BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Application for Order Authorizing Suburban Water Systems (U-339-W) to Purchase Sativa County Water District's Assets and for Related Approvals.	A.21-08- (Filed August 13, 2021)

APPLICATION FOR AN ORDER AUTHORIZING PURCHASE OF UTILITY ASSETS

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APPLICATION FOR AN ORDER AUTHORIZING PURCHASE OF UTILITY ASSETS

I. INTRODUCTION

Pursuant to Sections 851-854 and 2718-2720 of the California Public Utilities Code, Decision ("D.") 99-10-064,[1] Article 2 of the California Public Utilities Commission ("Commission") Rules of Practice and Procedure ("Rules"), and Rule 3.6, Suburban Water Systems (U-339-W) ("Suburban,") requests that the Commission authorize (1) Suburban's purchase of the Sativa Water System ("Sativa") assets, and (2) certain other actions related to the transaction.

This application is in the public interest and the Commission should approve it as such. In particular, as discussed in more detail below, the proposed acquisition furthers important Legislative and Commission polices and goals, including the goals and objectives set forth in the Commission's Environmental and Social Justice Action Plan. If approved, the transaction would bring greater economies of scale, and greater resources and expertise, to the management and operation of Sativa. It would also ensure Sativa customers' long-term access to safe and reliable water services at affordable prices and provide Sativa's economically disadvantaged customers with access to Suburban's already existing low-income assistance program. The transaction will also benefit Suburban's existing customers by spreading the fixed costs of the system across the additional customers of Sativa.

Because the transaction furthers important policy goals and provides much-needed

[1] D.99-10-064, *Order Instituting Rulemaking on the Commission's Own Motion to Set Rules and Provide Guidelines for the Acquisition and Merger of Water Companies*, Opinion. As recognized in this decision, Sections 852 and 854 of the Public Utilities Code do not apply in the acquisition of a municipal water system, such as the one involved in this transaction.

benefits, this proceeding should move along quickly and be placed on the Commission's agenda at or before 245 days from the date of this application, in accordance with the timeline established in D.99-10-064.[2]

II. LEGISLATIVE AND ADMINISTRATIVE HISTORY OF THE SATIVA WATER SYSTEM

The Sativa Los Angeles County Water District (the "Sativa District") owned and operated the Sativa Water System, consisting of water delivery pipelines, water appurtenances, hydrants, service laterals, interconnections, hydropneumatic tanks, chemical dosing equipment, groundwater wells, office, equipment, and storage buildings, and other facilities and properties necessary to provide domestic water service to approximately 1,600 customers located within a residential area in the unincorporated community of Willowbrook and three small non-contiguous areas within the City of Compton ("Sativa Water System") until 2018, when the Sativa District was dissolved. The dissolution of the Sativa District was the culmination of a legal process that started when the County of Los Angeles initiated an investigation into complaints by County residents relating to the poor water quality customers of the Sativa District were receiving. That investigation revealed significant aesthetic and other water quality problems that were not being addressed by the Sativa District's governing board. This investigation eventually led to compliance orders issued by the Division of Drinking Water ("DDW").

Due to the Sativa Water District governing board's lackluster response to the issues disclosed by the County investigation and the DDW compliance order, the California Legislature, with the input of the Los Angeles County Board of Supervisors and the support of many Sativa District residents, enacted AB 1577 (Gipson), the California Safe Drinking Water Act: Sativa-Los Angeles County Water District, in 2018. This legislation – codified in Health & Safety Code §116687 – empowered DDW to order the Sativa District to accept technical and managerial assistance facilitated by DDW, or alternatively to divest the Sativa District governing

[2] *See* D.99-10-064, Appendix D, Section 2.03 ("Processing. The Parties agree that applications should be processed according to the schedules attached to this Settlement"), and at page 5, which sets forth the schedules.

board of authority and appoint an interim administrator.

As contemplated by Health & Safety Code §116687, DDW appointed the County of Los Angeles Department of Public Works as interim administrator. The legislation expressly contemplated that the Department of Public Works would temporarily manage the Sativa Water System, and that another entity, possibly an investor-owned utility subject to Commission regulation, would assume permanent ownership.

III. REQUEST FOR AUTHORIZATION

Provided the Commission approves this application, Suburban's acquisition of Sativa's assets will occur pursuant to the purchase and sale agreement (the "Asset Purchase Agreement"), entered on April 20, 2021, between Suburban, and the County of Los Angeles, a corporate body and politic, seller. A copy of that Agreement is Attachment 1 to this application.

Through this application, Suburban asks the Commission to approve the Asset Purchase Agreement, the transactions contemplated in that Agreement, and certain related matters. Specifically, Suburban requests a Commission Order that:

(i) Approves the Asset Purchase Agreement's terms and conditions.

(ii) Expands Suburban's Certificate of Public Convenience and Necessity ("CPCN") so the company may assume all public utility responsibilities for the operation and ownership of the water utility operations in Sativa's current service area.

(iii) Establishes the rate base of the acquired system, at the time of approval of a decision in this proceeding, to be the full purchase price paid by Suburban for Sativa's assets covered by the Asset Purchase Agreement.[3] Included in the purchase price is recognition of the land and water rights in the transaction as non-depreciable assets.

(iv) Allows Suburban immediate consolidation of the Sativa system into Suburban's

[3] Original acquired rate base may be subsequently adjusted to include transactional costs associated with the acquisition, depending on the resolution of recovery of such costs in a subsequent Suburban general rate case.

Whittier/La Mirada Service Area for operational purposes.

(v) Authorizes Suburban to allow Sativa customers to apply for the Low Income Rate Assistant program ("LIRA") program[4] and enroll if they meet the eligibility criteria immediately after closing of this transaction.[5]

(vi) Allows Suburban to integrate the Sativa system into the Whittier/La Mirada Service Area for ratemaking purposes as of January 1, 2024. The rates for Sativa customers beginning January 1, 2024 would be determined in Suburban's 2023 general rate case ("GRC") to be filed on January 3, 2023.

(vii) If the Commission approves acquisition and the acquisition closes not later than December 31, 2023, at the time the acquisition closes Sativa's current flat rates for residential service will be reduced to $62.00 per month and then after December 31, 2023 Sativa will be subject to the Whittier/La Mirada Service Area Zone 1 Commission approved rates and charges. If the acquisition closes after December 31, 2023 Sativa will be subject to the Whittier/La Mirada Service Area Zone 1 Commission approved rates and charges in effect at that time, converted to flat rates until the time that meters are installed.

(viii) Establishes a Sativa Transaction Cost Memorandum account, pursuant to Commission Standard Practice U-27-W, to track all transaction related costs with rate treatment to be determined in Suburban's subsequent GRC.

(ix) Establishes an Environmental Improvements and Compliance Issues Memorandum Account ("EICIMA") to address any possible future required

[4] In D.20-08-047, the Commission ordered regulated water utilities to name or rename their respective low-income water assistance program as "Customer Assistance Program" or "CAP." Suburban will incorporate this change in its next GRC application. D.20-08-047, *Order Instituting Rulemaking Evaluating the Commission's 2010 Water Action Plan Objective of Achieving Consistency between Class A Water Utilities' Low-Income Rate Assistance Programs, Providing Rate Assistance to All Low – Income Customers of Investor-Owned Water Utilities, and Affordability*, Decision and Order, pp. 106-107, Ordering Paragraph 4.

[5] Closing means the date on which the transactions contemplated in the Asset Purchase Agreement are completed.

environmental improvements and compliance issues.[6]

(x) Establish a Sativa Production Cost Balancing Account ("SPCBA") to defer any differences between recorded Water Replenishment District of Southern California (WRD) Replenishment Assessment rates and a requested adopted rate of $382.00 per acre foot until the Commission establishes an updated WRD Replenishment Assessment rate in Suburban's next GRC.

IV. THE PROPOSED TRANSACTION

A. Parties to the Proposed Transaction

1. The County of Los Angeles

On February 13, 2019, the Local Agency Formation Commission for County of Los Angeles ("LAFCO") adopted Resolution No. 2019-02RMD ("LAFCO Resolution") which, among other things (1) dissolved the Sativa District and (2) appointed the County of Los Angeles ("County") as the "successor agency" for the Sativa District, succeeding to all of the rights, duties and obligations of the Sativa District with respect to enforcement, performance, or payment of outstanding bonds or other contracts and obligations of the Sativa District and winding up the affairs of the Sativa District pursuant to Government Code §§ 56886(m) and 57451(c) and subject to Health & Safety Code § 116687, including the power to exchange, sell, or otherwise dispose of all property, real and personal, of the Sativa District.

Pursuant to the California Safe Drinking Water Act: Sativa-Los Angeles County Water District, the dissolution or consolidation of the Sativa District is not subject to the provisions of Section 57113 of the Government Code, nor to any other requirement for a protest proceeding or election.[7] In particular, the Legislature specifically exempted the successor agency, in this case the County of Los Angeles, from the requirement to hold a protest proceeding or election

[6] Examples of such costs include but are not limited to: construction of a welded steel reservoir to provide operational, fire flow and emergency water storage; drilling a new well to increase groundwater production capacity to reliably meet demands and provide fire flow capacity; installing back-up power generators to maintain system pressure during power outages; increasing pipe diameter to increase transmission capacity to improve flushing velocities to clean debris from pipes and available fire flow; and installing meters to measure water delivered to customers.

[7] Health & Safety Code §116687(3).

regarding the sale of the Sativa Water System.[8] The Legislature specifically authorized the successor agency to "solicit proposals, evaluate submittals, and select any public water system to be the receiving water system and subsume all assets, liabilities, adjudicated water rights, responsibilities, and service obligations to provide retail water service to existing and future ratepayers within the former territory of the district" and recognized that the successor agency "shall represent the interests of the public and the ratepayers in the former territory of the district."[9]

The County of Los Angeles has since engaged in a transparent public process to find a permanent successor and operator of the Sativa Water System. That process included issuing a Request for Proposals ("RFP") soliciting interest from utilities and agencies to become the permanent successor to the Sativa District. The proposal submitted by Suburban received the highest score from County staff. The Los Angeles County Board of Supervisors has approved the resulting Asset Purchase Agreement that is the subject of this application and has been the subject of community outreach meetings targeted specifically to Sativa Water System customers.

2. Suburban Water Systems

Suburban, a subsidiary of SouthWest Water Company, is an investor-owned water utility providing high-quality water and reliable service in an approximately 42-square-mile service area that covers all or portions of Glendora, Covina, West Covina, La Puente, Hacienda Heights, City of Industry, Whittier, La Mirada, La Habra, Buena Park and unincorporated portions of California's Los Angeles and Orange counties.

Suburban serves a population of about 300,000 through a water distribution system that includes 18 wells, 32 reservoirs and more than 800 miles of pipeline. Its network of facilities pumps and distributes approximately 45,000 acre-feet of water annually. A description of Suburban's plant, water systems, and property is on file with the Commission in Suburban's most recent Annual Report to the Commission.

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[8] *Id.*

[9] Health & Safety Code §116687(4).

B. The Asset Purchase Agreement

Under the Asset Purchase Agreement, Suburban will acquire all assets associated with Sativa. For those assets, Suburban will pay County $11,800,000, in addition to the Proration Amounts set forth in the Asset Purchase Agreement

C. Rate Impact

Historically, Sativa customers have not had water meters and have been billed at a flat rate. Subject to Commission approval, during the period from the closing of the purchase and sale of the Sativa assets through December 31, 2023, Suburban will charge Sativa customers $62.00 per month as the base charge for a single unit (and multiples of that amount for each additional unit or portion thereof consistent with the rate schedule described in the Asset Purchase Agreement, Section 8.U) along with applicable surcharges, credits, taxes and franchise fees.

Beginning after December 31, 2023 the Sativa Water System will be incorporated into and subject to the Commission-approved tariffs for Suburban's Whittier/La Mirada service area, along with applicable rates, surcharges, credits, taxes and franchise fees. In the event that the closing occurs after December 31, 2023, the Sativa Water System will be incorporated into and subject to the Commission-approved tariffs for Suburban's Whittier/La Mirada service area, including the rates applicable to Suburban's Whittier/La Mirada service area along with applicable surcharges, credits, taxes and franchise fees immediately after closing.

For illustrative purposes, it may be helpful to estimate what the revenue impact would be if consolidation were implemented immediately. As discussed in the testimony of Robert Kelly, Suburban Vice President of Regulatory Affairs, based on certain assumptions, the consolidated Suburban revenue requirement with the addition of Sativa would increase approximately 2.32% under immediate rate consolidation. Assuming the average monthly usage of 13 ccf per customer, a Sativa customer would see a decrease in their monthly base water bill from $67.84 to $62.00, or 8.6% decrease. Again, this discussion is merely to provide an illustration. In this application, Suburban does not seek immediate consolidation of Sativa's rates with Suburban.

V. CUSTOMER BENEFITS AND PUBLIC INTEREST

A. Legislative Declarations and Other Resolutions Support the Acquisition

In Public Utilities Code Section 2719, the Legislature found and declared (1) public water systems face the need to replace or upgrade infrastructure to meet increasingly stringent state and federal laws and regulations, (2) increasing amounts of capital are required to finance the necessary investment in that infrastructure, (3) scale economies are achievable in the operation of public water systems, and (4) providing water corporations with an incentive to achieve these scale economies provides benefits to ratepayers. Similarly, State Water Resources Control Board ("SWRCB") Resolution No. 2008-0048 states: small water systems (1) often cannot provide the economies of scale necessary to build and maintain adequate water and wastewater systems; (2) lack resources and in-house expertise, including those necessary to best manage long term operations; and (3) need financial and technical assistance to ensure compliance. More recently, in D.20-08-047, the Commission recognized the benefits of transactions such as the one being proposed in this application:

> Consolidation has been and continues to be a tool to remedy systems failing water quality health and safety standards. Consolidation may also be a means to improve affordability, by leveraging greater economies of scale and scope, and by importing best, or better, practices related to operating a water utility, as well as designing rates to allow recovery of reasonable expenses.[10]

As is shown below, the public interest benefits by the proposed transaction, so the application should be approved. The County of Los Angeles has documented the poor management and historically poor water quality and water service that had plagued Sativa's customers. While the County has remedied significant problems such as well rehabilitation and replacing broken mains, additional investment is needed to meet current regulatory standards, as well as competent financial and technical expertise to properly manage the system into the future. The Sativa Water System is a prime example of the problems the Legislature sought to remedy with the Public Water System Investment and Consolidation Act.

B. Benefits of the Proposed Transaction

[10] D.20-08-047, p. 85.

Suburban has the experience to make the capital investments and operations improvements required to provide Sativa customers with clean, safe and reliable water. Suburban's existing low customer water rates make it best suited to acquire the Sativa Water System. Suburban's experience and well-qualified employees will provide quality water and service to Sativa by staying true to its core values:

- Safety – customer water quality, and employee and community safety;
- Customer Care – positive customer experience and affordability;
- Employee Development – empower and challenge employees to grow;
- Environmental Stewardship – safety of public health and the environment first, above all other objectives; and
- Community Involvement – long term partnerships in the communities we serve.

Suburban will provide the same exemplary service to Sativa's customers and will continue the great work that the Los Angeles County Department of Public Works team has done to improve the quality of life for Sativa's customers and provide Sativa's customers with affordable bills. Moreover, as noted above, Suburban proposes to – immediately upon acquisition – reduce Sativa customers' monthly bills by 8.6%, from $67.84 to $62.00, and to maintain those reduced monthly bills until December 31, 2023, when they will be aligned with Suburban's Whittier/La Mirada rates.

Benefits from economies of scale also strongly support granting this application. Examples of where economies of scale often benefit larger utilities and their customers include: (1) compliance with regulatory requirements, (2) maintaining customer information and billing systems, (3) purchasing materials and supplies, (4) maintaining high levels of customer service, (5) maintaining and improving the quality of treated water, and (6) providing for current infrastructure needs and future growth.

Suburban is the largest subsidiary of SouthWest Water Company ("SouthWest") that owns and operates water and wastewater systems in California, Oregon, Texas, Alabama, South Carolina, and Florida. Southwest's headquarters are located in Sugar Land (Houston), Texas.

SouthWest has extensive expertise in operating both large and small water systems. Because its business is multi-jurisdictional and has been for decades, SouthWest has developed a highly successful approach that serves the diverse and distinct needs of each community while developing overall industry expertise that benefits all communities.

Being part of a larger organization provides Suburban's customers with greater economies of scale for shared corporate services such as information technology, payroll, treasury, and strategic leadership. It also provides redundancy and access to more professional knowledge and experience. For example, in the event of an earthquake and the potential loss of Suburban's customer service call center, customer calls would be diverted to the Texas call center to maintain excellent customer care which is extremely critical when customers are in crisis.

Larger utilities, such as SouthWest and Suburban, are able to develop greater in-house expertise, creating institutional knowledge. Suburban has personnel with specific focuses, such as water quality and testing, environmental compliance, customer service, engineering, and conservation. In addition, with Suburban's greater size and more extensive personnel, customers will be better served because their issues can be addressed more quickly. Problems such as coverage gaps due to illness, vacation, or lack of skills or resources are also much less likely to occur.

Economies of scale are also driven by the relationship between fixed and variable costs of operation. Utilities are capital intensive and fixed costs are high relative to variable costs. With greater environmental and regulatory requirements, fixed costs will likely only increase, presenting a particular problem for smaller water providers. It would be challenging to spread those increased fixed cost across the smaller customer base of the Sativa Water System. Because of Suburban's larger size, it has a much better ability to spread costs and improve efficiencies. It is expected that Suburban will be able to leverage existing economies of scale to perform work at a lower cost, creating long-term savings for Sativa customers. Other savings could include lower

costs for materials, savings on contracts for engineering projects, and savings from the use of in-house engineers to perform work.

Suburban's support services are provided from the headquarters located in Covina, California. Suburban also has customer service offices that include payment stations in West Covina and in La Mirada. Suburban intends to retain the existing Sativa customer service office. This office will house a bilingual (Spanish/English) customer service representative to take payments and address concerns, and a bilingual (Spanish/English) field superintendent to perform field customer service and operations activities. In addition, after the acquisition, customers in the Sativa service area would have access to online self-service for many services, paperless billing, multiple payment channels, and call centers that have multi-language capability. Sativa customers also will have access to Suburban's wide-ranging conservation programs, that include free water-saving devices such as showerheads and hose nozzles, and if requested visits by Suburban staff to homes and businesses to review water use and identify ways to save water.

Suburban will leverage its existing 133 field and office employees that currently operate and manage its existing Los Angeles County and Orange County operations to support operations at Sativa where required. Suburban has extensive experience maintaining a clean and safe drinking water supply that complies with drinking water standards. Suburban's state certified drinking water system operators will leverage this experience to provide Sativa's customers with the clean and safe water they deserve. By leveraging its existing workforce and strategically adding key positions for Sativa, Suburban will be able to spread its fixed cost over a greater number of customers, thereby lowering the cost per share for all customers.

Thus, Suburban's acquisition of the Sativa Water System assets and CPCN expansion into the Sativa service territory will benefit customers in numerous ways. The acquisition will provide Sativa's customers with long-term access to safe and reliable water service at affordable prices. Suburban's size, position in the industry, association with SouthWest, specialized workforce, and access to capital will allow Suburban to efficiently meet water quality, reliability,

infrastructure, and customer service standards for Sativa customers. Moreover, existing Suburban customers are not expected to see significant adverse impacts. In fact, the acquisition will benefit Suburban's existing customer base because it will allow for costs to be spread across a larger customer base.

C. The Transaction Furthers the Commission's Environmental and Social Justice Action Plan

The Commission's Environmental and Social Justice Action Plan ("ESJ Plan") identifies existing inequities and proposes actions for how the Commission can use its regulatory authority to address health and safety, consumer protection, program benefits, and enforcement to encompass all the industries it regulates, including energy, water, and communications programs. Goal 3 of the Commission's ESJ Plan is to improve access to high-quality water, communications, and transportation services for ESJ communities.[11] For water utilities, objectives for this goal include (1) consolidating small water systems, and (2) expanding low-income programs.[12]

With respect to the first objective, the Commission's ESJ Plan recognizes that consolidation is an important tool to ensure safe and reliable water. The Commission has previously recognized that "Smaller water companies often do not have the resources or expertise to operate in full compliance with increasingly stringent and complex water quality regulations. Many water companies are too small to be viable in the long-term, raising questions as to whether they will be able to continue to provide clean and reliable water in the future."[13]

As discussed above, Suburban will bring economies of scale, internal expertise, access to resources, and greater knowledge and experience. These will help maintain the highest standards of water quality and improve infrastructure development. Suburban's size, financial strength, and the breadth of expertise of its employees, allow it to implement strong conservation programs

[11] Environmental and Social Justice Action Plan, Version 1.0, February 21, 2019 ("ESJ Plan"), p. 7.

[12] ESJ Plan, p. 16.

[13] California Public Utilities Commission 2010 Water Action Plan, p. 9.

and setting rates that balance investment, conservation, and affordability. In addition, Suburban is able to spread costs to operate, maintain, and invest over a much larger customer base. Suburban's resources will be used to improve the water quality and level of customer service in Sativa. If Sativa were to hire experts either internally or contractually to match the level of expertise Suburban has readily available, it would be far more burdensome on their customer base.

Related to the second objective, Suburban has a well-established low-income support program to help customers with their monthly bills. Sativa's qualifying customers would have access to Suburban's program that provides a monthly bill reduction of $7.39 per month. Small water systems like Sativa do not have a sufficient customer base to support such a program. As part of the program, Suburban coordinates with energy companies to identify low-income customers who qualify, which is important because some qualified customers may be unaware of such programs or unsure how to subscribe to them. Given that many Californians are experiencing financial difficulties due to the COVID-19 pandemic, providing access to Suburban low-income support program is a significant benefit, particularly for the most vulnerable customers.

Suburban's community outreach, supplier diversity program, and multilingual capability also provide benefits to the ESJ community.

First, Suburban's website highlights events where our employees participate in community outreach such as Meals on Wheels, food drives, and school supply drives. All these events benefit the communities we serve. Additionally, Suburban participates in various community events by conducting presentations to customers at landscape/gardening workshops and local organizations. If the transaction is approved, Suburban would extend this community outreach and involvement to include the Sativa community.

Second, Suburban's supplier diversity program encourages Suburban in meeting and exceeding the goals of General Order 156 to purchase from diverse owned vendors (Woman, Minority, Disabled Veteran, and LGBQT). Suburban has led Commission-regulated water

utilities with the highest percentage of supplier diversity procurement for the past three years, and in 2020, its supplier diversity procurement spend exceeded 50% for the first time.

Third, Suburban employs multilingual office and field staff who speak both Spanish and English to serve the primary languages spoken in the communities we serve. Our customer call center employees live in Southern California and work out of our La Mirada and West Covina offices. They are familiar with Los Angeles County and participate in many events to support our communities.

VI. THE PROPOSED RATEMAKING TREATMENT IS REASONABLE

A. Rate Base

Suburban requests that the Commission authorize rate base equal to the $11,800,000 purchase price, after any applicable adjustments. The purchase price resulted from negotiations between a willing and informed buyer and a willing and informed seller with neither side compelled to enter into the transaction hastily or out of necessity.

Inclusion of the entire purchase price in rate base is required by Public Water System Investment and Consolidation Act of 1997, codified at Public Utilities Code Sections 2718-2720. Public Utilities Code Section 2720(a) provides that the Commission "shall use the standard of fair market value when establishing the rate base for the distribution system of a public water system acquired by a water [utility]. This standard shall be used for rate setting." As the Commission has recognized, this legislation was enacted to aid water systems in making infrastructure improvements, to meet increasingly stringent state and federal drinking water laws, to recognize that economies of scale are achievable in the operation of public water systems, and to provide water corporations with incentives to achieve economies that benefit ratepayers.[14]

Public Utilities Code Section 2720(a)(2) defines "fair market value" as having the meaning set forth in Code of Civil Procedure Section 1263.320(a), which states that fair market value is "the highest price that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for doing so, nor obligated to sell, and a buyer, being ready,

[14] D.99-10-064, p. 2.

willing, and able to buy but under no particular necessity for doing so." As described above, this purchase price for the proposed transaction is the result of arms' length negotiations between a willing and informed buyer and a willing and informed seller with neither side compelled to enter into the transaction hastily or out of necessity. As such, the purchase price for the proposed transaction conforms to the definition of "fair market value" set forth in Code of Civil Procedure Section 1263.320(a).

Because the total purchase price therefore represents the fair market value for the assets purchased, pursuant to Public Utilities Code Section 2720 and Code of Civil Procedure Section 1263.320(a), the Commission should authorize Suburban to include the final purchase price paid by Suburban in the rate base for the system.[15] D.99-10-064 specifically recognizes that Public Utilities Code Sections 2718-2720 require that the Commission use the fair market value as the rate base value of the acquired distribution system.[16] It should also be noted that, as the appraisal makes clear, the value of the rate base being requested is well below the reproduction costs new less depreciation value or replacement costs new less depreciation value for the system.

In addition to being required by statute, the ratemaking requested is in the public interest. The purchase of Sativa by Suburban supports and furthers the provision of safe, reliable, and affordable water services to current Sativa customers.

B. Ratemaking Mechanisms

1. Sativa Transaction Memorandum Account

With any acquisition, certain transaction costs are inevitable. Suburban has incurred and expects to continue to incur costs for outsourced services, such as legal, engineering, surveying, the appraisal, noticing, and other professional activities necessary to complete the proposed transaction. Suburban requests establishment of a memorandum account to track these past and

[15] In addition, rate base may be adjusted to include transactional costs, depending on the resolution of recovery of such costs in Suburban's subsequent GRC.

[16] D.99-10-064, p. 2.

future transaction costs. This request meets the Commission's requirements for memorandum accounts as set forth in Standard Practice U-27-W:

- The item is caused by an event of exceptional nature not under the utility's control;
- It could not have been reasonably foreseen in the utility's last general rate case and will occur before the utility's next scheduled rate case;
- It is of a substantial nature in the amount of money involved; and
- The ratepayer will benefit by the memorandum account treatment.

As discussed in more detail in the testimony of Robert Kelly, first, Suburban does not incur transaction costs for the acquisition of smaller systems in the normal course of business, and the timing of a decision approving recovery of such costs is outside Suburban's control. Second, the expenses Suburban will incur in the Sativa transaction could not have been reasonably foreseen in Suburban's last GRC and will occur before the Suburban's next scheduled case. Third, as noted above transaction costs include outsourced services, such as legal, engineering, surveying, the appraisal, noticing costs, and other professional activities necessary to complete the proposed transaction, making them substantial in nature. Fourth, ratepayers will benefit by the memorandum account treatment because, as discussed above, the proposed transaction furthers Legislative and Commission policies and goals, and benefits Sativa and Suburban customers.

Therefore, Suburban should be permitted to establish a memorandum account to track transaction costs for future recovery. Suburban further proposes that it be allowed to defer any unrecovered transaction cost as a recoverable regulatory asset. In its subsequent GRC, Suburban will support the prudency of the transaction costs, seek recovery of the costs, and request that the Commission authorize such recovery. The draft tariff for this account is included with the application as Attachment 2.

2. Environmental Improvements and Compliance Issues for Acquisitions Memorandum Account (EICIAMA)

Suburban requests that the Commission approve the EICIAMA to allow Suburban to track the costs of addressing required environmental improvements and other potential compliance issues, with the understanding that, with memorandum account treatment, Suburban will bear the burden of proof for the reasonableness of such costs. Approval of this account will allow Suburban to the opportunity to recover the costs necessary to provide a safe, reliable, and environmentally compliant water supply to Sativa customers.

The costs to address environmental compliance and required improvements have yet to be determined. Such costs are not under the utility's control, nor can they be reasonably foreseen. See Footnote 6 for a listing of some of the expected costs involved. Compliance with such requirements, however, ensures safety, benefitting ratepayers. The proposed memorandum account treatment helps make certain that the requisite capital expenditures will be subject to regulatory oversight and that funds will be used judiciously. The draft tariff for this account is included with the application as Attachment 3.

3. Sativa Production Cost Balancing Account (SPCBA)

The SPCBA would provide treatment similar to Suburban's existing balancing account treatment for WRD Replenishment Assessment charges with an adopted rate of $382.00 per acre foot. Suburban would not otherwise be able to recover/refund uncontrollable changes in WRD Replenishment rates until prospectively after the Sativa water system has been combined with Suburban's Whittier/La Mirada service area, which is not expected to occur until Suburban's 2023 GRC. The SPCBA would only apply to changes in WRD Replenishment Assessment rates, but would not apply otherwise to changes in the amount of water pumped. In Suburban's next GRC any balances in the SPCBA would be consolidated with Suburban's WRD balances and the SPCBA would then be eliminated. The draft tariff for this account is included with the application as Attachment 4.

VII. SAFETY

Suburban is committed to the safety of water it provides to its customers, the safety of its employees and the safety of the community as a whole. This is demonstrated by the investments

Suburban makes in employee development and community outreach. Suburban has implemented safety programs designed to protect both its workforce and customers and requires all personnel to attend safety training every yearly. Suburban's extensive Safety Program is described in the testimony of Suburban Vice President of Engineering Jorge Lopez. Approval of this application will allow Suburban to extend these safety benefits to the customers of the Savita Water System.

VIII. CEQA REVIEW IS NOT REQUIRED

Rule 2.4 of the Commission's Rules requires applications to address the applicability of the California Environmental Quality Act ("CEQA") to the proposed project or transaction that is the subject of the application. The transaction described in this application is not subject to CEQA because it does not constitute a "project" within the meaning of CEQA. Projects under CEQA are those specifically defined as any "activity which may cause either a direct physical change [to] the environment, or a reasonably foreseeable indirect physical change in the environment."[17] A proposed "activity [that] will not result in a direct or reasonably foreseeable indirect physical change in the environment" is not subject to CEQA.[18] Similarly, where "it can be seen with certainty that there is no possibility that the [proposed] activity in question may have a significant effect on the environment, the activity is not subject to CEQA."[19]

This application seeks Commission approval of the acquisition of assets from Sativa by Suburban. Critically, once sold and transferred, there will be no change in the operation of the assets. They will be used and operated in the same manner and for the same purposes for which they are currently being used - to provide water service. The Commission has consistently held such a transfer of control and operation of existing water system facilities does not result in any changes to the environment, and thus, an application seeking authorization for such a transaction

[17] *See* Cal. Pub. Res. Code § 21065.

[18] CEQA Guidelines at §15060(c)(2).

[19] CEQA Guidelines at §15061(b)(3).

is not subject to CEQA.[20] Here, also, because it is clear that no "direct or reasonably foreseeable indirect physical change in the environment" will occur as a result of the proposed transaction, it is not subject to the provisions of CEQA.

IX. COMPLIANCE

A. Compliance with D.99-10-064 and D.20-08-047

After the Legislature passed the Public Water System Investment and Consolidation Act of 1997, the Commission instituted Rulemaking 97-10-048 to set guidelines for acquisitions and mergers of water companies. The final decision in that proceeding approved the terms of a settlement agreement included as Appendix D to D.99-10-064. That Appendix contains guidelines for mergers and acquisitions of water utilities in accordance with Public Utilities Code Sections 2718, *et seq*. More recently, in D.20-08-047, the Commission affirmed certain data elements required by D.99-10-064.[21] These data elements are:

- A copy of the purchase agreement;
- A copy of any appraisals conducted in the past five years;
- A forecast of the results of operation for (1) the acquiring utility, (2) the acquired utility, and (3) the combined operation;
- A list of all assets funded by the state or federal government and other contributions;
- Assets funded by contributions;
- Indication of compliance orders for failures to meet drinking water standards

[20] *See* D.13-01-033, *Application of California-American Water Company (U210W) and Garrapata Water Company (U212W) for an Order Authorizing Garrapata Water Company to Sell and California-American Water Company to Purchase the Assets of Garrapata Water Company*, Decision Approving the Application of California-American Water Company's Acquisition of Garrapata Water Company's Assets, pp. 8-9; D.11-03-016, *Application of Watertek, Inc. a California corporation (U420W) for Authority to Sell and Del Oro Water Co., Inc (U61W) for Authority to Buy the Watertek, Inc. Water Utilities (Grand View Gardens and East Plano) in Tulare County and (Metropolitan) in Fresno County*, Decision Conditionally Authorizing Douglas F. Elliot, Sole Owner DBA the Watertek Water Utilities, to Sell and Del Oro Water Co., Inc. to Buy Grand View Gardens, East Plano, and Metropolitan Water Systems, pp. 9-10.

[21] D.20-08-047, p. 88.

As noted above, a copy of the purchase agreement is included with the application as Attachment 1.

A May 2021 RCNLD appraisal of Sativa performed for Suburban by MR Valuation Consulting, LLC is included as Attachment 5. Included in this analysis is a separate appraisal of the land and private easements. Stratecon, Inc. performed the valuation of the water rights, which was incorporated into the RCNLD analysis. The total RCNLD valuation of the system non-grant funded assets is $18,788,000. In compliance with D.20-08-047, Suburban has also included as Attachment 6 a September 2019 appraisal performed for the Los Angeles County Public Works Department and as Attachment 7 an October 2019 appraisal of four land parcels performed Colliers International for Suburban.

A forecast of the results of operation for the acquiring utility, the acquired utility, and the combined operation for the first and fifth years following the acquisition, with the supporting information, is included as Attachment 8 to this application.

Sativa has no contributed property. A list of grant-funded assets is included in the MR Valuation Consulting, LLC appraisal discussed above (Attachment 5).

Information regarding compliance orders for failures to meet drinking water standards is included with the Direct Testimony of William Russel Bryden, Assistant Deputy Director of Los Angeles County Public Works.

In addition to these data elements, Appendix D to D.99-10-064 states that the utility needs to address how it will finance the acquisition. It may either file an application for the long-term debt financing of a particular acquisition or rely on authorization previously given by the Commission. Suburban will finance the acquisition from net cash provided from internal sources and from preapproved equity infusion.

Appendix D also states that notice of a proposed acquisition should be given to all affected customers at the time when the application is filed with the Commission.[22] Copies of

[22] Technically, Section 4.03 may apply only to the acquisition of mutual and publicly-owned water systems.

the draft notices are included as Attachment 9 to this application. The notices will be sent to customers as soon as the Commission assigns an application number in this proceeding and the Commission's Public Advisor's Office has reviewed and approved the notice.

In addition to affirming the data elements from Appendix D of D.99-10-064, the Commission in D.20-08-047 adopted minimum data requirements (MDRs) for acquisition applications. These MDRs are included as Attachment 10 to this application.

B. Communications Regarding the Application

All communications and correspondence with Suburban should be directed to:

Robert L. Kelly
Suburban Water Systems
1325 N. Grand Avenue, Suite 100
Covina, CA 91724
(626) 543-2590
bkelly@swwc.com

and

Lori Anne Dolqueist
Nossaman, LLP
50 California Street
34th Floor
San Francisco, CA 94111
(415) 438-7221
ldolqueist@nossaman.com

C. Articles of Incorporation and Financial Statements

Suburban filed a certified copy of its articles of incorporation with the Commission on January 6, 1966, in Application 48170. Suburban filed a certified copy of an amendment to its articles of incorporation with the Commission on November 30, 1989, in Application 89-11-036. Suburban filed a certified copy of a further amendment to its articles of incorporation with the Commission on February 28, 2002, in Application 02-02-030. Suburban filed, with the Commission, a certified copy of an additional amendment to its articles of incorporation with Application 17-04-003. Suburban has not subsequently amended its articles of incorporation.

D. Categorization and Schedule

Applicants request that the Commission classify this application as rate setting. The issues presented in the application are whether the transaction will serve the public interest,

whether Suburban is financially qualified to acquire Sativa, whether Suburban is qualified to operate the Sativa system, and what the appropriate rate base for the acquisition should be.

The following schedule is consistent with D.99-10-064.

Application Filed	August 13, 2021 (Day 0)
Protests Filed	30 Days after Notice
Replies to Protest	40 Days after Notice
Prehearing Conference	45 Days after Application filed
Cal PA's Report	90 Days after Application filed
Hearings (if required)	120-125 Days after Application filed
Briefs	155 Days after Application filed
Proposed Decision	215* Days after Application filed
Commission's Agenda	245** Days after Application filed

* Or 60 days after the case is submitted.

** Or 90 days after the case is submitted.

X. TESTIMONY IN SUPPORT OF APPLICATION

The following witnesses have provided direct testimony in support of this application:

William Russell Bryden, Assistant Deputy Director of Los Angeles County Public Works

Joseph J. Calvanico, Director, MR Valuation Consulting, LLC

Robert Kelly, Vice President Regulatory Affairs, Suburban Water Systems

Jorge Lopez, P.E., Vice President of Engineering, Suburban Water Systems

Mark Rodriguez, Founder and Managing Partner, MR Valuation Consulting, LLC

Rodney T. Smith, President, Stratecon Inc.

XI. NOTICE AND SERVICE OF THE APPLICATION

After the Commission has accepted this application for filing and assigned it an application number and the notices have been approved by the Commission's Public Advisor's Office, Suburban will provide notice of the proposed transaction and the filing of this application to Sativa and Suburban customers. As noted earlier, a copy of the draft notices is included as

Attachment 9 to this application.

A copy of this application is also being served on those persons and entities set forth on the service list for the application included as Attachment 11 to this application.

XII. CONCLUSION

As discussed above, the proposed transaction is the culmination of the extensive public processes and policies reflecting the cumulative judgment of multiple agencies and branches of government to address the poor water service provided to customers of the Sativa Water System. Approval of the application would ensure Sativa customers' long-term access to safe and reliable water services at affordable prices and further important Legislative and Commission policies and goals, including the goals and objectives set forth in the Commission's Environmental and Social Justice Action Plan. Therefore, Suburban requests that the Commission authorize (1) Suburban's purchase of the Sativa Water System assets, and (2) the other actions related to the transaction discussed above.

Respectfully submitted,

August 13, 2021

By: /s/ Craig Gott

Craig Gott
Suburban Water Systems

1325 N. Grand Avenue, Suite 100
Covina, CA 91724
(626) 543-2554
cgott@swwc.com

VERIFICATION

I, Robert L. Kelly, declare and verify the following:

This verification is made in connection with the Application for Order Authorizing Suburban Water Systems (U-339-W) to Purchase Sativa County Water District's Assets and for Related Approvals ("the Application").

I am an officer of Suburban Water Systems and have read the Application. As to those matters in the Application of which I have personal knowledge, I verify them to be true. As to those matters stated on information and belief, I verify them to be true.

I declare, under penalty of perjury under the laws of the State of California, the foregoing is true and correct.

Executed on this 13th day of August, 2021 at Upland, California.

/s/ Robert L. Kelly

Robert L. Kelly

FILED
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Attachment 1

Asset Purchase Agreement

ASSET PURCHASE AGREEMENT
SATIVA WATER SYSTEM

This Asset Purchase Agreement ("**Agreement**") is made and entered into as of the 20th day of April, 2021 ("**Effective Date**") by and between Suburban Water Systems, a California corporation ("**Buyer**" or "**Suburban**"), and the County of Los Angeles, a corporate body and politic ("**Seller**" or "**County**"). Buyer and Seller may be referred to individually as a "Party" or together as the "Parties." The Parties agree as follows:

1. **RECITALS**. The Parties enter into this Agreement with reference to the following:

A. The Sativa Los Angeles County Water District (the "**Sativa District**") owned and operated the Sativa Water System, consisting of water delivery pipelines, water appurtenances, hydrants, service laterals, interconnections, hydropneumatics tanks, chemical dosing equipment, groundwater well, office, equipment, and storage buildings, and other facilities and properties necessary to provide domestic water service to approximately 1,600 water service connections located within a residential area in the unincorporated community of Willowbrook and three small non-contiguous areas within the City of Compton ("**Sativa Water System**").

B. On June 1, 2018, the California State Water Resources Control Board ("**SWRCB**") issued Compliance Order No. 04_22_18R_003 to the Sativa District, wherein the SWRCB determined that the Sativa District had violated the California Safe Drinking Water Act.

C. On September 28, 2018, Governor Jerry Brown signed Assembly Bill 1577, thereby enacting California Health & Safety Code § 116687 ("**H&S Code § 116687**") which, among other things, authorized the dissolution of the Sativa District, the appointment of an "administrator" and "successor agency" for the Sativa District, and certain liability protections for the administrator, successor agency, and any water corporation that acquired the Sativa Water System.

D. Pursuant to H&S Code § 116687, on October 31, 2018, the SWRCB appointed County as the administrator of the Sativa District and, on November 1, 2018, County assumed full administrative, managerial, and financial control of the Sativa District.

E. On February 13, 2019, the Local Agency Formation Commission for County of Los Angeles ("**LAFCO**") adopted Resolution No. 2019-02RMD ("**LAFCO Resolution**") which, among other things (1) dissolved the Sativa District and (2) appointed County as the "successor agency" for the Sativa District, succeeding to all of the rights, duties and obligations of the Sativa District with respect to enforcement, performance, or payment of outstanding bonds or other contracts and obligations of the Sativa District and winding up the affairs of the Sativa District pursuant to Government Code §§ 56886(m) and 57451(c) and subject to H&S Code § 116687, including the power to exchange, sell, or otherwise dispose of all property, real and personal, of the Sativa District.

F. On September 11, 2019, County issued a request for proposals, RFP Number BRC0000114 (the "**RFP**"), along with a Bidders Notebook, soliciting proposals for interested and qualified bidders to purchase the assets associated with the Sativa Water System as described in, and subject to the terms set forth in, the RFP.

G. In response to the RFP, Buyer submitted a proposal to County dated November 12, 2019 which included an offer to enter into an interim Operations & Maintenance Agreement (the "**O&M Agreement**") whereby Suburban would provide operations and maintenance services to County with respect to the operations of the Sativa Water System pending the Closing of the Contemplated Transactions. The Parties contemplate entering into such an O&M Agreement contemporaneously with the execution of this Agreement.

H. By letter dated December 3, 2019, County informed Buyer that it had elected Buyer as the preferred bidder and that it was prepared to enter into negotiations with Buyer regarding the terms of this Agreement.

I. On May 29, 2020, the Parties entered into an Exclusive Negotiation Agreement ("**ENA**") to negotiate the terms of this Agreement and thereafter began negotiations regarding the terms of this Agreement as well as the terms of the O&M Agreement.

J. Based on the Parties' negotiations, County desires to sell, and Buyer desires to purchase, all of the assets associated with the Sativa Water System, including the Water Rights, as such assets are described in greater detail in Exhibit A attached hereto (collectively, the "**Acquired Assets**"), subject to the terms and conditions set forth in this Agreement.

K. The SWRCB's Division of Drinking Water ("**DDW**") has issued a new operating permit for the Sativa Water System ("**DDW Permit**") that identifies deficiencies with the Sativa Water System that require correction. A copy of the DDW Permit is attached hereto as Exhibit B.

2. DEFINITIONS; RULES OF CONSTRUCTION.

Unless the contrary is stated or clearly appears from the context, the following definitions will govern the construction of the words and phrases used in this Agreement. Capitalized terms have the meanings assigned to them. For purposes of this Agreement and the other documents executed in connection herewith, the following "Rules of Construction" apply, unless specifically indicated to the contrary: (i) wherever from the context it appears appropriate, each term stated in either the singular or plural includes the singular and the plural, and pronouns stated in the masculine, feminine or neuter gender include the masculine, the feminine and the neuter; (ii) the term "or" is not exclusive; (iii) the term "including" (or any form thereof) is not limiting or exclusive; (iv) the terms "hereof," "herein" and "herewith" and words of similar import are, unless otherwise stated, construed to refer to this Agreement as a whole and not to any particular provision of this Agreement; (v) all references to statutes and related regulations include any amendments of same and any successor statutes and regulations as well as all rules and regulations promulgated thereunder, unless the context otherwise requires; and (vi) all references to any instruments or agreements, including references to any of the documents

executed in connection herewith, include any and all modifications or amendments thereto and any and all extensions or renewals thereof.

"Accounting Firm" means an independent accounting firm of national or regional standing, mutually selected by the Parties.

"Acquired Assets" means all of the assets associated with the Sativa Water System, including the Water Rights, as such assets are described in greater detail in Exhibit A attached hereto, including any third party warranty that remains in effect with respect to the Acquired Assets and is transferable.

"Actual Knowledge of County" or "County's Actual Knowledge" and similar terms mean the actual knowledge, or knowledge that would have been obtained after due inquiry, with respect to any matter, of any of the following Persons: (1) Russ Bryden; (2) Sami Kabar; and (3) Pedro Campos (during the period in which he has been employed by the County).

"Affiliate" means, (i) with respect to Buyer, SouthWest Water Company and each of its subsidiaries and (ii) with respect to County, the Los Angeles County Department of Public Works.

"Allocation" means a reasonable and supportable allocation of the Purchase Price and the Capex Reimbursement among the Acquired Assets in accordance with Code § 1060 and the Treasury regulations thereunder (and any similar provisions of state or local Law, as appropriate).

"Assumed Contracts" means those Contracts arising from or related to the Sativa Water System or the Acquired Assets to which County is a party, under which County may have any rights or by which County or the Sativa Water System is bound, and all bids, quotations and proposals therefor, each as set forth in Exhibit C, which will be assumed by Buyer.

"Bill of Sale" means a bill of sale, in the form of Exhibit D attached hereto.

"Board of Supervisors" means the Board of Supervisors of the County of Los Angeles.

"Business Day(s)" means any day other than (i) Saturday or Sunday, or (ii) any other day on which County's offices are permitted or required to be closed.

"Business Records" mean the following books and records which are in the possession of County and are related to, used or held for use in connection with the Sativa Water System: (i) Permits for the operation of the Sativa Water System; (ii) repair and maintenance records with respect to the Acquired Assets; (iii) billing and accounts receivable information concerning the revenue and collections of the Sativa Water System; (iv) accounts payable reports for the Sativa Water System; and (v) such other information as is reasonably available to County. In no event shall Business Records include any attorney work product produced for County or attorney-client communications between County and legal counsel.

"Buyer" or "Suburban" means Suburban Water Systems.

"Capex Reimbursement" is defined in Section 3.B.

"Closing" means the closing of the Contemplated Transactions.

"Closing Date" means the date on which the Closing occurs.

"Closing Proration List" is defined in Section 3.C.

"Code" means the Internal Revenue Code of 1986, as amended, and the regulations and other guidance promulgated thereunder.

"Confidential Information" means (i) proprietary information not available to the general public concerning the business and financial affairs with respect to a Party hereto or its Affiliates, (ii) analyses, compilations, forecasts, studies and other documents prepared on the basis of such proprietary information by the Parties or their agents, representatives, any Affiliate, employees or consultants, (iii) any information clearly marked as "Confidential" by the disclosing Party or (iv) information covered by the Common Interest Doctrine as set forth in the Parties' ENA.

"Consent" means any approval, consent, ratification, waiver or other authorization.

"Contemplated Transactions" means the transactions contemplated by this Agreement and the other Transaction Documents.

"Contract" means any agreement, contract, obligation, legally binding commitment or undertaking (whether written or oral and whether express or implied).

"County" or "Seller" means the County of Los Angeles.

"CPUC" means the California Public Utilities Commission.

"CPUC Decision" means an Order from the CPUC approving the Contemplated Transactions.

"Customers" means the customers being provided water service by the Sativa Water System.

"Encumbrance" means any charge, claim, community property interest, condition, easement, equitable interest, encumbrance, lien, mortgage, option, pledge, security interest, right of first refusal, right of way, servitude or restriction of any kind, including any restriction on use, transfer, receipt of income or exercise of any other attribute of ownership, or any repayment obligation under any grant.

"Environment" means soil, land surface or subsurface strata, surface waters (including navigable waters, ocean waters, streams, ponds, drainage basins and wetlands), groundwater, drinking water supply, stream sediments, ambient air (including indoor air), plant and animal life and any other environmental medium or natural resource.

"Environmental Law" means any Law relating to pollution or protection of human health, safety, the environment, or natural resources, including any Occupational Safety and Health Law, or Law relating to releases or threatened releases of Hazardous Materials into the indoor or outdoor environment (including, without limitation, ambient air, surface water, groundwater, land, surface and subsurface strata) or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, release, transport or handling of Hazardous Materials.

"Final Proration List" is defined in Section 3.C.

"GAAP" means Generally Accepted Accounting Principles as promulgated by the Governmental Accounting Standards Board.

"Governmental Authority" means any (i) nation, state, county, city, village, district or other jurisdiction of any nature, (ii) federal, state, local, municipal, foreign or other government, (iii) governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official or entity and any court or other tribunal), (iv) multi-national organization or body or (v) body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power of any nature.

"Grant Funding" means all federal, state and local grant funding that is actually received by County in connection with the funding of capital improvements to the Sativa Water System, either as an advance or reimbursement for the costs of installing such capital improvements.

"Hazardous Materials" means any waste or other substance that is listed, defined, designated or classified as, or otherwise determined to be, hazardous, radioactive or toxic or a pollutant or a contaminant under or pursuant to any Environmental Law, including any admixture or solution thereof, and specifically including petroleum and all derivatives thereof or synthetic substitutes therefor and asbestos or asbestos-containing materials.

"Improvements" means all buildings, structures, fixtures, building systems and equipment, and all components thereof, including the roof, foundation, load-bearing walls, and other structural elements thereof, heating, ventilation, air conditioning, mechanical, electrical, plumbing, and other building systems, environmental control, remediation, and abatement systems, sewer, storm, and waste water systems, irrigation and other water distribution systems, parking facilities, fire protections, fencing, surface improvements, security, and surveillance systems, and telecommunications, computer, wiring, and cable installations, included in the Real Property.

"Interim Period" means that period between the Effective Date and the Closing.

"Law" means any law, rule, regulation or ordinance of any federal, foreign, state or local Governmental Authority or other provisions having the force or effect of law, including all judicial or administrative Orders and determinations, and all common law.

"Liability" means any liability, indebtedness or obligation of any kind, character or description, whether known or unknown, absolute or contingent, accrued or unaccrued, disputed or undisputed, liquidated or unliquidated, secured or unsecured, joint or several, due or to

become due, vested or unvested, executory, determined, determinable or otherwise and whether or not the same is required to be accrued on the financial statements of a Person.

"Material Adverse Effect" means any event, fact, change, development, or occurrence (each, an "Effect") that, individually or in the aggregate, is or could reasonably be expected to be materially adverse to the business, assets, Liabilities (contingent or otherwise), prospects, operations or condition (financial or otherwise) of the Sativa Water System and/or the Acquired Assets.

"O&M Agreement" is defined in Section 1.G.

"Occupational Safety and Health Law" means any Law designed to provide safe and healthful working conditions and to reduce occupational safety and health hazards, and any program, whether governmental or private (including those promulgated or sponsored by industry associations and insurance companies), designed to provide safe and healthful working conditions.

"Order" means any award, decision, injunction, judgment, order, ruling, subpoena or verdict entered, issued, made or rendered by any court, administrative agency or other Governmental Authority or by any arbitrator.

"Ordinary Course of Business" means, with respect to the Sativa Water System, only the ordinary course of water utility operations customarily engaged in by County with respect to the Sativa Water System, consistent with past practices, and specifically does not include (a) activity (i) involving the purchase or sale of the Sativa Water System, or (ii) that requires approval by the Board of Supervisors, or (b) the incurrence of any Liability for any tort or any breach or violation of or default under any Contract or Law.

"Permit" means any approval, Consent, license, permit, waiver, franchise, registration, exemption, certificate or other authorization or approval issued, granted, given or otherwise made available by or under the authority of any Governmental Authority or pursuant to any Law, and all pending applications therefor and amendments, modifications and renewals thereof.

"Person" means any individual, corporation (including any non-profit corporation), general or limited partnership, limited liability company, joint venture, cooperative, estate, trust, association, organization, labor union or other entity or Governmental Authority.

"Proceeding" means any action, application, arbitration, audit, hearing, investigation, litigation or suit (whether civil, criminal, administrative, investigative or informal) commenced, brought, conducted or heard by or before, or otherwise involving, any Governmental Authority or arbitrator.

"Proration Amounts" is defined in Section 3.C.

"Purchase Price" means Eleven Million Eight Hundred Thousand ($11,800,000), adjusted as provided pursuant to Sections 3.C (Prorations).

"Real Property" means those parcels of real property and those easements or any rights-of-way used or held for use in the operation of the Sativa Water System, together with all fixtures, fittings, buildings, structures and other Improvements erected therein or thereon.

"Receivables" mean all receivables (including notes, accounts receivable, loans receivable and advances) arising from or related to the Sativa Water System.

"Records" means information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

"Release" means any spilling, leaking, emitting, discharging, depositing, escaping, leaching, dumping or other releasing into the Environment of Hazardous Materials, whether intentional or unintentional.

"Tax" means all taxes, charges, withholdings, fees, duties, levies, or other like assessments including, without limitation, income, gross receipts, ad valorem, value added, excise, personal property, real property, sales, employment, withholding, social security, Pension Benefit Guaranty Corporation premium, environmental (under Section 59A of the Code), occupation, use, service, service use, license, payroll, franchise, transfer and recording taxes, fees and charges, windfall profits, severance, customs, import, export, employment or similar taxes, charges, fees, levies or other assessments, imposed by any Governmental Authority, whether computed on a separate, consolidated, unitary, combined or any other basis, and shall include any interest, fines, penalties, assessments, or additions to tax resulting from, attributable to, or incurred in connection with any such Tax or any contest or dispute thereof, and including any Liability for the Taxes of another Person under Treasury Regulation § 1.1502-6 (or any similar provisions of state, local, or foreign Law), as transferee or successor, by Contract or otherwise.

"Tax Return" means any return, declaration, report, claim for refund, or information return or statement relating to, or required to be filed in connection with any Taxes, including any schedule or attachment thereto and including any amendment thereof.

"Title Company" means Orange Coast Title Company.

"Transaction Documents" means this Agreement, the Bill of Sale, the Water Rights Assignment, and all other documents, certificates, assignments and agreements executed and/or delivered in connection with this Agreement in order to consummate the Contemplated Transactions, as the same may be amended, restated, modified or otherwise replaced from time to time.

"Water Rights" means the adjudicated water rights included as part of the Acquired Assets and set forth on Exhibit A.

"Water Rights Assignment" means the Assignment Agreement from County to Buyer conveying the Water Rights, substantially in the form of Exhibit E attached hereto.

3. AGREEMENT TO SELL AND PURCHASE; CONSIDERATION.

A. Agreement to Sell. County agrees to sell, transfer, convey and assign to Buyer, and Buyer agrees to purchase and accept from County, upon the terms and subject to the conditions set forth in this Agreement, the Acquired Assets, free and clear of all Encumbrances that have been placed on the Acquired Assets by County.

B. Consideration. The consideration for the Acquired Assets will be: (1) the Purchase Price (as adjusted by the Proration Amounts) and (2) the Capex Reimbursement. At Closing, Buyer will pay to County an aggregate amount equal to (i) the Purchase Price (as adjusted by the Proration Amounts) and (ii) the Capex Reimbursement, by wire transfer of immediately available funds in accordance with wire transfer instructions to be provided by County to Buyer at least ten (10) days before the Closing Date. County is receiving no compensation resulting from the disposal of any grant financed plant..

C. Prorations.

1. Generally, all operating income and operating expenses of the Sativa Water System shall be adjusted and allocated between the Parties to the extent necessary to reflect the principle that all such income and expenses attributable to the operation of the Sativa Water System on or before the Closing Date shall be for the account of County, and all income and expenses attributable to the operation of the Sativa Water System after the Closing Date shall be for the account of Buyer. No later than five (5) Business Days prior to the Closing, County shall provide Buyer with an itemized list of all sums to be credited or charged (the "**Proration Amounts**") against the account of Buyer, on the one hand, and of County, on the other hand, with a brief explanation in reasonable detail of the credits or charges, consistent with Exhibit F (the "**Closing Proration List**"). At Closing, the Purchase Price shall be increased to the extent any Proration Amounts result in a credit to the account of County or a charge to the account of Buyer and decreased to the extent any Proration Amounts result in a credit to the account of Buyer or a charge to the account of County.

2. The allocations and prorations to be made pursuant to this Section 3.C shall be computed in a manner that is consistent with the assumptions, categories, classifications, judgments and allocation, valuation and estimation methodologies set forth on Exhibit [F]. If the Closing occurs during a monthly operating period, the Proration Amounts for such period will be allocated on a per diem basis through the date of Closing to the County and following the date of Closing to the Buyer. To the extent not inconsistent with the express provisions of this Agreement, the allocations made pursuant to this Section 3.C shall be made in accordance with GAAP. Such prorations shall include all: (i) assessments, (ii) utility expenses, (iii) liabilities and obligations under the Assumed Contracts, (iv) rents, (v) deferred revenue from customers and prepayments, (vi) customer deposits and advances in aid of construction, and (vii) all other expenses and obligations attributable to the ownership and operation of the Sativa Water System that straddle the period before and after the Closing Date.

3. Within sixty (60) days following the Closing Date, or such later date as shall be mutually agreed to by County and Buyer, Buyer shall prepare and deliver to County a proposed final version of the Closing Proration List (the "**Final Proration List**"). The Final Proration List shall become final and binding upon the Parties ninety (90) days following delivery thereof (the "**Review Period**"), unless County gives written notice of its disagreement with the Final Proration List (the "**Notice of Disagreement**") to Buyer prior to the end of the Review Period. The Notice of Disagreement shall specify in reasonable detail the nature of any disagreement so asserted, indicating each disputed item, together with the amount thereof, and the basis for County's disagreement therewith. If a Notice of Disagreement is given to Buyer prior to the expiration of the Review Period, then the Final Proration List (as revised in accordance with clause (i) or (ii) below) shall become final and binding upon the parties on the earlier of (i) the date the Parties resolve in writing any differences they have with respect to the matters specified in the Notice of Disagreement or (ii) the date any disputed matters are finally resolved in writing by the Accounting Firm. Within 15 days after the Final Proration List becomes final and binding on the Parties pursuant to the preceding sentence, the Parties shall compute an adjusted Purchase Price pursuant to subsection (1) using the Final Proration List in lieu of the Closing Proration List. If the adjusted Purchase Price is greater than the Purchase Price computed pursuant to subsection (1) at the Closing, Buyer shall pay the difference to County. If the adjusted Purchase Price is less than the Purchase Price computed pursuant to subsection (1) at the Closing, County shall pay the difference to Buyer. If County disagrees with the Final Proration List determined by Buyer or with any other matter arising out of this Section 3.C, and the Parties cannot within 30 days resolve the disagreement themselves, the Parties will refer the disagreement to the Accounting Firm, whose decision shall be final. Each Party shall have an additional 30 days from the end of the prior 30-day period to submit their respective positions and any relevant supporting materials. Each of Parties shall pay one-half of the fees and expenses of the Accounting Firm.

D. Capex Reimbursement.

1. Consistent with Section 3.B., and subject to Section 3.D.3, at Closing, Buyer will pay to County the amount of County's actual and documented capital expenditures, minus the amount of Grant Funding ("**Capex Reimbursement**"), for Interim Period Capital Improvements (as defined in Section 3.F): (i) that have been completed as of the Closing; (ii) for which County has received all anticipated Grant Funding; and (iii) the grant application process for any anticipated Grant Funding has concluded.

2. No later than twenty (20) Business Days before the Closing, County shall deliver to Buyer County's proposed Capex Reimbursement, along with sufficient information and documentation supporting the calculation, including documentation relating to any applicable Grant Funding. Within sixty (60) days following the Closing Date, or such later date as shall be mutually agreed to by County and Buyer, Buyer shall prepare and deliver to County a proposed final

version of the Capex Reimbursement ("**Final Capex Reimbursement**"). The Review Period, the Notice of Disagreement, and the dispute resolution process set forth in Section 3.C.3 for the Final Proration List shall apply equally to the Final Capex Reimbursement. A Notice of Disagreement may include a dispute as to whether any cost item is a reimbursable capital expenditure.

3. If an Interim Period Capital Improvement has not been completed as of the Closing and/or anticipated Grant Funding for an Interim Period Capital Improvement has not been received by County as of the Closing ("**Post-Closing County Capex Project**"), County and Buyer will cooperate to supervise the completion of each such Post-Closing County Capex Project in accordance with the Contract(s) for such project. County shall be responsible for paying all amounts due under such Contract(s), subject to Buyer reimbursing County for the actual and documented capital expenditures for each such project minus the Grant Funding. Upon (i) the completion of each such Post-Closing County Capex Project, (ii) County's receipt of all anticipated Grant Funding for the project, and (iii) the conclusion of any grant application process for Grant Funding for such Post-Closing County Capex Project:

   (i) County shall timely pay all amounts properly due under the Contract(s) for the project.

   (ii) County shall provide Buyer with a reimbursement request for each such improvement, with sufficient information and documentation to support the calculation, including copies of invoices and documentation relating to any applicable Grant Funding.

   (iii) If Buyer disputes County's calculation of the reimbursement amount for any Post-Closing County Capex Project, including whether any cost item is a reimbursable capital expenditure, Buyer shall provide a notice of dispute within 60 calendar days of its receipt of County's reimbursement request and supporting documentation and information. The resolution of any such dispute shall be resolved in accordance with the dispute resolution process set forth in Section 3.C.3 for the Final Proration List. Buyer shall pay any undisputed portion of County's reimbursement request within 60 calendar days of its receipt of County's reimbursement request and supporting documentation and information.

   (iv) County will take all necessary steps to promptly transfer and assign title and ownership of the completed improvement to Buyer, along with all rights attendant thereto, including any contractor warranties.

E. Allocation. Buyer must prepare the Allocation in consultation with the County, which will be binding upon the Parties. The Parties must report, act, and file Tax Returns in all respects and for all Tax purposes consistent with the Allocation. No Party can take any Tax position (whether in audits, Tax Returns, or otherwise) that is inconsistent with or contrary to the Allocation. In the event that the Allocation is disputed by any Governmental Authority, the Party receiving notice of such dispute will promptly notify the other Party, and the Parties will consult in good faith as to how to resolve such dispute in a manner consistent with the Allocation.

F. Capital Improvements.

1. Interim Period Capital Improvements. The County may invest in capital improvements to the Sativa Water System during the Interim Period as necessary to comply with applicable Laws (including, without limitation, the DDW Permit) and/or to provide for the reasonable and prudent operation of the Sativa Water System ("**Interim Period Capital Improvements**"). The County will consult with Buyer in advance with respect to the scope, design and cost of Interim Period Capital Improvements except for any improvements that are undertaken on an emergency basis. The purpose of such consultation will be to (i) coordinate any Interim Period Capital Improvements with Suburban's plan for DDW Permit compliance measures and capital improvements following the Closing; and (ii) harmonize accounting for costs and expenditures for Interim Period Capital Improvements between the County accounting system and Sections 5 and 6 of the "Utility Plant Accounts – Instructions" of the Uniform System of Accounts for Class A Water Utilities prescribed by the CPUC. Notwithstanding clause (ii) above, the Capex Reimbursement for Interim Period Capital Improvements will not be subject to compliance with the CPUC's Uniform System of Accounts rules.

2. Post-Closing Compliance Measures. Based on the joint review of the DDW Permit and discussions between the County, Suburban and DDW staff, the County and Suburban acknowledge for planning purposes that Suburban intends to undertake the capital improvements specified on Exhibit G as necessary to bring the Sativa Water System into compliance with the DDW Permit following the Closing. Notwithstanding the foregoing, the aforementioned list is for planning purposes and the actual implementation of such capital improvements will be subject to DDW and CPUC approval. The current estimate of the aggregate cost of such compliance measures is $8.5 million.

G. Operational Covenants. As additional consideration for the purchase of the Acquired Assets, Buyer has committed to the following operational covenants in connection with the application to the CPUC for approval of the Contemplated Transactions and after the Closing:

1. Rate Plan. Subject to CPUC approval: (i) during the period from the Closing through December 31, 2023, Buyer will charge Customers $62.00 per month as the base charge for a single unit (and multiples of that amount for each additional unit or portion thereof consistent with the rate schedule described in Section 8.U) along with applicable surcharges, credits, taxes and franchise fees; (ii) beginning on January 1, 2024, the Sativa Water System will be incorporated into and subject to the CPUC-approved tariffs for Buyer's Whittier / La Mirada Buyer service area, including the rates applicable to Buyer's Whittier / La Mirada Buyer service area along with applicable surcharges, credits, taxes and franchise fees; and (iii) in the event that the Closing occurs after January 1, 2024, the Sativa Water System will be incorporated into and subject to the CPUC-approved tariffs for Buyer's Whittier / La Mirada Buyer service area, including the rates applicable to Buyer's

Whittier / La Mirada Buyer service area along with applicable surcharges, credits, taxes and franchise fees immediately after Closing ("**Rate Plan**").

2. Compliance With Laws And Permits Applicable To The Sativa Water System. Buyer will comply with all Laws applicable to the Sativa Water System, including: (1) SWRCB Compliance Order No 4_22_18R_003, to the extent it has not been rescinded after the issuance of the DDW Permit; (2) the DDW Permit and any other permit or compliance order issued by the DDW or the SWRCB; and (3) other federal and state laws, regulations, and standards applicable to the Sativa Water System, including those requiring the installation of meters by January 1, 2025 [Public Utility Code § 781].

4. CONVEYANCE OF TITLE; ASSIGNMENTS.

A. Upon the terms and subject to the conditions of this Agreement, at the Closing, County agrees to convey by quit claim deed to Buyer fee simple title to the Real Property constituting a portion of the Acquired Assets. As set forth below, the Real Property is to be transferred to Buyer in "AS-IS, WHERE-IS" condition.

B. Upon the terms and subject to the conditions of this Agreement, at the Closing, County agrees to transfer, convey and assign the remainder of the Acquired Assets in accordance with the applicable Transaction Document, including the tangible assets that do not constitute Real Property via the Bill of Sale and the Water Rights via the Water Rights Assignment.

5. ASSUMPTION OF LIABILITIES.

A. Buyer assumes no obligations and liabilities of any kind or nature whatsoever related to, arising from, or associated with the Sativa Water System prior to Closing except the following: (i) Sativa Water System customer deposits in the approximate amount of $148,475.77; and (ii) any Assumed Contracts.

B. For the avoidance of all doubt, Buyer assumes no obligations with respect to any other current or long-term Liabilities, including, but not limited to any obligations with respect to (x) the Loan Agreement dated January 11, 2019 by and between the County and the Sativa District ("**County Loan**") and (y) the Installment Sale Agreement dated June 1, 2017 by and between Municipal Finance Corporation and the Sativa District "**MFC Loan**"). At Closing, County shall pay off all outstanding amounts due under the MFC Loan and the County Loan.

6. CLOSING. Closing will occur at Buyer's place of business or such other place or by such other means (e.g., e-mail, PDF or facsimile and overnight delivery of original execution documents) as is agreed to by the Parties at 10:00 A.M., Pacific time, on (a) a date that is not more than [15] Business Days after the date on which all of the conditions precedent in this Agreement are satisfied or waived or, if Buyer elects, the final day of County's billing period of which such date is a part; or (b) such other date, time and/or place as the Parties may agree upon in writing.

7. CLOSING OBLIGATIONS. In addition to any other documents to be delivered under other provisions of this Agreement, at Closing the Parties must deliver:

A. All documents required to be executed by such Party including, without limitation, the Transaction Documents;

B. All documents and Consents (including, without limitation, the CPUC Decision) from Governmental Authorities and third parties necessary to ensure that Buyer will continue to have the same full rights with respect to the Acquired Assets as County had before the Closing; and

C. All other documents required to be delivered by a Party or reasonably requested by Buyer or County to be delivered at or before the Closing.

D. Joint escrow instructions to the Closing agent effectuating the Closing (i.e., title company) that provide for the full payment of the outstanding balances due under the Encumbrances listed in Exhibit H.

8. COUNTY'S REPRESENTATIONS AND WARRANTIES. County makes the following representations and warranties to Buyer, each of which is true and correct as of the date of this Agreement and will be true and correct as of the Closing:

A. County is the successor-in-interest to Sativa District and owner of the Acquired Assets, including the Real Property, pursuant to the authority granted under H&S Code § 116687 and the LAFCO Resolution.

B. Pursuant to the authority granted under H&S Code § 116687 and the LAFCO Resolution, County is authorized to own and operate the Sativa Water System and the Acquired Assets.

C. County has not placed any Encumbrance on the Acquired Assets, including the Real Property, since County's appointment as the administrator of the Sativa Water System and none of the Acquired Assets are on loan by County to any third party. To the County's Actual Knowledge, all Encumbrances on the Acquired Assets, including the Real Property, are set forth in Exhibit H attached hereto.

D. County has delivered to Buyer all documents in its possession regarding the location of water supply sources, pump stations and storage facilities, mains and service connections used in connection with the Sativa Water System and necessary to be used in connection with the Sativa Water System and does not have notice of any actual or pending dispute or claim that any portion of the Sativa Water System is located on real property for which there is not a valid easement, right of way or other real property interest. County has not investigated and makes no representation with respect to the existence, validity or scope of any easements for the Sativa Water System that are located on private property.

E. Except as otherwise provided by applicable Law (e.g., the United States Bankruptcy Code), this Agreement constitutes the legal, valid and binding obligation of County, enforceable against County in accordance with its terms.

F. Subject to the CPUC Decision, the County has the absolute and unrestricted right, power and authority to complete the Contemplated Transactions. County's representatives are authorized to execute and perform this Agreement and the other Transaction Documents. This Agreement has been, and the other Transaction Documents will be, duly executed and delivered by County.

G. Except as otherwise provided by applicable Law (e.g., the California Public Utilities Code and the LAFCO Resolution), no additional Consents are required to complete the sale, transfer and assignment of the Acquired Assets.

H. There is no unpaid Tax, levy or assessment against the Acquired Assets, including the Real Property (except for Encumbrances relating to Taxes not yet due and payable), nor is there pending or threatened any condemnation Proceeding against the Acquired Assets.

I. The Acquired Assets are and have been treated as exempt from real, personal property, and *ad valorem* Taxes in the County of Los Angeles and any other jurisdiction in which the Acquired Assets are or have been located, however, this exemption is due to the status of Sativa District and County as public agencies and this would not apply to Buyer.

J. County is, and at all times in which it has owned the Acquired Assets has been, a corporate body and politic existing in accordance with applicable Law, including the California Constitution and California Government Code, and is a legal subdivision of the State of California. For purposes of federal Law, County is considered a political subdivision of the State of California and an organization described in Sections 115 and 170(c)(1) of the Code.

K. County has received Grant Funding relating to some of the Acquired Assets. As to any Grant Funding the County received, (i) all work or other requirements that were required to be taken and completed have been taken and completed (or caused to be taken and completed) by County; (ii) County's performance with respect to such grants has not been challenged or questioned by nor is, to County's knowledge, the subject of any audit or investigation; and (iii) all such grants have been completed or are in the process of being completed and will be completed prior to the Closing.

L. No general obligation bonds were pledged for use by the Sativa Water System.

M. County has provided Buyer with copies of all Contracts that currently exist affecting the Acquired Assets to which County is a party or by which County is bound in its role as the successor agency to the Sativa District.

N. To County's Actual Knowledge, the operation of the Sativa Water System and the use of the Acquired Assets by County has been in compliance with all Laws applicable thereto.

O. To County's Actual Knowledge, the operation of the Sativa Water System and the use of the Acquired Assets by County has been in compliance with all Environmental Law applicable thereto. County has no basis to expect nor has it received any actual or threatened Order, notice or other communication of any actual or potential violation or failure to comply with any applicable Law.

P. Except for SWRCB Compliance Order No. 04_22_18R_003, there are no known pending or, to County's Actual Knowledge, threatened claims, Encumbrances or other restrictions of any nature, resulting from any alleged violation of applicable Law affecting the Acquired Assets. There are no Proceedings, either pending or, to County's Actual Knowledge, threatened, against County involving the operation or ownership of the Sativa Water System or any of the Acquired Assets, which would reasonably be expected to have an adverse effect on the Sativa Water System or any of the Acquired Assets.

Q. To County's Actual Knowledge and except as otherwise disclosed to Buyer, there are no Hazardous Materials present on or in the Real Property, except those used in connection with the operation of the Acquired Assets in accordance with applicable Environmental Law.

R. To County's Actual Knowledge, there has been no Release or threat of Release of any Hazardous Materials at or from the Acquired Assets.

S. County has provided Buyer with a complete and correct list of all Permits used by County in the current ownership, operation and/or maintenance of the Sativa Water System, which is attached hereto as Exhibit I, as well as the DDW Permit. Such Permits and the DDW Permit constitute all those necessary for the ownership, operation and maintenance of the Sativa Water System by the County and are all valid and subsisting and in full force and effect.

T. County has made reasonable efforts to provide copies of the Business Records in its possession with respect to the Sativa Water System. Business Records created by County in the period following its appointment as administrator of the Sativa Water System are true and correct and represent actual transactions entered into by the County with respect to the Sativa Water System; however, County makes no representation or warranty concerning the accuracy of Business Records that were created prior to its appointment as administrator of the Sativa Water System.

U. Attached hereto as Exhibit J is a true and correct schedule of (i) the current billing rates for the Sativa Water System, which provides for a flat rate for water service based on the number of dwelling units, with garage conversions and other ancillary buildings being treated as half or additional units; and (ii) the number of customers who are currently invoiced in each rate category as of November 23, 2020.

V. County has provided financial statements in the Bidders Notebook with the RFP for periods prior to its appointment as administrator of the Sativa Water System and has shared internally prepared financial projections and budget information concerning the Sativa Water System that are estimates only. County makes no representations or warranties concerning the accuracy of the financial statements in the Bidders Notebook and any proforma financial information created by County is provided for the information of Buyer only and is subject to Buyer's independent review and verification.

W. Buyer will not be responsible for any funding or continued operation of any health insurance policies, employee benefit plans, retirement plans, individual retirement

accounts, or 401(k) accounts related to, managed by, belonging to, or held for the benefit of, County, its officers, employees, subcontractors, agents, or any other third parties.

X. The Sativa Water System buildings, plants, and structures installed or constructed by County after its appointment as Administrator and Successor Agency of the Sativa District are structurally sound, in good operating condition and repair, and adequate for the uses to which they are being put, and none of such buildings, plants, or structures is in need of maintenance or repairs other than ordinary, routine maintenance that is not material in nature or cost.

Y. County, as the successor agency to the Sativa District under H&S Code § 116687, has taken and will take all necessary steps to ensure that the "interim operation period" under H&S Code § 116687 has been or will be extended until the Closing Date.

Z. County is self-insured for any and all risks and liabilities associated with its ownership and operation of the Sativa Water System, does not maintain commercial insurance for such risks and liabilities, and intends to continue to be self-insured for such risks and liabilities until Closing.

9. COUNTY'S DISCLOSURE AND DISCLAIMER. The information provided in the RFP and the Bidders Notebook are solely for the evaluation of the Sativa Water System and County makes no representation or warranty concerning the accuracy of such information. Furthermore, County makes no representation or warranty with respect to the accuracy of any documents, Business Records or information provided by County that was in existence prior to County's appointment as the administrator of the Sativa Water System. Notwithstanding the foregoing, County has not knowingly provided any information that is untruthful or inaccurate concerning the Sativa Water System.

10. "AS IS" SALE.

A. EXCEPT FOR THE REPRESENTATIONS, WARRANTIES AND COVENANTS OF COUNTY EXPRESSLY SET FORTH IN SECTIONS 8 AND 9 OF THIS AGREEMENT OR ANY OTHER DOCUMENT DELIVERED BY COUNTY TO BUYER AT THE CLOSING (COLLECTIVELY, THE **"COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS**"), IT IS UNDERSTOOD AND AGREED THAT COUNTY IS NOT MAKING AND HAS NOT AT ANY TIME MADE ANY WARRANTIES OR REPRESENTATIONS OF ANY KIND OR CHARACTER, EXPRESSED OR IMPLIED, WITH RESPECT TO THE ACQUIRED ASSETS, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OR REPRESENTATIONS AS TO HABITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, TAX CONSEQUENCES, LATENT OR PATENT PHYSICAL OR ENVIRONMENTAL CONDITION, UTILITIES, OPERATING HISTORY OR PROJECTIONS, VALUATION, GOVERNMENTAL APPROVALS, THE COMPLIANCE OF THE ACQUIRED ASSETS WITH GOVERNMENTAL LAWS, THE TRUTH, ACCURACY OR COMPLETENESS OF THE DOCUMENTS RELATING TO THE ACQUIRED ASSETS OR ANY OTHER INFORMATION PROVIDED BY OR ON BEHALF OF COUNTY TO BUYER, OR ANY OTHER MATTER OR THING REGARDING THE ACQUIRED ASSETS.

B. BUYER ACKNOWLEDGES AND AGREES THAT UPON CLOSING COUNTY SHALL CONVEY TO BUYER, AND BUYER SHALL ACCEPT, THE ACQUIRED ASSETS "AS IS,

WHERE IS, WITH ALL FAULTS", EXCEPT FOR THE COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS.

C. BUYER ACKNOWLEDGES AND AGREES THAT BUYER WILL HAVE HAD THE OPPORTUNITY TO CONDUCT PRIOR TO CLOSING SUCH INVESTIGATIONS OF THE ACQUIRED ASSETS, INCLUDING BUT NOT LIMITED TO, THE PHYSICAL AND ENVIRONMENTAL CONDITIONS THEREOF, AS BUYER DEEMS NECESSARY TO SATISFY BUYER AS TO THE CONDITION OF THE ACQUIRED ASSETS AND THE EXISTENCE OR NONEXISTENCE OF ANY HAZARDOUS MATERIALS ON, UNDER, ABOUT OR DISCHARGED FROM THE ACQUIRED ASSETS WHICH MAY NOW OR IN THE FUTURE REQUIRE INVESTIGATION, REMEDIATION OR OTHER CURATIVE ACTION UNDER ANY ENVIRONMENTAL LAWS, AND, EXCEPT FOR THE COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS, BUYER WILL RELY UPON SAME AND NOT UPON ANY INFORMATION PROVIDED BY OR ON BEHALF OF COUNTY OR COUNTY'S AGENTS OR EMPLOYEES WITH RESPECT THERETO.

D. UPON CLOSING, EXCEPT FOR AND SUBJECT TO THE COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS, BUYER SHALL ASSUME THE RISK THAT ADVERSE MATTERS, INCLUDING BUT NOT LIMITED TO, CONSTRUCTION DEFECTS AND ADVERSE PHYSICAL AND ENVIRONMENTAL CONDITIONS, MAY NOT HAVE BEEN REVEALED BY THE BUYER'S INVESTIGATIONS, AND, EXCEPT FOR ANY CLAIM FOR BREACH BY COUNTY OF ANY OF THE COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS, AND EXCEPT FOR EXCLUDED CLAIMS (DEFINED BELOW), BUYER, UPON CLOSING, SHALL BE DEEMED TO HAVE WAIVED, RELINQUISHED AND RELEASED COUNTY FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, CAUSES OF ACTION (INCLUDING CAUSES OF ACTION IN TORT), LOSSES, DAMAGES, LIABILITIES, COSTS AND EXPENSES (INCLUDING ATTORNEYS' FEES AND COURT COSTS) OF ANY AND EVERY KIND OR CHARACTER, KNOWN OR UNKNOWN, WHICH BUYER MIGHT HAVE ASSERTED OR ALLEGED AGAINST COUNTY AT ANY TIME BY REASON OF OR ARISING OUT OF (I) ANY LATENT OR PATENT CONSTRUCTION DEFECTS OR PHYSICAL CONDITIONS, (II) ANY MAINTENANCE OR OTHER WORK DONE OR PERFORMED ON OR ABOUT THE ACQUIRED ASSETS, INCLUDING, WITHOUT LIMITATION, ANY SUCH WORK PERFORMED FOR COUNTY OR ANY OF THE OTHER COUNTY, (III) VIOLATIONS OF ANY APPLICABLE LAWS INCLUDING ANY ENVIRONMENTAL LAWS) AND/OR (IV) ANY AND ALL OTHER ACTS, OMISSIONS, EVENTS, CIRCUMSTANCES OR MATTERS REGARDING THE ACQUIRED ASSETS (HEREINAFTER COLLECTIVELY THE "**RELEASED CLAIMS**"). BUYER AGREES THAT SHOULD ANY CLEANUP, REMEDIATION OR REMOVAL OF HAZARDOUS MATERIALS OR OTHER ENVIRONMENTAL CONDITIONS ON THE ACQUIRED ASSETS BE REQUIRED AFTER THE DATE OF CLOSING, EXCEPT FOR ANY CLAIM OF BREACH BY COUNTY OF ANY COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS AND EXCEPT FOR ANY OTHER EXCLUDED CLAIMS, BUYER'S CLAIMS AGAINST COUNTY ARISING FROM SUCH MATTERS ARE INCLUDED IN RELEASED CLAIMS. NOTHING CONTAINED HEREIN WILL PREVENT BUYER FROM ENFORCING ANY THIRD PARTY WARRANTY THAT HAS BEEN ASSIGNED BY COUNTY IN CONNECTION WITH THE ACQUISITION OR CONSTRUCTION OF ANY OF THE ACQUIRED ASSETS.

E. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY IN THIS SECTION 10 OR ELSEWHERE IN THIS AGREEMENT, IN NO EVENT SHALL COUNTY BE RELEASED FROM, NOR SHALL RELEASED CLAIMS INCLUDE OR BE DEEMED TO INCLUDE:

(A) THE BREACH OF ONE OR MORE OF THE COUNTY REPRESENTATIONS, WARRANTIES AND COVENANTS; (B) THE FRAUD, WILLFUL MISCONDUCT OR OTHER TORTIOUS CONDUCT OF COUNTY, ANY PARTY COMPRISING COUNTY, OR ANY OF THEIR REPRESENTATIVES, AGENTS, OR CONTRACTORS; (C) COUNTY'S BREACH OF ANY AGREEMENT BETWEEN COUNTY AND A THIRD PARTY; AND (D) ANY PERSONAL INJURY AND RELATED ACQUIRED ASSETS DAMAGE WHICH OCCURRED WITH RESPECT TO THE SATIVA WATER SYSTEM AND THE ACQUIRED ASSETS PRIOR TO THE CLOSING AND WAS NOT CAUSED BY THE ACT OR OMISSION OF BUYER OR REPRESENTATIVE OF BUYER) (COLLECTIVELY, THE "**EXCLUDED CLAIMS**").

F. AS PART OF THE PROVISIONS OF THIS SECTION, BUT NOT AS A LIMITATION THEREON, BUYER HEREBY ACKNOWLEDGES AND AGREES THAT THE MATTERS RELEASED HEREIN UPON CLOSING ARE NOT LIMITED TO MATTERS WHICH ARE KNOWN OR DISCLOSED, AND BUYER HEREBY WAIVES ANY AND ALL RIGHTS AND BENEFITS WHICH IT NOW HAS, OR IN THE FUTURE MAY HAVE CONFERRED UPON IT, BY VIRTUE OF THE PROVISIONS OF FEDERAL, STATE OR LOCAL LAW, RULES OR REGULATIONS. WITHOUT LIMITING THE FOREGOING, BUYER WAIVES THE PROVISIONS OF SECTION 1542 OF THE CALIFORNIA CIVIL CODE, WHICH PROVIDES:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR THE RELEASED PARTY.

Buyer initials _____

11. REPRESENTATIONS AND WARRANTIES OF BUYER. Buyer makes the following representations and warranties to County:

A. Buyer is a duly organized and validly existing corporation in good standing under the laws of the state of California and has the power and authority to own, lease and operate its assets and properties.

B. Buyer has all necessary corporate approvals to purchase and accept the Acquired Assets.

C. Except as otherwise provided by applicable Law (e.g., the United States Bankruptcy Code), this Agreement constitutes the legal, valid and binding obligation of Buyer, enforceable against Buyer in accordance with its terms.

D. Buyer has completed, and is satisfied with, all inspections of the Acquired Assets. No additional investigation or due diligence is required to complete performance of this Agreement and the other Transaction Documents.

E. Neither the execution or delivery of this Agreement nor the consummation of the Contemplated Transactions will result in: (i) a violation of or a conflict with any provision of the articles of incorporation or the bylaws of Buyer; (ii) a material breach of or default under any term, condition or provision of any Contract to which Buyer is a

party, or an event which, with the giving of notice, lapse of time, or both, would result in any such breach or default; or (iii) a material violation of any applicable Law, Order, judgment, writ, injunction, decree or award or any event which, with the giving of notice, lapse of time, or both, would result in any such violation.

12. ACCOUNTS RECEIVABLE.

A. Before the date hereof, County provided Buyer with a list of customers under seal and marked as "confidential" in accordance with Government Code § 6254.16 together with an aging schedule relating to such customers' accounts. These Receivables, together with any such Receivables arising between such date and the Closing, are (to the extent not yet paid in full and in excess of one year remaining before expiration under the applicable statute of limitations) valid. Except to the extent paid before Closing, the Receivables are and will be current and fully collectible. County will update the customer list, the list of Receivables and the related aging schedule at least five Business Days before Closing.

B. From and after the date of this Agreement through and until the Closing, County will undertake its reasonable best efforts to collect all Receivables, whether now existing or accrued after the date hereof, in a timely manner (subject to any restrictions on collection as a result of the Covid-19 pandemic).

13. CONDITIONS PRECEDENT TO THE OBLIGATIONS OF BUYER. Buyer's obligations to consummate the Contemplated Transactions are subject to the satisfaction in full, unless expressly waived in writing by Buyer, of each of the following conditions:

A. Buyer must secure the following, in form and substance satisfactory to Buyer:

1. All necessary regulatory approvals from the CPUC, including the CPUC Decision in form and substance acceptable to Buyer; and

2. Any other applicable Consents from public entities or third parties.

B. Buyer must receive (or the Title Company will commit to deliver) one or more ALTA 2006 Standard Owner's Policy(s) of title insurance for the Real Property.

C. A Material Adverse Effect has not occurred.

D. Prior to the Closing, Buyer shall have conducted, at its sole cost, an ASTM Phase 1 Environmental Site Assessment covering the Real Property, which assessment shall conclude that no recognized environmental conditions, that could reasonably be expected to cost more than $25,000 to remediate, were found in connection with the Real Property, and that no further investigation of the Real Property is warranted.

E. All items to be delivered at Closing under the Transaction Documents have been properly executed by duly authorized persons and have been delivered to Buyer.

F. Each of County's representations and warranties in this Agreement shall have been true and correct in all material respects as of the date of this Agreement and will be true and

correct in all material respects as of the time of the Closing as if then made (except to the extent that any such representation and warranty expressly speaks as of a particular date, in which case such representation and warranty shall be true and correct in all material respects as of such date).

G. The covenants and obligations that County is required to perform or to comply with pursuant to this Agreement at or prior to the Closing shall have been duly performed and complied with in all material respects.

H. County has promptly taken such actions as may have been reasonably requested by Buyer to secure the release of all Encumbrances that have been placed on the Acquired Assets by County or which County has agreed to satisfy through escrow, in each case, in substance and form reasonably satisfactory to Buyer

14. CONDITIONS PRECEDENT TO THE OBLIGATIONS OF COUNTY. County's obligations to consummate the Contemplated Transactions are subject to the satisfaction in full, unless expressly waived in writing by County, of each of the following conditions:

A. Buyer must secure the following, in form and substance satisfactory to County:

1. All necessary regulatory approvals from the CPUC, including the CPUC Decision in form and substance acceptable to County; and

2. Any other applicable Consents from public entities or third parties.

B. All items to be delivered at Closing under the Transaction Documents have been properly executed by duly authorized persons and have been delivered to County.

C. Each of Buyer's representations and warranties in this Agreement shall have been true and correct in all material respects as of the date of this Agreement and will be true and correct in all material respects as of the time of the Closing as if then made (except to the extent that any such representation and warranty expressly speaks as of a particular date, in which case such representation and warranty shall be true and correct in all material respects as of such date).

D. The covenants and obligations that Buyer is required to perform or to comply with pursuant to this Agreement at or prior to the Closing shall have been duly performed and complied with in all material respects.

15. COMPLIANCE WITH APPLICABLE REQUIREMENTS AND GOVERNMENTAL APPROVALS. Except for: (i) the CPUC Decision; (ii) County's consent and approval; and (iii) any obligation that must be performed by County under applicable Law; Buyer is solely responsible for complying, at Buyer's sole expense, with all applicable Laws, and obtaining all Consents of Governmental Authorities and third persons in connection with the consummation of the Contemplated Transactions.

16. COOPERATION. Upon the terms and subject to the conditions of this Agreement, the Parties will use their respective reasonable efforts to cooperate with each other in connection

with, and will use reasonable efforts to take or cause to be taken and do or cause to be done, any actions required to be taken under applicable Law to perform this Agreement as promptly as practicable. Before the Closing, the Parties will proceed expeditiously and in good faith to make such filings, including, without limitation, filings with the CPUC, and take such other actions as may be reasonably necessary to satisfy the conditions to Closing. Any and all filing fees in respect of such filings must be paid by Buyer. From and after the Closing, the Parties will do such acts and execute such documents and instruments as may be reasonably required to make effective the Contemplated Transactions. County agrees to cooperate with Buyer to ensure a proper transition of all customers with respect to billing and customer service activities, including meter reading. Buyer will take the lead in obtaining the required regulatory approvals with respect to the Contemplated Transactions.

17. CONDUCT OF BUSINESS.

A. During the Interim Period, County will (a) carry on the operation and maintenance of the Acquired Assets in compliance with applicable Law; (b) not introduce any materially new method of management or operation of the Sativa Water System without first obtaining the prior written consent of Buyer; (c) use best efforts to preserve the Acquired Assets; (d) conserve the goodwill and relationships of the customers, suppliers, and others having business relations with the Sativa Water System; (e) maintain supplies at a level which is sufficient to operate the Sativa Water System in accordance with past practice; (f) maintain the Acquired Assets in substantially the condition currently existing, normal wear and tear excepted; (g) preserve all Permits; and (h) maintain all Business Records. Notwithstanding the foregoing, if the Parties enter into the O&M Agreement, subject to the terms of such O&M Agreement, some or all of the obligations set forth in this Section 17(A) may be assumed by Buyer to the extent expressly assumed by Buyer therein.

B. Without limiting the generality of the foregoing, during the Interim Period, the County shall not, without first obtaining the prior written consent of Buyer:

1. transfer, sell, lease, encumber, or otherwise dispose of all or any portion of any Acquired Assets;

2. terminate, cancel, or materially amend or modify any Assumed Contract, or fail to exercise any renewal right with respect to any Contract that by its terms would otherwise expire (other than in the ordinary course of business);

3. commence, release or settle any Proceeding or waive any claims or rights of value, in each case, attributable to the Acquired Assets;

4. enter into any transaction or take any other action that could be reasonably expected to cause or constitute a breach of any representation or warranty made by the County in this Agreement;

5. voluntarily waive or release any material right with respect to any Acquired Assets;

6. grant or suffer to exist any Encumbrance on or with respect to any of the Acquired Assets that would not be fully released and discharged on or prior to Closing;

7. install capital improvements into the Sativa Water System during the Interim Period except for Interim Period Capital Improvements;

8. make any regulatory or other filings of any kind with any Governmental Authority, except in the ordinary course of business consistent with past practices or as required in connection with the consummation of the Contemplated Transactions consistent with this Agreement; or

9. enter into any agreement or commitment to take any action prohibited by this Section 17.B.

18. RELEASE OF ENCUMBRANCES. County will promptly take such actions as may be reasonably requested by Buyer to secure the release of all Encumbrances that have been placed on the Acquired Assets by County or which County has agreed to satisfy through escrow, in each case, in substance and form reasonably satisfactory to Buyer.

19. PUBLIC RECORDS; RETENTION OF RECORDS. Buyer acknowledges that County is a public entity subject to the Public Records Act (Government Code §§ 6250-6276.48) and that this Agreement, and documents ancillary to this Agreement, must generally be disclosed upon request, except to the extent protected from disclosure under applicable Laws, including the Common Interest Doctrine. All records subject to this Agreement that are not delivered to Buyer upon Closing will be retained by County in accordance with the Public Records Act and County's retention schedule.

20. LIMITED INDEMNIFICATION. Notwithstanding anything to the contrary in this Agreement:

A. Each Party will indemnify and hold harmless the other Party from any and all costs, Liabilities, claims and expenses, including those from death or injury to any Person or from a loss or damage to any real, personal or other property, to the extent arising from any claim against a Party arising from the breach of such Party's representations, warranties, covenants, or obligation set forth in this Agreement or in any certificate, document, writing or instrument delivered by a Party pursuant to this Agreement.

B. County will indemnify, defend and hold harmless Buyer from all claims or Liabilities of County, or the Sativa Water System, which arise out of the operation of the Sativa Water System from the time of County's appointment as the administrator of the Sativa District pursuant to H&S Code § 116687, including any claims covered by H&S Code § 116687(f).

C. Buyer will indemnify, defend and hold harmless County from all claims or Liabilities which arise in connection with the ownership and operation of the Sativa Water System, the Assumed Contracts and the Acquired Assets arising on or after the date of Closing.

D. To be indemnified and held harmless under this Agreement, a Party must promptly notify the other Party of the existence of any matters to which that Party's indemnity obligations apply. Upon demand by a Party pursuant to this Section, the other Party must defend at its own expense with mutually acceptable counsel any such matter; provided that the Party seeking indemnification and defense also has the right to fully participate in the defense and consent to any settlement or compromise.

E. It is expressly understood and agreed that this Section will survive termination of this Agreement.

21. NO TRANSFER AT ODDS WITH LAW. Notwithstanding anything to the contrary contained herein, nothing in this Agreement will be deemed to require the conveyance, assignment or transfer of any Acquired Asset that by operation of applicable Law cannot be conveyed, assigned, transferred or assumed.

22. DISPUTE RESOLUTION. Any dispute arising between County and Buyer regarding this Agreement will first be attempted to be resolved through informal mediation between the respective Parties' designated representatives. If the dispute cannot be resolved pursuant to this Section 22, then the dispute will either be resolved in accordance with the specific dispute resolution mechanisms set forth in this Agreement or in accordance with the rights and remedies available under applicable Law.

23. CONFIDENTIALITY.

A. Before Closing and for a period of three (3) years after the Closing Date, each Party will ensure that all Confidential Information which such Party or any of its respective officers, directors, employees, counsel, agents, or accountants may have obtained, or may hereafter obtain, from the other Party (or create using any such information) relating to the financial condition, business plans and strategies, results of operations, the Sativa Water System, properties, assets, Liabilities or future prospects of the other Party, any Affiliate of the other Party or any customer or supplier of such other Party or any such Affiliate will not be published, disclosed or made accessible by any of them to any other Person at any time or used by any of them, in each case, without the prior written Consent of the other Party; provided, however, that the restrictions of this sentence do not apply (i) as may otherwise be required by Law, including the requirements of the California Public Records Act unless the Confidential Information is subject to an exemption from the California Public Records Act, (ii) to the extent such Confidential Information has otherwise become publicly available, and (iii) as to Buyer, to disclosure by or on its behalf to regulatory authorities or other third parties whose Consent or approval may be required to consummate the Contemplated Transactions and to its lenders and professionals for the purpose of obtaining financing of such transactions.

B. In the event of termination of negotiations or failure of the Contemplated Transactions to close for any reason whatsoever, each Party promptly will destroy or deliver to the other Party and will not retain any documents, work papers and other material (and any reproductions thereof) obtained by each Party or on its behalf from such other Party or its subsidiaries as a result of this proposal or in connection therewith, whether so obtained

before or after the execution hereof, and will not use any information so obtained and will cause any information so obtained to be kept confidential and not used in any way detrimental to such other Party.

24. TERMINATION. This Agreement can be terminated at any time before the Closing only upon the following:

A. By mutual written Consent of County and Buyer;

B. By either Party, upon written notice to the other Party, if the Closing has not occurred on or before the date that is 90 days after the effective date of the CPUC Decision (unless extended in writing by both Parties); provided, however, that the right to terminate this Agreement under this Section is not available to any Party whose breach under this Agreement has caused or resulted in the failure of the Closing to occur on or before such date;

C. By either Party, upon written notice to the other Party, if there is any Law that makes consummation of the Contemplated Transactions illegal, or if any court of competent jurisdiction or other competent Governmental Authority issues a judgment, Order, decree or injunction or taken any other action permanently restraining, enjoining or otherwise prohibiting the Contemplated Transactions, and such statute, rule, regulation, Order, decree or injunction or other action becomes final and non-appealable; provided, however, that the Party seeking to terminate this Agreement pursuant to this Section must have used all commercially reasonable efforts to remove such judgment, injunction, Order or decree;

D. By Buyer, if a Material Adverse Effect occurs;

E. By County, if Buyer has not filed an application with the CPUC for the approval of the Contemplated Transactions described herein within one hundred eighty (180) days of the Effective Date;

F. By Buyer, if the conditions to Closing set forth in Section 13 have not been satisfied within three (3) years of the filing date of Buyer's application to the CPUC to approve the Contemplated Transactions; provided, however, that the right to terminate this Agreement under this Section is not available to any Party whose breach under this Agreement has caused or resulted in the failure of the Closing to occur on or before such date; or

G. By County, if the conditions to Closing set forth in Section 14 have not been satisfied within three (3) years of the filing date of Buyer's application to the CPUC to approve the Contemplated Transactions; provided, however, that the right to terminate this Agreement under this Section is not available to any Party whose breach under this Agreement has caused or resulted in the failure of the Closing to occur on or before such date,

H. By either Party, within 90 days after the effective date of the CPUC Decision, by written notice to the other Party if this Agreement and the Contemplated Transactions are not approved by the CPUC in a manner acceptable to the Parties.

25. TAX REPORTING AND WITHHOLDING – NON-FOREIGN STATUS.

A. The Foreign Investment in Real Property Tax Act of 1980, as amended by the Tax Reform Act of 1984, places special requirements for tax reporting and withholding on the parties to a real estate transaction where the transferor (County) is a non-resident alien or non-domestic corporation or partnership, or is a domestic corporation or partnership controlled by a non-resident or non-resident corporation or partnership.

B. County advises Buyer that County is NOT a "foreign person" for the purposes of Section 1445 (as may be amended) of the Code, and that, in accordance with the provisions of Section 1445 of the Code, County must execute an affidavit under penalty of perjury setting forth County's name, address, federal tax identification number, and certifying that County is not a "foreign person" in accordance with the provisions of the Code.

26. AMENDMENT AND MODIFICATION. No amendment, modification or supplement of any provision of this Agreement will be effective unless the same is in writing and is signed by the Parties.

27. ASSIGNMENTS. Neither Party may assign or transfer any of its rights or obligations under this Agreement to any other person without the prior written consent of the other Party, which will not be unreasonably delayed, conditioned or withheld. If an assignment is approved, all provisions of this Agreement are binding upon, inure to the benefit of and are enforceable by or against the Parties and their respective heirs, executors, administrators or other legal representatives and permitted successors and assigns.

28. PUBLIC ANNOUNCEMENTS. Neither Party may issue any press release or make any public statement with respect to this Agreement or the Contemplated Transactions without the prior written consent of the other Party (which consent shall not be unreasonably withheld), except as may be required by Applicable Law, in which case the Party required to publish such press release or public announcement shall allow the other Party a reasonable opportunity to comment on such press release or public statement to the extent practicable.

29. CAPTIONS; CONSTRUCTION. Captions contained in this Agreement and any table of contents preceding this Agreement were inserted as a matter of convenience and in no way define, limit, extend or describe the scope of this Agreement or the intent of any provision hereof. In the event of an ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the Parties and no presumption or burden of proof will arise favoring or disfavoring any Party by virtue of the authorship of any provisions of this Agreement.

30. COUNTERPARTS; ELECTRONIC SIGNATURES. This Agreement may be executed by the Parties on any number of separate counterparts, and all such counterparts so executed constitute one agreement binding on all the Parties notwithstanding that all the Parties are not signatories to the same counterpart. In accordance with Government Code § 16.5, the

Parties agree that this Agreement, agreements ancillary to this Agreement, and related documents to be entered into in connection with this Agreement will be considered signed when the signature of a party is delivered by electronic transmission. Such electronic signature will be treated in all respects as having the same effect as an original signature.

31. ENTIRE AGREEMENT. Except for the confidentiality provisions of the ENA, this Agreement (together with its Exhibits) and the other Transaction Documents constitute the entire agreement between the Parties pertaining to the conveyance of the Acquired Assets and supersede all prior agreements, letters of intent, understandings, negotiations and discussions of the Parties, whether oral or written. All of the Exhibits attached to this Agreement are incorporated herein by reference.

32. CONSISTENCY. In interpreting this Agreement and resolving any ambiguities, the main body of this Agreement takes precedence over the attached Exhibits; this Agreement supersedes any conflicting provisions.

33. GOVERNING LAW. This Agreement and the rights and obligations of the Parties are governed by and construed and interpreted in accordance with the Laws of the State of California applicable to Contracts made and to be performed wholly within California, without regard to choice or conflict of laws rules.

34. LEGAL FEES, COSTS. Except as otherwise provided, all legal, consulting and advisory fees and other costs and expenses incurred in connection with this Agreement are to be paid by the Party incurring such costs and expenses. Furthermore, in the event of any dispute and/or legal action arising from an interpretation and/or performance of any of the provisions of this Agreement, each party will bear its own attorneys' fees and costs.

35. NOTICES. All notices, Consents, requests, demands and other communications hereunder are to be in writing and are deemed to have been duly given, made or delivered: (i) when delivered in person or by e-mail (with confirmation of receipt); (ii) three Business Days after being deposited in the United States mail, first class postage prepaid; or (iii) in the case of overnight courier services, one Business Day after delivery to the overnight courier service with payment provided, in each case addressed as follows:

If to Seller/County:
County of Los Angeles
Department of Public Works
900 South Fremont Avenue
Alhambra, CA 91803
Tel: (626) 300-3300
Email: rbryden@dpw.lacounty.gov
Attn: Russ Bryden
Assistant Deputy Director

If to Owner:
Suburban Water Systems
1325 N. Grand Avenue, Suite 100
Covina, CA 91724
Telephone: 626-543-2500
E-mail: CGott@swwc.com
Attn: President

With a copy to (which shall not constitute notice):
Office of the County Counsel
County of Los Angeles
500 West Temple Street
Los Angeles, CA 90012
Tel: (213) 974-9668
Email: wwellen@counsel.lacounty.gov
Attn: Warren Wellen
Principal Deputy County Counsel

With a copy to (which shall not constitute notice):
Suburban Water Systems
1325 N. Grand Avenue, Suite 100
Covina, CA 91724
Telephone: 626-543-2500
E-mail: Legal@swwc.com
Attn: General Counsel

or to such other address as any Party hereto may designate by notice to the other Parties in accordance with the terms of this Section.

36. SEVERABILITY. If any portion of this Agreement is declared by a court of competent jurisdiction to be invalid or unenforceable, such portion will be deemed modified to the extent necessary in the opinion of the court to render such portion enforceable and, as so modified, such portion and the balance of this Agreement will continue in full force and effect.

37. SPECIFIC PERFORMANCE; ENFORCEMENT COSTS. The Parties agree that failure to perform this Agreement cannot be adequately relieved by pecuniary compensation. Accordingly, either Party may compel specific performance of this Agreement in accordance with Civil Code §§ 3384, 3386, or 3389, and any other applicable Law.

38. THIRD PARTY BENEFICIARIES. This Agreement and every provision herein is generally for the exclusive benefit of Buyer and County and not for the benefit of any other party. There will be no incidental or other beneficiaries of any of Buyer's or County's obligations under this Agreement.

39. WAIVER OF COMPLIANCE; CONSENTS. Any failure of a Party to comply with any part of this Agreement may be waived by the other Party only by a written instrument signed by the Party granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition does not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

40. VENUE. Exclusive venue for any action involving this agreement will be in the Superior Court for the County of Los Angeles or the Federal District Court for the Central District of California.

41. WAIVER OF JURY TRIAL. To the fullest extent permitted by law, each of the Parties irrevocably waives all right to trial by jury in any action, suit, proceeding or counterclaim arising out of or relating to this Agreement or any of the Contemplated Transactions.

[Remainder of page intentionally left blank; signature page attached.]

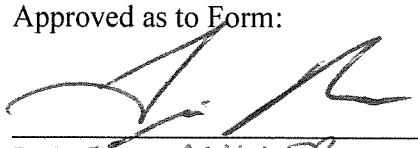
IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

SUBURBAN WATER SYSTEMS	**COUNTY OF LOS ANGELES**
By: Craig Gott	By: Mark Pestrella
Title: President	Title: Director
Approved as to Form:	Approved as to Form:
By:	By: Michael Simon
Title: _____	Title: Senior Deputy County Counsel

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

SUBURBAN WATER SYSTEMS	**COUNTY OF LOS ANGELES**
By: Craig Gott Title: President	By: Mark Pestrella Title: Director
Approved as to Form:	Approved as to Form:
By: Title: _____	By: Title: _____

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

SUBURBAN WATER SYSTEMS	**COUNTY OF LOS ANGELES**
By: Craig Gott Title: President	By: Mark Pestrella Title: Director
Approved as to Form:  By: TIM MILLER Title: GENERAL COUNSEL	Approved as to Form: By: Title: _____

EXHIBITS LIST

A. Acquired Assets

B. DDW Permit

C. Assumed Contracts

D. Form of Bill of Sale

E. Form of Water Rights Assignment

F. Prorations

G. Post-Closing Compliance Measures

H. Encumbrances

I. Permits

J. Schedule of Billing Rates and Number of Customers Per Rate Category

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EXHIBIT A – ACQUIRED ASSETS

The Acquired Assets consist of all of the assets associated with the Sativa Water System, including the Water Rights, as such assets are described in further detail below, including any transferable third party warranties that remain in effect with respect to any Acquired Asset:

1. Land:
    a. 2015 Hatchway St., Compton, California 90220
        i. (Lots 35 and 36 in Block Q of Tract 4631, as per Map recorded in Book 49, Pages 90 and 91 of Maps, in the office of the County Recorder of said County)
    b. 13320 Willowbrook Ave., Compton, California 90220
        i. (Lots Eighteen (18) and Nineteen (19) in Block 8 of East Richland Tract, as per Map recorded in Book 10, Page 1 of Maps, in the office of the County Recorder of said County)
    c. 13139 Aranbe St., Compton, California 90220 and adjacent lot (parcel #6152-019-900)
        i. (Lots 46 and 47 of Block D of Tract No. 4631, in the County of Los Angeles, State of California, as per Map recorded in Book 49, Pages 90 and 91 of Maps, in the office of the County Recorder of said County)
    d. 2081/2083 E. Stockwell St., Compton, California 90220
        i. (Lot 58 and 59, Block "M" of Tract No. 4631, in the County of Los Angeles, State of California, as per Map recorded in Book 49 Pages 90 and 91, inclusive of Maps, in the office of the County Recorder of said County)
2. Land: All Easements in favor of the Sativa Water District
3. All Structures & Improvements located on the land referenced in item #1, above.
4. Well Numbers 2, 3, 4, and 5 – including all associated improvements, pumping and electrical equipment, and water treatment equipment (including manganese water treatment equipment at Well No. 5)
5. All Sativa Water System reservoirs, tanks, and standpipes
6. All Sativa Water System water mains and valves
7. All Sativa Water System water services and meters
8. All Sativa Water System hydrants

9. All other Sativa Water System equipment, including a Kubota tractor with backhoe, pickup truck, passenger van, trailer mounted air compressor, and a trailer mounted generator

10. All adjudicated water rights held in the name of the Sativa Water District, namely, the 474 acre-feet of adjudicated Central Basin Groundwater Rights held in the name of the Sativa Water District

EXHIBIT B – DDW PERMIT

See Attached

State Water Resources Control Board

Division of Drinking Water

December 23, 2020

Mr. Mark Pestrella
Director, Los Angeles County Public Works
County of Los Angeles
P.O. Box 1460
Alhambra, CA 91802-1460

Dear Mr. Pestrella:

SYSTEM NO. 1910147 – SATIVA WATER SYSTEM DOMESTIC WATER SUPPLY PERMIT NO. 04-22-20P-009

I am pleased to forward the Domestic Water Supply Permit and accompanying Engineering Report for the Los Angeles County Public Works - Sativa Water System. Please acknowledge receipt of this permit and your willingness to comply with the permit conditions in writing within 15 days.

Please be advised that a public water system may file with the State Water Resources Control Board (State Water Board) a petition for reconsideration of a decision by the Deputy Director to issue, deny or amend a permit. Petitions must be received by the State Water Board within 30 calendar days of the issuance of the permit, permit amendment or decision. The date of issuance is the date when the Division of Drinking Water mails or serves a copy of the permit, permit amendment, or decision, whichever occurs first. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day. Petitions must be received by 5:00 p.m. Information regarding filing petitions may be found at:
http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml.

If you have any questions regarding these documents, please contact Ms. Ofelia Oracion at (818) 551-2020 or me at (818) 551-2045.

Sincerely,

Shu-Fang Orr

Digitally signed by Shu-Fang Orr
Date: 2020.12.23 12:57:42 -08'00'

Shu-Fang Orr, P.E.
District Engineer
Angeles District

Enclosures

cc: Mr. Russ Bryden, P.E.
Assistant Deputy Director, Waterworks Division
Los Angeles County Public Works

Mr. Sami Kabar
Area Manager, Waterworks Division
Los Angeles County Public Works

WATER SUPPLY PERMIT NO. 04-22-20P-009

Los Angeles County Public Works
Sativa Water System

Los Angeles County
System No. 1910147

December 2020

CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

STATE OF *CALIFORNIA*

DOMESTIC WATER SUPPLY PERMIT

Issued To

Los Angeles County Public Works

Sativa Water System

Public Water System No. 1910147

By

State Water Resources Control Board,

Division of Drinking Water

PERMIT NUMBER: 04-22-20P-009 **DATE: December 23, 2020**

WHEREAS:

I. The ***Los Angeles County Public Works*** was operating the ***Sativa Water System*** under a revised full domestic water supply permit, Water Supply Permit No. 04-22-12P-009, issued on August 30, 2012 and one permit amendment issued on July 11, 2019 by the State Water Resources Control Board.

II. The State Water Resources Control Board initiated a permit investigation after the Local Agency Formation Commission for the County of Los Angeles approved the dissolution of the former Sativa Los Angeles County Water District and appointed the ***Los Angeles County Public Works*** as the successor agency for the water district on March 19, 2019.

III. On August 24, 2020, the ***Los Angeles County Public Works*** submitted a permit application to the State Water Resources Control Board for an amendment to the ***Sativa Water System*** domestic water supply permit to change the chlorination facilities at Well 3 and 5 from gas to 12.5 percent sodium hypochlorite chlorination systems. The application was submitted in accordance with California Health and Safety Code, Section 116525.

IV. This public water system is known as the ***Sativa Water System*** whose headquarter is located at ***2015 East Hatchway Street, Compton, California 90222****.*

V. The legal owner of the ***Sativa Water System*** is the ***Los Angeles County Public Works***. The ***Los Angeles County Public Works***, therefore, is responsible for compliance with all statutory and regulatory drinking water requirements and the conditions set forth in this permit.

VI. The public water system for which the permit application had been submitted is as described briefly below (a more detailed description of the permitted system is described in the attached Permit Engineering Report).

*The **Sativa Water System** serves a population of 6,837 through 1,643 active service connections in portions of the city of Compton and Willowbrook, an unincorporated area of Los Angeles County. The water system consists of two active wells (Wells 3 and 5), one active connection with the Liberty Utilities – Compton/Willowbrook Water System, and one emergency connection with the City of Compton. Wells 3 and 5 are disinfected with chlorine gas prior to distribution. The **Los Angeles County Public Works** will replace the gas chlorination system with the 12.5 percent sodium hypochlorite chlorination system. The water system has single pressure-zone distribution system with three operational hydropneumatic tanks with 10,000 gallons capacity each. The water system has no storage tank.*

VII. The service area of the ***Sativa Water System*** is shown on the service area map in Appendix D of the Permit Engineering Report.

And WHEREAS:

I. The ***Los Angeles County Public Works*** has submitted all the required information relating to the operation of the ***Sativa Water System*** *and the proposed sodium hypochlorite chlorination systems****.***

II. The Division of Drinking Water of the State Water Resources Control Board has evaluated all the information submitted by the ***Los Angeles County Public Works*** and has conducted a physical investigation of the ***Sativa Water System*** facilities on December 3, 2019 in conjunction with the Sanitary Survey.

III. The Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE: The Division of Drinking Water has determined the following:

I. The ***Sativa Water System*** meets the criteria for and is hereby classified as a community water system.

II. The applicant has demonstrated that the ***Sativa Water System*** has sufficient source capacity to serve the anticipated water demand for at least ten years.

III. The design of the water system complies with the Water Works Standards and all applicable regulations.

IV. The applicant has demonstrated adequate technical, managerial, and financial capacity to operate reliably the existing water system and the proposed sodium hypochlorite chlorination systems.

V. Provided the following conditions are complied with, the ***Los Angeles County Public Works - Sativa Water System*** should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE **LOS ANGELES COUNTY PUBLIC WORKS** IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE **SATIVA WATER SYSTEM**.

The ***Los Angeles County Public Works (hereinafter LA County PW)*** shall comply with the following permit conditions in operating ***Sativa Water System***:

GENERAL

1. The LA County PW shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards, or orders adopted thereunder.

2. The only sources approved for domestic water supply for Sativa Water System are listed in Table 1 and Table 2:

Table 1. Groundwater Sources

Source	Primary Station (PS) Code	Status	Capacity (gpm)
Well 3	1910147-002	Active	424
Well 5	1910147-005	Active	650

Table 2. Interconnection

Source	PS Code	Location	Status	Capacity (gpm)
Liberty Utilities – Compton/Willowbrook	1910147-010	137th Street & Paulsen Avenue 8" One Way Connection	Active	1,500
City of Compton	1910147-009	Oris Street & Willowbrook Avenue 6" One Way Connection	Emergency	900

3. The only approved treatment facilities for Sativa Water System are those listed in Table 3:

Table 3. Treatment Facilities

Treatment Plant	Treatment Processes
Wells 3 and 5 Chlorination Facilities	Chlorination for precautionary purposes with 12.5 percent sodium hypochlorite solution.

4. No additions, changes, or modifications to the sources of water supply or water treatment facilities outlined in Conditions 3 and 4 shall be made without prior receipt of an amended domestic water supply permit from the Division.

Inactive Source

5. Well 2 has been inactive for more than one year. The well is no longer viable to use for domestic purposes due to contamination with *E. coli* bacteria. LA County PW shall plan to destroy the well. The destruction permit and report shall be submitted to the Division.

Water Quality

6. All water supplied by the Sativa Water System for domestic purposes shall meet all Maximum Contaminant levels (MCLs) established by the Division. If the water quality does not comply with the California Drinking Water Standards, additional treatment shall be provided to meet standards. The plans and specifications for the proposed treatment facilities shall be submitted to the Division for review and approval prior to construction.

7. The LA County PW shall monitor all groundwater sources listed in Table 1 in accordance with Title 22, Chapter 15, CCR and the Division's most recent Vulnerability Assessment and Monitoring Frequency Guidelines.

8. Except for bacteriological analyses and constituents without chemical storet numbers, all water quality monitoring results obtained at a certified laboratory shall be submitted to the Division by Electronic Data Transfer using the appropriate Primary Station (PS) Codes. Analytical results of all sample analyses completed in a calendar month shall be reported to the Division no later than the tenth day of the following month.

9. The LA County PW shall notify the governing body of the local agency in which users of the drinking water reside (i.e. city council and county board of supervisors) when a notification level is exceeded in drinking water that is provided to consumers.

Operator Certifications

10. The distribution system and treatment facilities shall be operated by personnel who have been certified in accordance with Chapter 13, Title 22, CCR, *Operator Certification Regulations*. The chief and shift operator(s) for the Sativa Water System's distribution facilities shall have, at minimum, D2 and D1 certifications, respectively. The minimum certification requirements for all disinfection facilities for which no *Giardia* or Virus reduction is required shall either be certified distribution operators or certified treatment operators that have been trained to operate these facilities.

Cross-connection Control Program

11. The LA County PW shall comply with Title 17, CCR, to prevent the Sativa Water System and its facilities from being contaminated by possible cross-connections. The LA County PW shall maintain a program for the protection of the domestic water system against backflow from premises having dual or unsafe water systems in accordance with Title 17. All backflow prevention assemblies shall be tested annually.

Direct Additives

12. The LA County PW shall only use additives that have been tested and certified as meeting the specifications of NSF International/American National Standard Institute (NSF/ANSI) Standard 60. This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by ANSI.

Indirect Additives

13. The LA County PW shall only use chemicals, materials, lubricants, or products that have been tested and certified as meeting the specifications of NSF/ANSI Standard 61 in the production, treatment or distribution of drinking water that will result in its contact with the drinking water, including process media, protection materials (i.e. coating, linings, liners), joining and sealing materials, pipe and related products, and mechanical devices used in treatment/transmission/ distribution system, unless conditions listed in Section 64593, Title 22, CCR are met. This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by ANSI.

Active Wells

14. Well 3 does not have an annular seal. LA County PW shall keep the well site clean and secured at all times to prevent contamination from outside sources and elements. In addition, LA County PW shall monitor the well for coliform bacteria monthly.

Chloramines

15. The LA County PW shall inform the public served by Sativa Water System the possibility of receiving chloraminated water. The LA County PW shall reach out to kidney dialysis facilities, if any, and home patients to ensure their treatment units can remove chloramines. The LA County PW shall answer questions that the general public and dialyses centers may have.

16. Since Liberty Utilities has indicated the intention to switch to 100 percent imported surface water from MWDSC, which contains chloramines, when groundwater alone cannot meet the system demand. The LA County PW shall develop and implement a transition plan to address the potential water quality issues, in case water imported from Liberty Utilities containing chloramines. If the Sativa Water System needs to rely on chloraminated water for an extended period, the LA County PW shall develop a nitrification monitoring and control plan. Special water quality parameters sampling and lead and copper tap sampling shall be conducted to ensure the switch does not cause adverse impact on lead and copper leaching in the area receiving chloraminated water from the interconnection.

17. The Sativa Water System shall comply with the minimum residual requirements of the Surface Water Treatment Rule during the time the water system receives treated surface water.

Chlorination Facilities

18. Within **90 days** of receiving this permit, the LA County PW shall submit to the Division the revised Emergency Chlorination Plan for review and approval. The revised plan shall reflect the current chlorination facilities at Wells 3 and 5.

19. The LA County PW shall maintain the following daily operation records of the chlorination facilities at Wells 3 and 5:

    - current dosage rate, in mg/L, and chlorine consumption in lbs./day,
    - amount of water treated in each well in gallons per day or MG/day
    - chlorine residuals test results
    - unusual conditions, mechanical problems, emergencies, or unusual test results

Hydropneumatic Tanks

20. The hydropneumatic tanks shall be disinfected and sampled for bacteriological quality in accordance with AWWA procedures and standards, when placed back to service after repairs and routine maintenance.

Minimum Pressure Requirement

21. The LA County PW shall continue to evaluate if the current source, storage and pipeline capacities are adequate to meet the fire flow requirement and the minimum system pressure requirement (20 psi) at the same time; if not, more improvement should be planned.

Water System Operation and Maintenance Plan

22. The LA County PW shall ensure that all water produced from each source is reliably measured to determine total production. The flow meters at each site shall be calibrated annually.

23. The LA County PW shall notify the Division by telephone immediately upon discovery of any condition judged to create a significant potential or existing health hazard to users. Such conditions include, but are not limited to actual or threatened sabotage, vandalism and/or water outages, which result from inadequate source, storage and/or pumping capacity or any other unplanned loss of system pressure.

Emergency Response Plan

24. The LA County PW shall update Sativa Water System's Emergency Response Plan. The updated plan shall be submitted to the Division within 120 days of receiving this permit.

Annual Reports

25. The LA County PW shall submit Annual Reports on the status and condition of the Sativa Water System, as directed by the Division

This permit supersedes all previous domestic water supply permits and permit amendments issued for this public water system. This permit shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the Division. This permit is non-transferable. Should the ***Los Angeles County Public Works - Sativa Water System*** undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Engineering Report, or any addition of

distribution system storage reservoirs shall not be made unless an application for such change is submitted to and approved by the Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE DIVISION OF DRINKING WATER
STATE WATER RESOURCES BOARD

Shu-Fang Orr Digitally signed by Shu-Fang Orr
Date: 2020.12.23 12:19:49 -08'00'
Water Boards

December 23, 2020

Date

Shu-Fang Orr, P.E., District Engineer
Angeles District, Southern California Section

Engineering Report

For Consideration of Full Permit Revision for the
Los Angeles County Public Works
Sativa Water System

Serving Portions of the City of Compton and
Willowbrook, an Unincorporated Area of Los Angeles County

December 23, 2020

Prepared By:

Ofelia Oracion

Ofelia Oracion
Sanitary Engineer, Angeles District

Approved By:

Shu-Fang Orr

Digitally signed by Shu-Fang Orr
Date: 2020.12.23 12:43:57 -08'00'

Water Boards

Shu-Fang Orr, P.E.,
District Engineer, Angeles District

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1. NTRODUCTION

1.1. Purpose of Report

The Division of Drinking Water (hereinafter, Division) of the State Water Resources Control Board (hereinafter, State Water Board) has initiated the investigation for issuing a new domestic water supply permit to the Los Angeles County (hereinafter, LA County) Public Works (hereinafter, PW) - Sativa Water System, System No. 1910147. The LA County PW - Sativa Water System was formerly the Sativa Los Angeles County Water District (hereinafter, SLACWD). On February 13, 2019, the Local Agency Formation Commission for the County of Los Angeles (hereinafter, LAFCO) approved dissolution of the SLACWD and appointed the LA County as the successor agency for the water district. LAFCO recorded the dissolution on March 19, 2019 and the LA County has since become the legal owner of the SLACWD (Appendix A). LA County PW now manages and operates the water system. A complete evaluation of the technical, managerial, and financial (TMF) capacities of the LA County PW – Sativa Water System was performed by the Division based on information provided by LA County PW and available data on file with the Division. Attached to this report is the completed TMF Assessment Review Form (Appendix B).

On August 24, 2020, LA County PW submitted to the Division a permit amendment application to change the gas chlorination systems at Wells 3 and 5 of the Sativa Water System to the 12.5 percent sodium hypochlorite chlorination systems (Appendix C). This proposal is incorporated into this full permit investigation for the change of ownership. All changes made to the water system facilities since the last issuance of full permit in August 2012, including the improvements made by the LA County PW, are reviewed during this permit investigation.

This report will document the change of ownership of the water system from SLACWD to LA County PW, the engineering review and evaluation of the water supply system facilities as they currently exist, outline the existing deficiencies and the needed improvements, including the water system's compliance status with the directives of Compliance Order No. 04_22_18R_002 issued by the Division to SLACWD on June 1, 2018, the reviews of the specifications and facilities layouts of the new sodium hypochlorite chlorination systems at Wells 3 and 5 and to make recommendations regarding the issuance of a domestic water supply permit to the LA County PW – Sativa Water System.

1.2. Background Information

The LA County PW - Sativa Water System is being operated under the revised full domestic water supply permit (Water Supply Permit No. 04-22-12P-009) issued to SLACWD on August 30, 2012 and the permit amendment issued to the LA County PW – Sativa Water System for the 8-inch one-way metered connection with the Liberty Utilities – Compton/Willowbrook Water System (hereinafter, Liberty Utilities) on July 11, 2019.

From November 1, 2018 to March 19, 2019, the LA County served as the Administrator appointed by the State Water Board for the SLACWD water system. On March 19, 2019, LAFCO appointed the LA County as the successor agency for SLACWD – now the LA County PW - Sativa Water System.

The dissolution of SLACWD was initiated after a brown water incident occurred in April 2018. Many complaints were received by SLACWD not only because of issues related to the water quality but also issues on how the water system was managed. These issues were brought to the LA County Department of Public Health (DPH), then the State Water Board and LAFCO's attentions, and eventually to the media. Staff from the three agencies conducted investigations.

On June 1, 2018, the Division issued Compliance Order No. 04_22_18R_002 to SLACWD for the failure to provide its customers with a reliable and adequate supply of pure, wholesome, healthful, and potable water, and the failure to comply with the source capacity, minimum flushing velocity, and minimum pressure requirements of the California Waterworks Standards. Directive 3 of the compliance order directed SLACWD to prepare a Corrective Action Plan (CAP) identifying improvements to the water system to address source capacity deficiencies, the general physical water quality issues in the distribution system, fire flow deficiencies, and the infrastructure deficiencies hampering effective maintenance of the system, such as flushing activities. The SLACWD failed to provide an adequate CAP to address the deficiencies.

On July 11, 2018, LAFCO voted unanimously to begin the process of dissolving the SLACWD. LAFCO adopted Resolution No. 2018-00RMD that approved the proposed Commission-Initiated Resolution of Application for Dissolution of the SLACWD.

On October 31, 2018, the State Water Board issued Administrator Order No. 04_22_18R_003 to SLACWD pursuant to Assembly Bill 1577. In addition to the issues documented in Compliance Order No. 04_22_18R_002, this Order documented the serious technical and managerial capacity problems. The Order appointed LA County as the State Administrator for SLACWD and terminated SLACWD's Board of Directors. On November 1, 2018, the LA County PW representative assumed full administrative, managerial, and financial control of SLACWD.

On February 13, 2019, LAFCO approved Resolution No. 2019-02RMD, ordering dissolution of SLACWD. On March 19, 2019, LAFCO appointed the LA County as the successor agency for SLACWD. The LA County PW becomes the legal owner of the SLACWD and named the water system the Sativa Water System.

Since March 2019, the LA County PW has made many capital improvements to the water system's facilities. The following are the improvements that have been completed or undergoing:

1. On July 11, 2019, Permit Amendment No. 1910147PA-001 was issued by the Division to the LA County PW for the Sativa Water System. To address the source capacity deficiency, an 8-inch one-way metered connection with Liberty

Utilities-Compton/Willowbrook water system was added as an active source. The connection can supply up to 1,500 gallons per minute (gpm) of water.

2. In September 2019, the Paulsen Avenue Pipeline Improvement was completed. An 8-inch pipeline was constructed along Paulsen Avenue from Hatchway to 139th Street. The new pipeline delivers water from the Liberty Utilities Interconnection to the southern part of the Sativa Water System's service area.

3. In June 2020, the LA County PW completed the installation of a new Supervisory Control and Data Acquisition System (SCADA).

4. In July 2020, the LA County PW completed major rehabilitation works on Well 5. The well had been removed from service in August 2019. This well is currently the main source of supply for the Sativa Water System.

5. In July 2020, the Lucien Waterline Project was completed. An 8-inch pipeline was constructed along Lucien Street from South Oleander Avenue to South Largo Avenue. The new pipeline delivers water to the east side of the Sativa Water System's service area and addresses the fire flow deficiencies in that area.

6. In August 2020, the LA County PW submitted a permit amendment application to the Division to replace the existing gas chlorination systems for Wells 3 and 5 with the 12.5 percent sodium hypochlorite chlorination systems. This project will be incorporated into this permit investigation.

Other urgent infrastructure improvement projects identified by LA County PW, but still awaiting funding, are the following:

1. Pipeline Interconnects. This project will eliminate some critical dead-ends in the distribution system.

2. Manganese Wellhead Treatment. The project will equip Well 5 with manganese treatment. The well withdraws water from aquifers with elevated manganese levels. Manganese concentration in the water produced by the well, even after the rehabilitation works, is still near the secondary MCL and causing water quality complaints.

1.3. Brief Description of Sativa Water System

The Sativa Water System is located approximately 11 miles south of the downtown Los Angeles. The system's service area lies within the boundary of the Central Water Basin and encompasses about 0.25 square mile area. It serves a portion of the City of Compton and portion of Willowbrook, an unincorporated area of the Los Angeles County.

The water system has two active groundwater wells (Wells 3 and 5), one active one-way connection with Liberty Utilities and one emergency connection with the City of Compton. The system has one inactive well (Well 2). The system also has four hydro-pneumatic tanks. The 10,000-gallon capacity hydro-pneumatic tank at the Well 2 site has been disconnected from the distribution system. The Well 3 site has two 10,000-gallon capacity hydro-pneumatic tanks, operating simultaneously. The Well 5 site has one 10,000-gallon capacity hydro-pneumatic tank. Water produced by the wells is pumped to the hydro-pneumatic tanks first before being distributed to the system. Wells 3 and 5 are each equipped with a gas chlorination system. The water served by the Liberty Utilities contains free chlorine most of the time.

The distribution system has only one pressure-zone, with eight miles of transmission and distribution pipelines consisting of asbestos-cement, steel, ductile iron, cast iron and polyvinylchloride pipes. The distribution system has no booster station and no storage tank. All service connections are not metered.

The LA County PW has proposed to remove the gas chlorination systems at Well 3 and Well 5 sites and replaced them with the sodium hypochlorite chlorination systems. The evaluation of the proposed sodium hypochlorite chlorination systems for both wells will be documented in this report.

1.4. Enforcement History

Since November 1, 2018, when the operation and management of the water system was turned over to LA County, there has been no enforcement actions issued against the water system.

On June 1, 2018, the Division issued Compliance Order No. 04-22-18R-002 to SLACWD for the failure to provide its customers with a reliable and adequate supply of pure, wholesome, healthful, and potable water. Specifically, the water system violated the California Waterworks Standards for the failure to comply with the source capacity, minimum flushing velocity, and minimum pressure requirements.

On July 23, 2018, the Division issued a warning letter to SLACWD, after discovering the SLACWD had posted on its website a file entitled “Sativa Los Angeles County Water District System Improvements, June 2018”, a Notice Inviting Bids for the “Paulsen Avenue Water Main Phase 2- Project No. 106-WTR”, and a meeting agenda showing the interconnection and another Paulsen Avenue Water Main Project (Phase 1). SLACWD was warned that they must comply with Directives 3, 4 and 5 of the Compliance Order and not to proceed with projects without first demonstrating to the Division that the projects would help solve the problems listed in Directive 3 and comply with the California Waterworks Standards. As documented in the Administrative Order issued to SLACWD on October 31, 2019, the plans and specifications for both Paulsen Avenue Water Main projects and the Corrective Action Plan submitted by SLACWD were incomplete, contained various errors, and inadequate to demonstrate compliance with the California Waterworks Standards.

The LA County PW has been in communications with the Division and identified corrective actions to bring the Sativa Water System back to compliance. The LA County PW's current and future improvement projects for the Sativa Water System are discussed in this report.

1.5. Service Area

The Sativa Water System's service area is bounded by Wayside Street and 131st Street on the north, Oris Street and 139th Street on the south, Mona Boulevard on the east and Paulsen Street and Wilmington Avenue on the west. The boundaries of the service area have not changed since the original formation in 1938. The service area is a residential community composed of single-family houses. The terrain is basically flat. The service area map is appended in Appendix D. The schematic of the water supply system is appended in Appendix E.

1.6. Consumer and Production Data

The Sativa Water System serves a permanent residential population of 6,837 through 1,643 active service connections. Except for one commercial connection, all service connections are classified as residential connections and none of the connections is metered. There are about 57 fire hydrants and four blow-off assemblies strategically located in the distribution system. Table 1 summarizes the population served and service connections records for the last 10 years.

Table 1: Historical Water Production Profile (2010-2019)

Year	Served Population		Water Production (MG)			MDD		Maximum Month	
	Resident	Service Conn.	Produced	Purchased	Total	MG	Date (M/D)	Flow (MG)	Month
2010	6813	1488	214.08	0	214.08	1.5	NR	20.83	July
2011	6813	1631	209.00	0	209.00	1.3	NR	20.06	July
2012	6813	1631	207.22	0	207.22	0.52	10/23	19.41	October
2013	6813	1631	189.52	0	189.52	0.94	7/5	17.98	July
2014	6837	1637	165.58	0	165.58	NR	NR	16.81	July
2015	6837	1640	152.21	0	152.51	0.88	6/13	15.02	March
2016	6837	1643	153.99	0	153.99	0.98	6/20	18.13	June
2017	6837	1643	156.52	0	156.52	0.65	10/24	14.91	July
2018	6837	1643	167.10	0	167.10	0.65	9/15	17.23	July
2019	6837	1643	93.77	55.72[1]	147.49	0.65	7/12	14.90	August

Source: 2012 – 2019 Electronic Annual Report to the Drinking Water Program (EAR); MG – Million Gallons
MDD – Maximum Day Demand; M/D – Month/Day; NR – No Record
[1] Through Liberty Utilities Interconnection

1.7. Sources of Information

All information gathered for this report was obtained from the Division's files, discussions with and documents provided by the LA County PW staff, the review of the

water system's files and records, and during the on-site field inspection conducted by Ofelia Oracion, Sanitary Engineer with the Angeles District on December 3, 2019. The investigation, analysis and preparation of this report were undertaken by Ms. Oracion under the supervision of Shu-Fang Orr, P.E., Angeles District Engineer.

2. INVESTIGATION AND FINDING

2.1. SOURCES OF SUPPLY

Sources of supply for the Sativa Water System's domestic water distribution system include groundwater from two active wells, Wells 3 and 5, an active interconnection with the Liberty Utilities – Compton/Willowbrook water system, and one emergency interconnection with the City of Compton.

The LA County WP utilizes Well 5 as the primary source and the Liberty Utilities Interconnection as the secondary source. Well 5 is running continuously to maintain 52 to 65 psi pressures in the distribution system. The Liberty Utilities Interconnection will be activated when the pressure in the distribution system falls below 52 psi. Well 3 serves as the backup source, in case Well 5 is out of service for regular maintenance or is in need of repairs. The City of Compton Interconnection will be used only during emergencies. Table 2 summarizes the Sativa Water System's water supply sources.

Table 2: Water Supply Sources

Source	Status	Primary Station (PS) Code	Treatment	Capacity (gpm[1])	Comments
Well 3	Active	1910147-002	Gas chlorination for disinfection; The gas chlorination system will be replaced with a sodium hypochlorite chlorination system.[2]	424[3]	The well is 76 years old and has no annular seal. It has history of sand pumping. PCE is detected in the water. 1,4-dioxane is above the notification level of 1 µg/L, but lower than the response level of 35 µg/L.
Well 5[4]	Active	1910147-005	Gas chlorination for disinfection; The gas chlorination system will be replaced with a sodium hypochlorite chlorination system.[2]	650[5]	Newly rehabilitated. Water produced from the well contains PCE, 1,4-dioxane, and elevated level of manganese.
Total Capacity of Active Wells				**1,074**	

Source	Status	Primary Station (PS) Code	Treatment	Capacity (gpm[1])	Comments
Interconnection with the Liberty Utilities – one way	Active	1910147-010	Groundwater sources by hypochlorination or surface water purchased from the Metropolitan Water District of Southern California, which is treated by conventional filtration, chloramination and fluoridation. Fluoridation is also provided to one of the Liberty Utilities wells. Liberty Utilities will rely on chlorinated well water majority of the time, but plan to switch to 100 percent MWDSC water if groundwater sources are not adequate to meet system demand.	1,500	This inter-connection facility was permitted in July 2019.
Total Active Interconnection Capacity				**1,500**	
Interconnection with the City of Compton – one way	Emergency	1910147-009	Groundwater sources by hypochlorination; purchased surface water from the Metropolitan Water District of Southern California, which is treated by conventional filtration, chloramination and fluoridation. However, the City of Compton rarely utilizes the MWDSC interconnection.	900	Good condition
Total Emergency Interconnection Capacity				**900**	

[1] Gallon per minute
[2] Discussed in this report
[3] Maximum pump operating capacity based on the result of efficiency test conducted by Edison Company on September 10, 2020. The LA County PW has set this rate as Wells 3's maximum flow rate.
[4] The main source for the Sativa Water System.
[5] The maximum production rate set by LA County PW for Well 5. The maximum pumping rate tested on the pump by Edison Company on September 10, 2020 was 699 gpm with overall plant efficiency of 64.5 percent

2.1.1. Active Groundwater Wells

The Sativa Water System's groundwater sources extract water from the Central Groundwater Basin. The aquifers consist of Gage Aquifer (200 to 300 feet below ground surface (bgs), Hollydale Aquifer (450 to 500 feet bgs), Lynwood Aquifer (590 to 670 bgs), Silverado Aquifer (680 to 780 feet bgs), and Sunnyside Aquifer (820 to 1,000

feet bgs). The Water Replenishment District of Southern California (WRD) is responsible for management, monitoring, replenishment, and protection of groundwater in the Central Groundwater Basin. Based on WRD's water quality monitoring data, there are trichloroethylene (TCE) and tetrachloroethylene (PCE) plumes in the basin. Table 3 lists the water system's active groundwater sources and the construction information.

Table 3: Active Groundwater Source Construction Information

Source Name	Depth (feet)	Perforation Depths (feet)	Casing Diameter (inches)	Annular Seal
Well 3	316	236 to 247; 264 to 281	14	None
Well 5	510[1]	200 to 240; 380 to 500[2]	Original -16 With 12 inches Stainless Steel Liner to 510 feet now	The annular seal between the original casing and the borehole extended to 180 feet bgs. The annular space between the original 16-inch casing and the new 12-inch liner was filled with glass beads from 180 to 510 feet bgs and with bentonite cement from the ground surface to 180 feet bgs.

[1] Depth of the well after rehabilitation. It was 910 feet when drilled in 1993.
[2] This well has four perforations originally: the first perforation from the top was from 200 to 240 bgs, the second perforation was from 380 to 510 bgs, the third perforation was from 550 to 670 feet bgs, and the fourth perforation was from 750 to 890 feet bgs. The third and the fourth perforations were abandoned after the 2020 well rehabilitation.

The Southern California Edison Company conducted the pump efficiency tests for Wells 3 and 5 on September 10, 2020. The results of the tests indicate the efficiencies of these pumps are acceptable. The results of the tests are appended in Appendix F.

Well 3: PS Code 1910147-002

Well 3 is housed in a concrete block building located on a 50 by 100 feet lot. The lot is securely fenced with wrought iron fence and with barb wire on the top of the fence and locked gate. The building is lighted and ventilated. The well site is properly maintained and equipped with a burglar monitoring system.

The well is 76 years old. It was drilled in 1944 and has history of sand pumping. In 2016, the well was removed from service because of excessive sands in the well water. According to the former SLACWD staff, soil materials around the deeper portion of the well had collapsed and entered the casings. To address the issue, the pumping equipment was replaced with a lower horsepower pump and the length of the suction pipe was shorten. No sand pumping issue has been reported since. The LA County PW operates this well once a week, on Mondays, for one hour to make sure the well is operable when needed. The well serves as a backup source. Due to other higher priority projects, the LA County PW has no plan to rehabilitate Well 3 at this time.

Well 3 has a 14-inch diameter 10-gage steel casing, with the highest perforation at 236 feet bgs. As observed during well drilling, there are three impervious clay layers above the first perforation. The thicknesses of impervious layers are 21 feet, 15 feet and 152 feet at depths from 36 to 57 feet bgs, 60 to 75 feet bgs and 84 to 236 feet bgs, respectively. The casing is perforated from 236 to 247 feet bgs and from 264 to 281 feet bgs. The well has no annular seal. A copy of the well log is on file with the Division

The well is equipped with a 50 Hp Vertical Turbine (VT) pump and motor. The pump is oil lubricated, electrically powered, and may be set to control automatically by a pressure switch. The well is set to be run manually at this time. The operator can switch it back to automatic control mode when needed. The well is capable of pumping up to 424 gpm.

An air-relief vacuum breaker valve, flow meter, check valve and sampling tap are provided on the well's discharge line. The vent opening of the air-release vacuum breaker valve is screened. The sampling tap with a vacuum breaker is located between the wellhead and the check valve. The pump is adequately surface sealed at the base. The concrete flooring is raised up to the motor base. The flooring is gradually sloping away from the motor base. The well is equipped with a pump-to-waste line with a screen at the discharge pipe opening and an airgap. Water from Well 3 is chlorinated and pumped into a hydro-pneumatic tank. The well has no back-up power. The Well Data Sheet for Well 3 is appended in Appendix G.

In January 2001, a source water assessment was conducted for Well 3 by the Division staff using TurboSWAP. According to the source water assessment report, the PCA within Well 3's protection zones include water supply wells. Well 3 is approximately 1,950 feet west from Well 5 and approximately 2,600 feet northeast from the inactive well, Well 2. Well 3's PBE was considered moderate. The well is over 75 feet from the nearest sewer.

Well 5: PS Code 1910147-005

Well 5 is the newest well and the primary source for the Sativa Water System. The well was drilled in 1993 to a depth of 910 feet. Two impervious clay layers were observed during the drilling of this well. The impervious layers are located at depths from 60 to 80 feet bgs and from 120 to 200 feet bgs. The well has a 30-inch diameter conductor casing from ground surface to 50 feet bgs, and 16-inch diameter mild steel casings and screens. Prior to the recent well rehabilitation, the well had louvered screens from 200 to 240 feet and 380 to 510 feet bgs and wire-wrapped screen from 550 to 670 feet and 750 to 890 feet bgs. A copy of the well log is on file with the Division.

The well was initially producing about 3,000 gpm. However, the well's capacity has reduced substantially through the years. By 2019, the well's production rate decreased to about 500 gpm. The well is also producing water with elevated levels of manganese, exceeding the secondary MCL of 0.05 mg/L frequently. Compliance with manganese

MCL is based on the running annual average (RAA). The manganese RAAs had been at or near the MCL, but not exceeding the MCL.

In August 2019, LA County PW removed Well 5 from service for rehabilitation. The rehabilitation was completed in June 2020. During the period of rehabilitation, the Liberty Utilities Interconnection was utilized as the main source for the water system.

In September 2019, the LA County PW hired Pacific Surveys to conduct the video survey for Well 5. The video survey result shows that the screen casings from 200 to 510 feet bgs are slightly plugged up; and from 550 to 845 feet bgs, the screen casings are completely plugged up. The well casing is filled with hard soil materials at 845 feet bgs. The video camera was not able to reach the bottom of the well.

In November 2019, the Spinner Log and Mass Balance Analyses were performed to determine the quantities and qualities of water produce by the aquifers. The Spinner Log Analysis indicates higher production and higher velocity are observed from aquifers between 200 and 450 feet bgs. The Mass Balance Analysis indicates that manganese concentrations in the water from aquifers between 250 and 520 feet bgs are lower than the water from aquifers between 520 and 845 feet bgs. Manganese concentrations between 250 and 520 feet bgs and between 520 and 845 feet bgs ranged from 0.047 to 0.078 mg/L and from 0.36 to 0.38 mg/L, respectively.

In January 2020, the General Pump, Inc. started the construction to rehabilitate the well. The construction was completed in March 2020. The following modifications were made to the well:

- Abandoned approximately 390 feet of casings and screens in the lower section of the well from 520 feet to 910 feet bgs. The well was backfilled with pea gravel from 530 to 845 feet bgs, and the pea gravel was capped with bentonite pellets from 520 to 530 bgs.

- Provided the well with 12-inch stainless steel liner casings from ground surface to 510 feet bgs. The liner is composed of blank and screen casings. The wire-wrapped screen casings are located from 200 to 240 feet bgs and from 380 to 500 feet bgs. The bottom of the liner at 510 feet bgs is capped with stainless steel bull nose.

  The annular space between the original 16-inch casing and the new 12-inch liner was filled with glass beads from 180 to 510 feet bgs and with bentonite cement from the ground surface to 180 feet bgs. The space at the bottom of the well from 510 to 520 feet bgs was also filled with glass beads.

The Video Survey Reports, Spinner Log and Mass Balance Analyses, and As Built Well Liner Diagram are appended in Appendix H.

The LA County PW also installed a SCADA system and equipped the modified Well 5 with the following:

- Installed the new 100 horsepower variable frequency drive (VFD) pump and motor. The pumping equipment is water lubricated and electrically powered, and remotely controlled by the new SCADA system.

- Installed the new column, tubes, shaft, and suction pipe.

- Installed a water level transducer to monitor the static and pumping water levels via the new SCADA system.

- Replaced the dilapidated section of the discharge piping from the wellhead to the hydro-pneumatic tank with a new pipe.

The LA County PW currently operates Well 5 continuously for 24 hours a day, 7 days a week. The well is set to produce at the maximum flow rate of 650 gpm. Water from Well 5 is chlorinated and pumped through a 10,000-gallon hydropneumatic tank into the distribution system. The well has a manual switch that can accommodate a portable power generator. The Well 5 site is equipped with an 800 Hp diesel engine for the backup power.

An air-release vacuum breaker valve, flow meter, check valve and sampling tap are provided on the well's discharge line. The vent opening of the air-release vacuum breaker valve is screened. The sampling tap is located between the wellhead and check valve and equipped with a vacuum breaker. An adequate surface seal is provided at the base. The well has a pump-to-waste line and the end of the line is screened and provided with an airgap. The Well Data Sheet for the rehabilitated Well 5 along with the specifications for the new pumping unit and water level transducer are appended in Appendix I.

Well 5 is housed in a concrete block building located on a 50 by 100 feet lot. The lot is securely fenced with wrought iron fence and locked gate. The building is lighted and ventilated. The well site is properly maintained and equipped with a burglar monitoring system.

In January 2001, a source water assessment for Well 5 was conducted by the Division. According to the source water assessment report, the PCAs within Well 5's protection zones include water supply wells. Well 5 is approximately 1,350 feet south from Well 3 and approximately 800 feet northeast from inactive Well 2. Well 3, an active well, is located within 3,947 feet radius, Zone B5, from Well 5. Well 5's PBE was considered moderate. The well is approximately 75 feet from the nearest sewer. With the reduction in the production rate, the sizes of the well protection zones will be smaller than those calculated during the January 2001 assessment.

2.1.2. Inactive Groundwater Source

Well 2: PS Code 1910147-001 (Inactive)

Well 2 has been inactive since July 2017 and **cannot be utilized as a water supply source**. The well was removed from service in December 2015 due to the detection of *E. Coli*. The well is over 78 years old. It has elevated level of bacteriological growth and protozoa. The casing is corroded and has multiple holes in it. The portion of casing from 226 to 228 feet bgs appears to be collapsed. In addition, water from the well also contains elevated level of manganese and 1,4-dioxane exceeding the MCL of 0.05 mg/L and NL of 0.001 mg/L, respectively. In July 2017, the well was physically disconnected from the distribution system. The electrical power source was disconnected and the gate valve along the discharge line to the hydropneumatic tank was removed. A blind flange was installed on the discharge line.

The LA County PW must plan to destroy the well to prevent the well from becoming a conduit of groundwater contamination.

2.1.3. Active Interconnection

Liberty Utilities Interconnection (PS Code 1910147-010)

The Liberty Utilities Interconnection is situated at the southwestern side of the Sativa Water System in the corner of N. Paulsen Avenue and W. 137th Street. The one-way 8-inch metered interconnection is capable of delivering up to 1,500 gpm of water from Liberty Utilities at minimum pressure of around 52 psi. It is connected to Liberty Utilities' 12-inch water mains along W. 137th Street.

The interconnection consists of an 8-inch octave ultrasonic water meter and an 8-inch one-way pressure reducing/pressure sustaining Cla-Val valve. The Cla-Val has a check valve built-in feature to prevent backflow. It is housed inside a polymer concrete vault with torsion assist polymer concrete cover and padlock. The vault is installed below ground surface and located within the street right of way. Liberty Utilities maintains the interconnection. Liberty Utilities will conduct periodic testing of water meter to ensure water meter is measuring and recording within 5 percent error. The interconnection drawing and layout is attached with this report (Appendix J).

This interconnection serves as a temporary active water supply source for the Sativa Water System. Liberty Utilities will provide a reliable and uninterruptible source of water to the Sativa Water System, contingent upon meeting the conditions set forth in the Agreement. According to the Agreement, Liberty Utilities' obligation to supply water to the Sativa Water System is subject to the following conditions: (1) the availability of such water to Liberty Utilities; (2) the ability of both water systems' distribution facilities to deliver such water through the interconnection; and (3) Liberty Utilities' determination, at its sole discretion, that the supply of such water will not have an adverse economic

impact on, or result in the impairment of, or jeopardize Liberty Utilities' water system, its customers, or its commitments to third parties.

2.1.4. Emergency Interconnection

The Sativa Water System has a 6-inch one-way metered emergency connection with the City of Compton, with rated capacity of 900 gpm. This emergency connection is manually operated.

2.1.5. Adequacy of Supply

Section 64554, Title 22 of the CCR, California Waterworks Standards mandates a public water system to have the capacity to meet the system's maximum day demand (MDD) at all times. After well rehabilitation, Well 5 production has increased. The Sativa Water System has an instantaneous combined yield of approximately 1,074 gpm (1.55 MGD) from Wells 5 and 3, and 1,500 gpm (2.16 MGD) from Liberty Utilities interconnection. The highest daily usage recorded during the period from 2010 to 2019 was 1.5 MGD (in 2010, 1,041.66 gpm). Although on the paper, the combined production from Wells 5 and 3 is adequate to meet the MDD, Well 3 is in poor condition.

Section 64554 (a) (1) of the *California Waterworks Standards* states that "For systems with 1,000 or more service connections, the system shall be able to meet four hours of peak hourly demand (PHD) with source capacity, storage capacity, and/or emergency source connections". Using the peaking factor of 1.5, times the average hourly consumption during the maximum demand day (0.06 MG per hour), the estimated PHD is 0.09 MG. The amount of water needed to meet four hours of PHD is 0.36 MG. The combined capacities of the current active sources (Well 5, Well 3 and Liberty Utilities interconnection) can produce up to 0.62 MG in four hours. The capacities of the Sativa Water System's active sources are sufficient to meet the four hours of PHD.

It should be noted that the interconnection with Liberty Utilities is only a temporary active water supply source for the Sativa Water System. One of the conditions in the agreement with Liberty Utilities specifies that Liberty Utilities, at its sole discretion, can terminate the agreement if it determines that supplying water to the Sativa Water System will have an adverse economic impact on, or result in the impairment of, or jeopardize Liberty Utilities' water system, its customers, or its commitments to third parties. Liberty Utilities has recently requested to renegotiate the water rate with the LA County PW. In addition, the 12-inch pipeline along the Paulsen Avenue where the Sativa Water System connected to is part of the Liberty Utilities Water Main Improvement Project. Liberty Utilities agrees to let the Sativa Water System use this pipeline on a temporary basis. Liberty Utilities has indicated from the beginning that they will need to take this pipeline back when they have completed their system-wide improvement project.

In the event Liberty Utilities decides to terminate the agreement and cease supplying the Sativa Water System through the interconnection, the combined

capacity of Wells 5 and 3 is not adequate to meet the PHD. The Sativa Water System has no storage facility to provide reserve for emergency conditions. The emergency interconnection with the City of Compton can provide up to 0.22 MG in four hours. Without the Liberty Utilities Interconnection, the Sativa Water System has to rely upon this emergency interconnection to comply with the requirements of Section 64554 (a) (1), Title 22, CCR.

2.1.6. Recycled Water

There are no recycled water use sites within the Sativa Water System's service area

2.2. TREATMENT FACILITY

2.2.1. Chlorination Systems at Wells 3 and 5

For precautionary purposes, water produced by the groundwater wells is disinfected before entering the distribution system. The LA County PW has proposed to change the chlorination facilities at Wells 3 and 5 from gas chlorination systems to the sodium hypochlorite chlorination systems.

The Proposed Sodium Hypochlorite Chlorination Systems

Wells 3 and 5 will be equipped with identical sodium hypochlorination system. The LA County PW has proposed to utilize 12.5 percent sodium hypochlorite solution. These units will replace the existing gas chlorination systems for Wells 3 and 5.

The liquid chlorine will be fed by a Stenner SVP Series Digital Peristatic Metering Pump with a capacity of 17 gallons per day (0.71 gallons per hour) at maximum working pressure of 100 psi (6.9 bar). The pump tubes and valves are made of Santoprene materials. Santoprene is a registered trademark of Exxon Mobil Chemical Company and is NSF/ANSI Standard 61 certified. The specifications of Stenner SVP Series Digital Peristatic Metering Pump and NSF/ANSI Standard 61 certification for Santoprene are provided in Appendix K.

The chemical injection pumps are operated by a time relay that receives a signal from the well pump. When the well turns on, the injection pump relay switch closes to supply electrical power to the injection pump to start the flow of sodium hypochlorite solution. The injection point is at the wellhead discharge line prior to entering the hydro-pneumatic tank. When the well is turned off, the relay switch opens and disconnects the power supply, thus turning off the injection pump.

The sodium hypochlorite solution will be stored in a 50-gallon LMI Chemical Solution Tank with a spill containment scale. The tank is made of medium-density linear polyethylene with UV inhibitors and is an NSF/ANSI Standard 61 compliant product. The spill containment scale provides containment of chemical spill up to 66 gallons and weighs the amount of chemical leftover in the chemical solution tank. A digital display

equipment is connected to the scale and shows the weight of chemical solution in the tank. The data is then transmitted to the SCADA. A stock of 50-gallon chemical solution will be available on hand in each site. The specifications and NSF/ANSI Standard 61 certification for of LMI Chemical Solution Tank is appended in Appendix L.

Each site will be equipped with a HACH 17 chlorine analyzer. The analyzer measures free chlorine residual from the hydro-pneumatic tank effluent and transmits the information to the SCADA.

The chlorination system facilities will be installed inside the well house. The building is equipped with a burglar monitoring system. The well sites are properly secured with fences and locked gates.

The configuration of Disinfection Facility Layout, including the Chlorination Data Sheets for the proposed 12.5 sodium hypochlorite chlorination systems at Wells 3 and 5 are appended in Appendix M.

Operation of the Hypochlorination Systems

- Well 3

The hypochlorite injection rate at Well 3 will be manually adjusted. The goal is to have a minimum of 1.5 mg/L free chlorine residual at the hydro-pneumatic tank effluent, the entry point to the distribution system. The chlorine residual concentration at the hydro-pneumatic tank effluent will be measured continuously via the on-line chlorine analyzer. The analyzer is connected to the SCADA system. When chlorine residual is out of the targeted range, the operator will adjust the hypochlorite injection rate to meet the target.

- Well 5

The hypochlorite injection rate at Well 5 is automatically adjusted via the PLC for the well's VFD. The controls for the well's VFD are all local with Failsafe SCADA Off Commands for both the well and the chlorine injection pump. Similar with Well 3, the goal is to have a minimum of 1.5 mg/L free chlorine residual at the hydro-pneumatic tank effluent. The chlorine residual concentration at the hydro-pneumatic tank effluent will be measured continuously via the on-line chlorine analyzer. The data from the analyzer is then transmitted to the SCADA system. The chlorine residual is adjusted through the VFD speed loop. The speed of the motor is used to control the injection rate of the chlorine residual pump. The chlorine dosing is adjusted through the VFD speed analog loop settings. All analog data, system pressures, chlorine weight, chlorine residual, motor speed, and flow are reported back into the SCADA system and recorded.

Metering Pumps Capacity Evaluation

In addition to be able to meet the water system's minimum residual goal at the entry point to the distribution system, the metering pump should be sized to have the capacity to provide a minimum chlorine residual of 1.0 mg/L in the distribution system during an emergency, such as a significant rise in bacteriological count. The dosing capacity of at least 2 mg/L is recommended. As shown in the calculations below, the chlorine metering pumps for Wells 3 and 5 are adequately sized.

- Well 3 – 424 gpm (well's maximum production rate)

Maximum Chlorine Dose = (125,000 ppm x 17 gal/day) ÷ (424 gpm x1,440 min/day) = 3.48 mg/L

- Well 5 – 650 gpm (well's average production flow rate)

Maximum Chlorine Dose = (125,000 ppm x 17 gal/day) ÷ (650 gpm x1,440 min/day) = 2.27 mg/L

- Well 5 – 699 gpm (pump maximum operating capacity)

Maximum Chlorine Dose = (125,000 ppm x 17 gal/day) ÷ (699 gpm x1,440 min/day) = 2.11 mg/L

Direct Additives

As shown in Table 4, the sodium hypochlorite solution will be utilized by the water system is an NSF/ANSI Stand 60 compliant product. The NSF/ANSI Standard 60 certification information for the sodium hypochlorite solution is provided in Appendix N.

Table 4: Chemical Additives

Chemical	Manufacturer	Purpose	NSF/ANSI Standard 60 Certified?
12.5 % Sodium Hypochlorite Solution	Hasa, Inc.	Disinfection	Yes

2.2.2. Treated Water from Liberty Utilities Interconnection

This Interconnection receives system water from the Liberty Utilities – Compton/Willowbrook System. The Liberty Utilities-Compton/Willowbrook System has two active wells, Well 12C and Well 19C and two active connections (CB-9 and CB-50) with the Metropolitan Water District of Southern California (MWDSC). Well 12C can receive either chlorination or chloramination treatment. Well 19C can also receive either chlorination or chloramination treatment. In addition, Well 19C is equipped with the blended phosphate and fluoride addition facilities for manganese sequestration and

fluoridation treatment, respectively. Water from CB-9 and CB-50 is fluoridated and chloraminated.

The main source of supply for the interconnection will be coming from Liberty Utilities' Well 12C, located approximately 0.5 mile east from the interconnection. Well 12C was constructed in 2015 and became operational in July 2019. It was subsequently rehabilitated in July 2020 due to odor issue. The well was originally designed to produce 2,500 gpm. After rehabilitation, the production rate has reduced to a maximum of 1,000 gpm. The second closest source is CB-50, which is located approximately 0.8 mile north of Well 12C. CB-50 is capable of delivering up to 4,500 gpm of water.

Liberty Utilities - Compton/Willowbrook system is a groundwater only system most of the time. Chlorination treatment will be provided for both Well 12C and Well 19C under normal operation conditions. However, when the available groundwater source(s) is/ are not adequate to meet the water demand, Liberty Utilities has indicated to the Division recently that it would convert the system to a surface water only system, with chloraminated MWDSC water as the sole source. Currently, the Sativa Water System is able to meet the water demand with running Well 5 alone. However, since Well 5 alone is not sufficient to meet the maximum day demand, the use of Liberty Utilities Interconnection is highly anticipated.

The LA County PW must notify the public served by the Sativa Water System, including the dialyses centers, if any, the possibility of receiving chloraminated water. In addition, the LA County PW must have a notification plan in place to inform the public as soon as possible after learning from Liberty Utilities of the pending conversion to chloraminated water or the presence of chloramines in the water. The LA County PW must answer questions that the general public and dialyses centers may have. The LA County PW must ensure that they are informed in a timely manner by Liberty Utilities of the switching of disinfectant residual from chlorine to chloramines. The LA County PW must provide the Division with a copy of the notification. The LA County PW must also develop a plan to address the potential water quality issues during the transition period and during the time the system is served with chloraminated water.

2.2.3. Emergency Interconnection

Water from the City of Compton Interconnection receives chlorination treatment.

2.3. STORAGE FACILITY

The Sativa Water System does not have other storage facilities other than the three active 10,000 gallons-capacity hydropneumatic tanks installed at the well sites. Well 3 site has two hydropneumatic tanks operated simultaneously. Well 5 site has one hydropneumatic tank. The hydropneumatic tank at Well 2 site is offline. It has been disconnected from the distribution system when Well 2 was changed to inactive status.

The three hydropneumatic tanks are identical. The tanks are baffled. The maximum allowable working pressure is 75 psi. The outside diameter of the tank is 88 inches with 3/8-inch shell thickness. The Tank Data Sheet is appended in Appendix O.

Insulators are provided between concrete tank supports and tank surfaces to prevent corrosion due to stray currents. All tanks are equipped with 32-inch diameter steel manhole hatches for cleaning and maintenance. The pressure relief valves release excess air from the tanks. Sight tubes are provided for the tanks. A Mercoid switch at each site maintains the tank pressure between 52 and 65 psi.

The hydropneumatic tanks are 68 years old. They were constructed in 1952. Because the tanks are old, a thorough structural and coating inspection should be done by a specialist in steel tank structure and coating at least once every five years. The tanks were last inspected and cleaned in May 2011. The tanks at the Well 3 site were last coated in July 2011. **The tanks are due for professional inspection.**

Hydropneumatic tanks do not provide much of the storage capacity and cannot be counted on for firefighting. The *Recommended Standard for Water Works* (Ten States Standards, 2012) states "*Hydropneumatic (pressure) tanks, when provided as the only water storage are acceptable only in very small water systems. Systems serving more than 150 living units should have ground or elevated storage… Hydropneumatic tank storage is not to be permitted for fire protection purposes."* The Sativa Water System is currently serving 1,631 service connections.

The hydropneumatic tanks are pressure maintenance facilities**. Facilities without backup storage may lose system pressure in the event of power outage.** The Well 5 site has a portable generator. In the event of power outage, only Well 5 may continue to operate. Well 3 is not equipped with back-up power.

2.4. DISTRIBUTION SYSTEM

2.4.1. Pressure Zones

The Sativa Water System has a one pressure zone distribution system. According to the LA County PW, pressures in the distribution system range from 52 to 65 psi.

2.4.2. Booster Pump Station

The Sativa Water System does not have any booster pump station. The water system utilizes three operational hydropneumatic tanks to maintain pressure in the distribution system.

2.4.3. Transmission and Distribution Mains

The wells are connected to the distribution system through the hydropneumatic tanks. The water system does not have any transmission mains. There are no gravity lines in

the distribution system. The distribution system consists of approximately 8.5 miles of asbestos cement, cast iron, steel, polyvinylchloride (PVC) and ductile iron (DI) pipes with sizes range from 4-inch to 8-inch diameters. Table 5 summarizes the pipeline Inventory.

Table 5: Distribution System Pipeline Inventory

Material	Amount (%)	Size	Class/Gauge	Comments
Asbestos Cement	75	4 - 6”	Class 150	Good
Steel	3.6	4 - 6”	12 Gauge	Good
Cast Iron	10	4 - 6 “	Unknown	Good
PVC	7	4 - 6”	Class 900	Good
PVC	2.5	8”	PC 165	New
Ductile Iron	1.5	8”	Class 350	New
CML & CMC Steel	0.4	8”	Schedule 20	New

Note: The 12-inch pipeline owned by Liberty Utilities is not included in the table.

Liberty Utilities 12-Inch Pipeline along N. Paulsen Avenue (Utilized by the Sativa Water System per the Interconnection Agreement)

In July 2019, Liberty Utilities constructed 620 linear feet of 12-inch water main line along N. Paulsen Avenue. It connects to the 12-inch water main line along W. 137th Street and, subsequently, to the 8-inch Liberty Utilities Interconnection. As part of the Agreement, Liberty Utilities allows the Sativa Water System to use this pipeline solely to transmit water from the interconnection to the Sativa Water System’s distribution system. Except for fire hydrants, no service connections are connected to the 12-inch pipeline. The configuration of the 12-inch pipeline is shown in Appendix P. It is unclear for how long Liberty Utilities will allow the Sativa Water System to use this pipeline. Ductile iron (DI) Class 350 pipes were used in the construction. The DI Class 350 pipe has a pressure rating of more than 200 psi.

The Sativa Water System connects to the 12-inch pipeline through a 12-inch tee at the corner of W. 137th Street and three 12-inch by 8-inch tees located at the corners of Hatchway Street, Piru Street and Stockwell Street. The sizes of the pipeline along Hatchway Street, Piru Street, and Stockwell Street are 6-inch, 6-inch, and 4-inch, respectively. Along Paulsen Avenue from Hatchway Street to Stockwell Street, the Sativa Water System has an existing 4-inch pipeline.

Paulsen Avenue Waterline

In July 2019, the LA County PW constructed 650 linear feet of 8-inch pipeline along Paulsen Avenue from Hatchway Street to 139th Street. It connects to the 12-inch tee at the corner of W. 137th Street and to the 8-inch tee at the corner of Hatchway Street. The existing distribution pipelines along Bliss Street, Oris Street, 138th Street and 139th Street connect to this pipeline. Bliss Street, Oris Street, 138th Street and 139th Street have 4-inch pipes. The LA County PW utilized DI Class 350 pipes with pressure rating of 200 psi. The configuration of the 8-inch pipeline is shown in Appendix Q.

Lucien Waterline

In July 2020, the LA County PW constructed 1,181 linear feet of 8-inch pipeline along Lucien Street from South Oleander Avenue to South Largo Avenue. The new pipeline aims to bring enough pressures to the east side of the service area and address the fire flow deficiencies in the surrounding area. In crossing the railroads along South Willowbrook Avenue, 170 linear feet of Cement Mortar Lined and Cement Mortar Coated (CML & CMC) welded steel pipe was used and installed inside a 16-inch steel casing. The rest of the 1,011 linear feet pipeline is made up of C900 PVC pipe, PC 165, DR 25. The configuration of the 8-inch pipeline is shown in Appendix R.

Water Main Separation Requirements

The new pipelines were constructed in accordance with the California Waterworks Standards. LA County PW maintained a minimum 10 feet horizontal separation and one foot vertically above non-potable pipelines. When crossing non-potable pipelines, the new water mains were constructed with eight-foot no joint from either side of the crossings.

Water Lines Hydrostatic Testing and Disinfection

The new pipelines were tested under hydrostatic pressure in accordance with American Water Works Association (AWWA) Standard C600 Section 5.2 using potable water. The test pressure was 150 psi measured at the low point of the pipeline for a duration of two hours. All detectable leaks were fixed, and pipeline re-tested until the pipe was found satisfactory and met the allowable leakage rate.

After pressure testing, the entire pipelines, including all valves, fittings, hydrants, and other accessories were disinfected in accordance with AWWA C651. The chlorination method was to give an initial chlorine dose of 40 to 50 mg/L and a residual of not less than 5 mg/L after 24 hours. Bacteriological samples were collected after disinfection and samples were analyzed by a certified laboratory. The pipelines were placed in service after results of analysis indicated no presence of bacteriological contamination.

2.4.4. Pipeline Improvements/Fire Flow Requirements

The distribution system contains undersized pipes and not able to meet the 1,250 gpm fire flow requirements for single family houses. In March 2019, the LA County PW contracted Civiltec Engineering Inc. (Civiltec) to run scenarios for four different potential interconnections at each side of the Sativa Water System service area. Civiltec modeled the available fire flow at each hydrant under MDD conditions for each of the individual scenarios. For areas that did not meet the fire flow requirement of 1,250 gpm, pipe improvements were iterated until the fire flow requirement was met at each fire hydrant throughout the system. Appendix S shows the interconnect scenario at west side of the service area (Liberty Utilities – Compton/Willowbrook side). The highlighted

pipes are recommended to be upgraded to 8-inch pipe, approximately 11,500 linear feet, to meet the fire flow at each hydrant. **However, the modeled scenario is not the same as the current interconnection set-up for the Liberty Utilities Interconnection**.

The LA County PW had made some pipeline improvements in the Sativa Water System's distribution system and reported significant improvements in system pressure. **The LA County PW must continue to evaluate if the current sources, storage and pipeline capacities are adequate to meet the fire flow requirements and the minimum system pressure requirement of 20 psi at the same time; if not, more improvements should be planned**.

2.4.5. Dead Ends

The distribution system has ten dead-ends. Six out of the ten dead ends are equipped with hydrants and the other four are equipped with blow-off valves. The operator flushes the dead-end blow-off valves and hydrants once a month. The LA County PW plans to eliminate these dead ends in the future.

2.4.6. Service Connections

The Sativa Water System service connections are categorized as residential connections, except for one commercial connection. The commercial connection is a mini-grocery store. There are no industrial, institutional, and agricultural connections in the service area. According to 2019 ARDWP, 1,550 service connections are made of copper, 87 are made of galvanized steel and the rest are made of PVC. There is no lead service line or fittings. **The service connections are not metered and some of the shutoff valves are located within the property lines of the customers.**

The Division encourages all public water systems to take steps now to conserve the water. All public water systems should keep records of water system production and delivery activities through metering at the source and customer connections. All public water supply systems that do not have customer meters and effective metered rates are encouraged to take the steps needed to obtain the necessary funds to install meters and adopt metered rates. The LA County PW has included the metering of all service connections in their future improvements for the Sativa Water System.

2.5. WATER QUALITY ASSESSMENT

2.5.1. Raw Water (Active Sources)

Wells 3 and 5 pump water from the confined aquifers in the Central Basin.

2.5.1.1. Bacteriological

Wells 3 and 5 are sampled monthly for bacteriological analysis. The Clinical Laboratory of San Bernardino, Inc. analyzes the samples using Colisure Quanti-Tray 200 Method (MPN method). The analytical results are submitted to the Division by the 10th day of the month following the month the wells are sampled. The Division has reviewed the monitoring data available on file. Table 6 summarizes the bacteriological quality of the groundwater wells.

Table 6. Bacteriological Quality Source Monitoring Summary (August 2012 – November 2020)

Year	Record of Total Coliform-Positive	*E. Coli* Positive
2012 - 2014	None	None
2015	Well 3[1]: September 15, October 21 & 23	None
2016	Well 3[1]: September 20 & 22	None
2017	None	None
2018	Well 3[1]: October 9	None
2019	Well 5[2]: January 15	None
2020	None[3]	None

1 The well is 75 years old and no annular seal. It has history of sand pumping.
2 The well is 27 years old. The well was removed from service in August 2019 for rehabilitation and was placed back in service in July 2020.
3 Data is from January through November 2020.

The total coliform-positive samples recorded in 2015, 2016, and 2018 from Well 3 and in 2019 from Well 5 were not as a result of triggered source monitoring under the federal Groundwater Rule. The wells are sampled monthly for total coliform and *E. Coli* analyses. The water system pumped the well with total coliform-positive result to waste and re-sampled the well. So far, the results of the repeat samples were total coliform-negatives.

2.5.1.2. Title 22 Constituents / Vulnerability Assessment

The Division has developed a monitoring matrix for routine monitoring of Title 22 constituents based on the outcomes of vulnerability assessment. The monitoring matrix is valid for three years. The vulnerability assessment and monitoring frequency guidelines for Sativa Water System's wells for the first period of the fourth compliance cycle (January 1, 2020 through December 31, 2022) was sent to the LA County PW on December 31, 2019. A copy of the monitoring matrix is enclosed in Appendix T. All Title 22 monitoring results must be submitted electronically via electronic data transfer (EDT) process to the Division. Detailed summary of water quality monitoring data for Wells 3 and 5 from the Division's Water Quality Database between January 1, 1994 and November 30, 2020 is enclosed in Appendix U. Table 7 summarizes the monitoring schedules.

Table 7: Summary of Monitoring Schedules

Constituents	Well 3 (1910147-002)			Well 5 (1910147-005)		
	Monitoring Frequency	Date of Monitoring		Monitoring Frequency	Date of Monitoring	
		Last	Next by		Last	Next by
General Mineral	Once every 3 years	10/2019	10/2022	Once every 3 years	7/2020	7/2023
Secondary Standards[1]	Once every 3 years	10/2019	10/2022	Once every 3 years	7/2020	7/2023
Manganese	Once every 3 years	10/2020	10/2023	Quarterly	11/2020	1st quarter 2021
Inorganic[2]	Once every 3 years	10/2019	10/2022	Once every 3 years	7/2020	7/2023
Asbestos	Waived[3]	10/2016	TBD[3]	Waived[3]	6/2020	TBD[3]
Nitrate (as N)[4]	Annually	7/2020	7/2021	Annually	7/2020	7/2021
Nitrite[4]	Once every 3 years	10/2019	10/2022	Once every 3 years	7/2020	7/2023
Perchlorate[5]	Annually	7/2020	7/2021	Annually	7/2020	7/2021
Radionuclides[6]	6 years for GA & U. 9 years for Rad-226 &-228	1/2015	1/2021 (GA & U). 1/2024 (Rad-226 &-228)	6 years for GA & U 9 years for Rad-226 &-228	6/2020	6/2026 (GA & U). 6/2029 (Rad-226 &-228)
VOC[7]	Annually	7/2020	7/2021	Annually	7/2020	7/2021
PCE & TCE	Quarterly	10/2020	1st quarter 2021	Quarterly	10/2020	1st quarter 2021
SOC[8]	2 quarters in one year every 3 years for DEHP[9]; Others are waived.	DEHP[9] - 7/2018 & 10/2018. Others - 7/2011	DEHP[9] – 7/2021 & 10/2021. Others – waived	2 quarters in one year every 3 years for DEHP. Others are waived.	DEHP[9] - 4/2018, 7/2018 & 6/2020. Others - 6/2020	DEHP[9] – 4/2021 & 7/2021. Others – waived
1,2,3-TCP	2 quarters in one year every 3 years	2/2019 4/2019 7/2019	2022	2 quarters in one year every 3 years	1/2019 4/2019 7/2019 6/2020	2022

1 Except manganese for Well 5
2 Except asbestos, nitrate, nitrite, and perchlorate.
3 Monitoring is waived during the first period (2020-2022) of the fourth compliance cycle (2020-2028).
4 Increase to quarterly monitoring if ≥ ½ MCL.
5 Increase to quarterly monitoring if ≥ DLR.
6 GA – Gross Alpha; U – Uranium; Rad-226 – Radium 227; Rad-228 – Radium 228
7 Except tetrachloroethylene (PCE) and trichloroethylene (TCE).
8 Except 1,2,3-Trichloropropane (1,2,3-TCP)
9 DEHP - Di-(2-ethylhexyl) phthalate

General Mineral and Secondary Standards

Wells 3 and 5 produce hard water with total hardness levels ranged from 230 mg/L to 291 mg/L and 210 mg/L to 261 mg/L, respectively. Manganese concentration in the water produced by Well 5 fluctuated from non-detect to 0.130 mg/l. The secondary MCL for manganese is 0.05 mg/L. The first Well 5 sample with manganese concentration exceeding the MCL was collected in August 2000. The revised California

Secondary Drinking Water Standards became effective on September 27, 2006. The revised regulations specify that the compliance with the manganese MCL is based on the running annual average (RAA). Prior to the revision, the compliance determination procedures were not specified in the regulations. Although the RAA for manganese in Well 5 had exceeded the MCL for in several quarters from 2000 through 2005, the RAAs have been right at or below the MCL after the adoption of the revised Secondary Drinking Standards in 2006. The RAAs from 2006 through the third quarter of 2018 were below the MCL. The RAA for the fourth quarter of 2018 was 0.0506 mg/L. In 2019, the first and second quarters RAAs were below the MCL.

In August 2019, Well 5 was removed from service for rehabilitation. The well was placed back in service in July 2020. Manganese concentration from the sample collected in July 2020 was 0.039 mg/L. A sample collected in October 2020 from the well had manganese concentration of 0.34 mg/L, exceeding the MCL. The LA County PW collected another sample on November 30, 2020, and the result was 0.0023 mg/L.

The results of Spinner Log and Mass Balance Analyses and Testing conducted in November 2019 reveal that the water from the aquifers tapped by the rehabilitated Well 5 contains elevated levels of manganese, and the chance of manganese concentration of Well 5 water exceeding the MCL remains high. The LA County PW has indicated the intention to work with WRD to provide manganese treatment for Well 5.

Inorganic Chemicals

Arsenic, barium, and fluoride have been detected in Wells 3 and 5, but the concentrations are below their respective MCLs. Aluminum and total chromium have also been detected in Well 3, but the concentrations are below their respective MCLs.

Wells 3 and 5 are not considered vulnerable to asbestos contamination, based on available data published by USGS. All asbestos samples collected from the wells have the results of non-detects. Wells 3 and 5 were last sampled for asbestos in October 2016 and June 2020, respectively.

The initial monitoring requirements for perchlorate had been completed for both wells. Analytical results of the initial and subsequent monitoring were all non-detects. The wells were last sampled for perchlorate in July 2020, with results of non-detects. Therefore, perchlorate monitoring frequency is annually for the wells.

Nitrate/Nitrite

Nitrate has been detected in the water produced by Well 3, but the concentrations have remained below half of the Nitrate MCL of 10 mg/L, as nitrogen. The last nitrate sample collected from Well 3 was on July 13, 2020, with the result of 0.45 mg/L, as N. Nitrate has not been detected in Well 5. The last nitrate sample collected from Well 5 was on July 13, 2020, after well rehabilitation. The result was non-detect. Therefore, nitrate monitoring frequency is annually for both wells. Nitrite has not been detected in both

wells. Therefore, nitrite monitoring frequency for Wells 3 and 5 is once every three years.

Radionuclides

The Initial monitoring for radionuclides had been completed for both wells. Gross alpha and uranium were detected in the wells, but the concentrations were below their respective MCLs. Radium-226 (Rad-226) and radium-228 (Rad-228) have not been detected. Monitoring frequency for a radionuclide with concentration less than the DLR is every nine years. Monitoring frequencies for a radionuclide with concentration above the DLR but equal to or below half the MCL is every six years and concentration above half the MCL to MCL is every three years. The gross alpha and uranium concentrations for Well 3 and 5 are above the DLR, but below half their respective MCLs. Therefore, the LA County PW must monitor both wells for gross alpha and uranium once every six years and once every nine years for Rad-226 and Rad-228. After completion of the well rehabilitation, the LA County PW sampled Well 5 for radionuclides on June 23, 2020. Gross alpha and uranium concentrations in the well were still lower than half their respective MCLs. Rad-226 and Rad-228 concentrations in the well remained non-detects.

Volatile Organic Chemicals (VOC)

Except for tetrachloroethylene (PCE), no other regulated VOCs has been detected in Wells 3 and 5. The wells are sampled for PCE quarterly. Thus far, the sampling results for both wells remained below the MCL. Well 3 was last sampled for VOCs on July 23, 2020, with results of non-detects except for PCE. PCE concentration in the July 2020 sample was 0.00083 mg/L. The well was last sampled for PCE and TCE on October 2, 2020 with concentrations of 0.0008 mg/L and non-detect, respectively. The LA County PW also sampled Well 5 for VOCs on July 23, 2020, after rehabilitation. Analytical results indicate all VOCs, including PCE, were non-detects. The well was last sampled for PCE and TCE on October 2, 2020. The results were again non-detects. Because the wells are located in the Central Basin with known PCE and TCE plume, LA County PW must continue to sample the wells quarterly for these constituents.

Synthetic Organic Chemical

According to 2020 – 2022 Vulnerability Assessment and Monitoring Frequency Guidelines, the wells are not considered vulnerable to contamination by SOCs other than di (2-ethylhexyl) phthalate (DEHP) and 1,2,3-TCP. The Division has waived the monitoring requirements for all other SOCs for the 2020-2022 compliance monitoring period. The monitoring frequency for DEHP is two quarterly samples in one year within the current compliance monitoring period. The wells were last sampled for DEHP in 2018. The results were all non-detects. No DEHP samples have been collected from both wells for the current monitoring period (January 1, 2020 – December 31, 2022).

In December 2017, the MCL for 1,2,3-TCP was established. The initial 1,2,3-TCP monitoring for 1,2,3-TCP were completed for both wells in 2018. The results were all non-detects. Subsequent monitoring collected from Wells 3 and 5 were also non-detects. Therefore, 1,2,3-TCP monitoring frequency is two quarterly samples in one year within the current compliance monitoring period for both wells.

Unregulated Chemicals

Monitoring requirements for unregulated chemicals have been completed for the wells. The monitoring consisted of two consecutive samples five to seven months apart in a single year were successfully completed in October 2011 for boron, hexavalent chromium, vanadium, and dichlorodifluoromethane (freon 12).

In November 2010, the notification level (NL) for 1,4-dioxane was established at 0.001 mg/L. The wells have 1,4-dioxane concentrations above the NL. Quarterly samples are collected from the wells. The LA County PW continues to notify annually the governing body of the 1,4-dioxane NL exceedance.

2.5.2. Distribution System Water Quality Monitoring

2.5.2.1. Bacteriological

Total Coliform Rule (TCR)

The Division has on file an approved Bacteriological Sample Siting Plan (BSSP) dated June 2016. Pursuant to Section 64423, Table 44423-A, Title 22 of the CCR, the Sativa Water System is required to collect a minimum of two routine total coliform samples per week from the distribution system. The revised BSSP has identified four routine sampling sites, along with their respective downstream and upstream repeat sample locations. The sites are sampled every Tuesdays. Table 8 lists the locations of the routine and repeat sample sites.

Table 8: Routine and Repeat Sample Sites

Routine	Repeat Sample Sites	
	Upstream	Downstream
Site 1 - 730 139th Street	719 139th Street	738 139th Street
Site 2 - 2016 Lucien Street	2036 Lucien Street	2012 Lucien Street
Site 3 - 13122 Largo Street	13126 Largo Avenue	13103 Largo Avenue
Site 4 - 2315 Bliss Street	2311 Bliss Street	2325 Bliss Street

Per Section 64426.1 of the CCR, a public water system collecting less than 40 samples per month is in violation of total coliform MCL when more than one sample collected during any month is total coliform-positive; or any repeat samples is fecal coliform-positive or *E. Coli*-positive; or any repeat sample following a fecal coliform-positive or *E. Coli*-positive routine sample is total coliform-positive. The Sativa Water System has been in compliance with the Total Coliform MCL since 2012. In 2017, a total of four

total coliform-positive and *E. Coli*-negative samples were recorded. These samples were collected in the months of February, July, August, and September. All repeat samples were total coliform-negatives and *E. Coli*-negatives. The rest of the samples collected from 2012 through November 2020 were absent of coliform bacteria.

Groundwater Rule (GWR) Amendment to Coliform Sample Siting Plan

The monitoring requirements under GWR has been incorporated into the revised approved BSSP dated June 2016. The Sativa Water System is required to conduct triggered source water monitoring within 24 hours upon being notified by their laboratory that a sample collected for the TCR is total coliform positive. All wells that are in operation during the time the total coliform positive TCR sample was collected will need to be sampled. The Sativa Water System did collect samples from Wells 3 and 5, when a routine sample tested total coliform-positives in February, July, August, and September 2017. The results were total coliform-negatives.

The water system's GWR Amendment needs to be updated to reflect the Liberty Utilities Interconnection as an additional source.

Federal Revised TCR

On April 1, 2016, the Federal Revised TCR (federal rTCR) became effective. The revisions include the new Coliform Treatment Technique requirement replacing the Total Coliform MCL, and a new *E. Coli* MCL regulatory limit. *E. Coli* MCL is exceeded when (1) *E. Coli*-positive repeat sample following TC-positive routine sample; (2) TC-positive repeat sample following an *E. Coli* positive routine sample; (3) failure to collect all required repeat samples following a *E. Coli*-positive routine sample; (4) failure to test for *E. Coli* when any repeat sample is TC-positive. The State Water Board is implementing the federal rTCR. The Sativa Water System has neither exceeded the total coliform MCL nor *E. Coli* MCL.

2.5.2.2. Lead and Copper Tap Sampling

The Sativa Water System is on reduced triennial monitoring for lead and copper. Data from the first and second rounds of standard 6-month monitoring in 1993 though the last annual monitoring round in 2009 have 90th percentile ranks below the action levels (ALs) for lead and copper. The first triennial monitoring was conducted in 2012. Table 9 summarizes the triennial monitoring from 2012 through 2018.

Table 9: Distribution System Lead and Copper Monitoring (2012, 2015 and 2018)

Category	Date Conducted	Number of Samples Required	Number of Samples Collected	90th Percentile Lead (mg/L)	90th Percentile Copper (mg/L)
1st Triennial	June 2012	20	24	<0.005	0.160
2nd Triennial	August 2015	20	23	<0.005	0.260
3rd Triennial	September 2018	20	23	<0.005	0.410

Lead Action Level = 0.015 mg/L; Copper Action Level = 1.30 mg/L

The 90th percentile lead and copper levels did not exceed the ALs in 2012, 2015 and 2018. The next round of sampling event is due in 2021. The sampling event should take place during the warm months of June, July, August, or September.

If the Sativa Water System must utilize the Liberty Utilities Interconnection while Liberty Utilities relies 100 percent on treated MWDSC water, it will be a major change in water quality. Special water quality parameters sampling and lead and copper tap sampling must be conducted to ensure the switch does not cause adverse impact on lead and copper leaching in the area receiving chloraminated water from the interconnection.

2.5.2.3. Disinfectant Residuals and Disinfection By-Products (DBP)

Chlorine Residuals

Pursuant to Section 64534.4, Title 22 of the CCR, the Sativa Water System is required to measure the residual disinfectant levels at the same points in the distribution system and at the same time as total coliform are sampled. Table 10 summarizes the running annual average (RAA) chlorine residual levels from the January 2012 through November 2020. The RAAs are below the MRDL.

Table 10: Chlorine Residual Compliance (January 2012 – November 2020)

Year	Number of Samples Collected	Monthly Averages, Range (mg/L)	Quarterly RAAs, Range (mg/L)	Compliant w/ MRDL?
2012	208	1.22 – 1.34	1.25 – 1.27	Yes
2013	208	1.18 – 1.44	1.29 – 1.38	Yes
2014	212	1.12 – 1.27	1.20 – 1.33	Yes
2015	208	0.91 – 1.14	1.05 – 1.11	Yes
2016	204	0.97 – 1.19	1.09 – 1.12	Yes
2017	223	0.97 – 1.11	1.03 – 1.08	Yes
2018	208	0.83 – 1.45	1.05 – 1.07	Yes
2019	212	0.78 – 1.98	1.07 – 1.21	Yes
2020[1]	188	0.93 – 1.37	1.22 – 1.27	Yes

[1] Samples collected from January through November 2020.

Stage 1 DBPR Disinfection Byproducts Monitoring

The water system has completed the Stage 1 Disinfectant and Disinfection Byproduct Rule (DBPR) monitoring in 2013 and moved onto compliance monitoring for Stage 2 DBPR beginning 2014. Under Stage 1 DBPR, and as a groundwater system serving fewer than 10,000 persons, the Sativa Water System is required to collect one pair of total trihalomethanes (TTHMs) and haloacetic acids (HAA5) samples once per year per treatment plant during the month of warmest water temperature and at a location representing maximum residence time. The Stage 1 MCLs for TTHMs and HAA5 are 80 µg/L and 60 µg/L, respectively and the compliance is based on system-wide

average. The water system collected TTHM and HAA5 samples from two approved sites. Neither MCL was exceeded during Stage 1 DBPR monitoring period.

Stage 2 DBPR Requirements

The Sativa Water System is classified as a Schedule 4 system under Stage 2 DBPR. The water system conducted the Initial Distribution System Evaluation (IDSE) standard monitoring in 2008. TTHM and HAA5 samples were collected from two monitoring locations at a frequency of every 90 days. The IDSE monitoring requirement was completed on April 1, 2010. On June 22, 2010, SLACWD submitted the IDSE report to the Division. The report was subsequently revised on July 13, 15 and 21, 2010. The revised IDSE report along with the proposed Stage 2 Compliance Monitoring Plan (CMP) dated July 21, 2010 was submitted and approved by the Division on July 22, 2010. The water system has chosen the two sites utilized during the Stage 1 DBPR monitoring as the Stage 2 DBPR Compliance Monitoring Sites. In accordance with the approved IDSE report and Stage 2 CMP, the Sativa Water System is required to collect one pair of TTHMs and HAA5 once per year from the two approved sites beginning on July 7, 2014 and every year thereafter. Table 11 summarizes the results of monitoring.

Table 11: Stage 2 DBPR Compliance (2014 – 2020)

Sample Sites	PS Codes	Frequency	Monitoring Results, µg/L		Meets Standard?
			TTHM	HAA5	
Site1–2423 East Bliss Street	1910147-800	Yearly	ND - 15.6	ND - 6.0	Yes
Site2–2045 East 131st Street	1910147-801	Yearly	1.4 - 15.4	ND - 5.3	Yes

2.5.2.4. General Physical Parameters

Pursuant to Section 64449.5 (b) (2), *Distribution System Physical Water Quality*, Title 22 of the CCR, community water systems with greater than 1,000 service connections must collect one sample for every four bacteriological samples required per month. Because four routine total coliform samples per week are collected from the Sativa Water System's distribution system, one sample per week for physical water quality analyses (color, odor, turbidity) must be collected. Starting 2012, one general physical quality sample per week rotating among the four routine sample sites, were consistently collected until April 2018.

In April 2018, a "brown water incident" occurred after flushing activities were conducted by the SLACWD's operators. Residents complained about receiving dirty water from their taps. On April 19, 2018, the Division conducted a field inspection and interviewed some residents. Majority of the residents indicated that brown and yellowish water had been an issue since January 2018. The Division collected samples from the four bacteriological sampling sites and a few houses to check chlorine residuals. The chlorine residuals were adequate, with results ranging from 0.72 mg/L to 0.91 mg/L.

On April 23, 2018, another round of sampling was conducted by the Division, along with representatives from the LA County Department of Public Health (DPH). Samples were

collected strategically from various houses and analyzed for manganese, iron, color, turbidity, chlorine residuals and total coliforms. Table 12 summarizes the results.

Table 12: Bacteriological, Free Chlorine, Iron and Manganese, and General Physical Sampling Event of April 23, 2018

Constituents	Sample Results, Ranges	
	Division	LA County DPH
Total Coliforms	Absent	Absent
Free Chlorine Residual, mg/L	0.23 – 0.88	Not analyzed
Iron, µg/L	13.1 - 100	11 – 59
Manganese, µg/L	27.1 - 185[1,2]	28 – 75[1]
Color, Unit	5 - 20[3]	Not analyzed
Turbidity, NTU	0.37 – 2.21	Not analyzed

1 Above the MCL of 50 µg/L for manganese.
2 Four out of the eight sites are above the MCL.
3 Above the MCL of 15 Units for color. Two out of the eight sites are above the MCL.

The Division, therefore, instructed SLACWD to sample the four bacteriological sample sites for general physical water quality parameters weekly beginning in May 2018 and cease the flushing activity until appropriate flushing procedures have been developed. The LA County PW, the new owner of the water system, continued to collect four general physical samples weekly. In July 2019, the LA County PW resumed with the flushing activities using the NO-DES methodology. Also, dead-end flushing has been regularly performed. Table 13 summarizes the monitoring results from May 2018 through November 2020.

Table 13: General Physical Compliance from May 2018 through November 2020

Year	Month	Total Samples	Color			Odor Range, Unit	Turbidity Range, NTU
			Range, Unit	No. ≥3.0 Units	No. ≥MCL		
2018	May	20	5.0 – 10.0	20	0	1 - 2	0.4 – 1.2
	June	16	5.0 – 10.0	16	0	1 - 2	<0.1 – 0.6
	July	20	<3.0 – **20.0**[1]	19	1	1 - 2	0.2 – 0.6
	August	16	<3.0 – 10.0	9	0	1 - 2	<0.1 – 0.6
	September	16	<3.0 – 7.5	4	0	1	<0.1 – 0.3
	October	20	<3.0 – 5.0	3	0	1	<0.1 – 0.4
	November	16	<3.0 – 10.0	10	0	1 - 2	<0.1 – 0.5
	December	16	<3.0 – 15.0	3	1	1	<0.1 – 3.0
2019	January	20	<3.0	0	0	1	<0.1 – 0.3
	February	16	<3.0 – 15.0	7	1	1 - 2	<0.1 – 1.9
	March	16	<3.0 – 10.0	8	0	1 - 2	<0.1 – 0.8
	April	20	<3.0 – **20.0**[1]	8	1	1 - 2	<0.1 – 1.7
	May	16	<3.0 – **25.0**[1]	4	1	1	<0.1 – 1.6
	June	16	<3.0 - 10	4	0	1 - 2	<0.1 – 1.1
	July	20	<3.0 – 10.0	6	0	1	<0.1 – 1.2
	August	16	<3.0 – **30.0**[1]	7	1	1	<0.1 – **5.2**[2]
	September	16	<3.0 – 5.0	1	0	1 - 2	<0.1 – 0.3
	October	20	<3.0 – 5.0	3	0	1 - 2	<0.1 – 0.3
	November	16	<3.0 – 5.0	2	0	1 - 2	<0.1 – 0.4
	December	20	<3.0	0	0	1 - 2	<0.1 – 0.4

Year	Month	Total Samples	Color			Odor Range, Unit	Turbidity Range, NTU
			Range, Unit	No. ≥3.0 Units	No. ≥MCL		
2020	January	16	<3.0 – 5.0	1	0	1 - 2	<0.1 – 4.3
	February	16	<3.0	0	0	1 - 2	<0.1 – 0.4
	March	20	<3.0	0	0	1	<0.1 – 0.4
	April	16	<3.0	0	0	1	<0.1 – 0.6
	May	16	<3.0 – 5.0	1	0	1 - 2	<0.1 – 0.3
	June	20	<3.0	0	0	1	<0.1 – 0.5
	July	16	<3.0	0	0	1	<0.1 – 0.3
	August	16	<3.0 - **25**[1]	8	1	1	<0.1 – 3.2
	September	20	<3.0 - 10	11	0	1	<0.1 – 1.0
	October	16	<3.0 – 7.5	9	0	1 - 2	0.1 – 0.7
	November	16	<3.0 – 7.5	10	0	1 - 2	<0.1 – 1.3

[1] Above color MCL of 15 Units.
[2] Above turbidity MCL of 5 NTU.

The above table shows discoloration of water was system-wide between May and July 2018. Beginning in August 2018, discoloration of water gradually decreased. In July 2019, the NO-DES flushing method was utilized by the LA County PW to flush the distribution system. The general physical quality of water had improved until August 2020.

In August 2020, the number of samples with elevated levels for color increased. Color was detected in 8 out of 16 samples, with levels ranged from 5 to 25 units. One of the samples exceeded the secondary MCL for color. During this month, the newly rehabilitated Well 5 and the newly constructed 8-inch pipeline along Lucien Street were placed in service. The sample with elevated color exceeding the secondary MCL was from Sample Site 13122 Largo Avenue, which is located downstream of the new 8-inch pipeline. In addition, all samples collected from Sample Site 2016 Lucien Street were detected for color. This site is a block away from Well 5. The increase of the flow and the changes in flow direction may have disturbed the legacy deposits in the pipeline. In November 2020, color was detected in 9 out of 16 samples, but none has exceeded the secondary MCL. The highest color concentration was 10 units. The LA County PW plans to conduct other rounds of NO-DES flushing by December 2020 and March 2021. In addition, the LA County PW has planned to replace the old and undersized pipes. Due to the cost, however, this project may take longer for the LA County PW to implement.

2.5.2.5. Asbestos Monitoring

About 80 percent of the water system's distribution pipelines are asbestos cement pipes. The LA County PW is required to collect one sample at a tap served by asbestos cement pipe, under conditions where asbestos contamination is most likely to occur (i.e. low aggressive index), during the first compliance period of the nine-year compliance cycle from the distribution system and analyze the sample for asbestos. In the 2011 – 2019 compliance cycle, asbestos sample was collected in June 2011. The result was

non-detect. The next round of asbestos monitoring must be completed by December 31, 2022.

2.5.3. Consumer Confidence Report

Section 64480(a), Chapter 15, Title 22 of the CCR requires that water suppliers to distribute an annual report on the water quality of the water served to each of their customers by July 1st of every year. The Consumer Confidence Report has been distributed via mail to the water system's consumers by July 1st every year. The reports for 2018 and 2019 are also posted in the LA County PW – Sativa website. The reports have been submitted and uploaded to the Division via the Electronic Annual Reporting System since 2013.

2.6. OPERATION AND MAINTENANCE

2.6.1. Personnel and Operator Certification

Pursuant to Section 64413.3 of the Operator Certification Regulations, the Division classified the water system as a D2 system (Appendix V). The Chief Operator must possess a D2 or higher certification and the Shift Operator must possess a D1 or higher certification. For the disinfection facilities for which no *Giardia* or Virus reduction is required, the LA County PW is required to utilize either certified distribution operators or certified treatment operators that have been trained to operate these facilities. The LA County PW has sufficient number of certified operators with proper certifications.

2.6.2. SCADA

The LA County PW has installed a SCADA system for the Sativa Water System. It controls or monitors the operation of wells and associated chlorination facilities (Appendix W).

2.6.3. Facility Inspection and Maintenance Program

All well sites, including the office site, are properly secured with fences and locked gates to prevent unauthorized access. All sites are equipped with the burglar monitoring systems.

The operators check the well sites daily. The routine check includes the visual inspection of (1) well sites for any signs of vandalism; (2) wells for wellhead, sampling tap, flowmeters, pumping equipment and lubrication conditions; (3) chlorination facilities for chemical pump and injection point conditions, and chlorine supply tanks for solution levels, any signs of leaks or spills, and (4) hydropneumatic tanks conditions, among others. The well sites are provided with log sheets for the well, disinfection facility, and hydropneumatics tank. The operator that performs the inspection fills out the respective log sheets with the findings including the water meter reading, electric meter reading, chlorination feed rate reading, chlorine tank solution level and chlorine usage, on-line

analyzer reading, lubricator condition, unusual test results and any mechanical problems, among others.

The operator performs daily chlorine residual test with a Hack pocket colorimeter using the DPD method at downstream of the chlorine injection points to check if proper chlorine dose rate is applied.

Hydropneumatic Tanks

The water system has a hydropneumatic tank inspection and maintenance program. On a daily basis, the operators check and record (1) leaks around water piping, the tank, and fittings; (2) leaking air from the tank; (3) air-to-water ratio (water level in the tank) by visually checking the sight tube; (4) presence of sediments in the tank by visually checking the sight tube; and (5) control systems and alarms to ensure that they are operating properly and protected from moisture and corrosion.

On a weekly basis, the sanitary and structural condition of the basic tank components will be checked in more detail that includes (1) pressure fluctuation during a cycle (actual cut-in and cut-out pressures); (2) number of pump cycles per hour; (3) condition of paint on the exterior of the tanks and signs of corrosion; and (4) condition of tank supports to insure that the tanks are adequately secured to the floor.

The hydropneumatic tanks will be disinfected and sampled for bacteriological quality in accordance with AWWA procedures and standards, when placed back to service after repairs and routine maintenance.

2.6.4. Cross-Connection Control Program

SLACWD adopted a cross-connection control ordinance on January 1, 1987. The ordinance was approved by the Division on May 17, 1988. The ordinance explains in detail the purpose and type of protection required for different types of hazards, prevention device installation, and the testing and maintenance. The LA County PW has designated a certified cross-connection specialist for the Sativa Water System. The specialist obtained his certification from the University of Southern California (USC) in August 2019.

In October 2012, the Cross Connection and Water Pollution Control Program staff from the Los Angeles County Department of Public Health (LACDPH), Bureau of Environmental Protection conducted a cross-connection survey. The results of the survey indicated that 20 homes have active irrigation sprinklers systems with no backflow protection and 21 homes have pressure type vacuum breakers (PVB). The 20 homes were notified to correct and abate the backflow hazard. The 21 homes with PVBs were given the options to either convert their PVBs to a non-testable atmospheric type vacuum breaker or have their PVBs tested on annual basis. According to the former SLACWD, all the 41 homes have installed the non-testable devices.

The airgaps at the end of the pump-to-waste lines for Wells 3 and 5 are maintained properly.

2.6.5. Customer Complaint Program

The LA County PW took over the water system after the brown water incident in 2018. The staff are fully aware of the water system customers' concerns over the water quality issues. The staff have worked hard to respond to the customers' concerns in a timely manner. Complaints are received at the administration office and the customer's information such as name, address, and telephone number, etc. are recorded. Work orders are generated for those requiring the follow-up investigation.

Majority of complaints received in 2018 and 2019 are related to taste and color. All complaints received were investigated and handled accordingly. The LA County PW also conducted several community outreaches to keep the customers well informed of the status of projects designed to address deficiencies listed in the Division's compliance order and to gain the trust of the customers.

2.6.6. Emergency Response Program

The Division has on file the water system's Emergency Response Terrorism/Security Vulnerability Assessment Plan dated June 28, 2012. **The LA County PW needs to update the plan to reflect the changes in the management, operation, and facilities.**

2.6.7. Emergency Chlorination Plan

The Division has on file the water system's Emergency Chlorination Plan dated November 16, 2011. The LA County PW needs to update the plan to reflect the change in chlorination facilities.

2.6.8. Water Quality Emergency Notification Plan

The Water Quality Emergency Notification Plan (WQENP) for the Sativa Water System is up-to-date and on file with the Division.

2.6.9. Valve Maintenance Program

The water system has a valve maintenance program that was established in 2015. There are currently approximately 194 valves ranging from 4-inch to 8-inch in size in the distribution system. The pressure zone is divided into quadrants. The locations of the valves including valve number, address and quadrant location, size, type, number of turns and date of inspection are recorded, and their locations are indexed. In the event of an emergency, the operator can isolate portions of the distribution system.

The LA County PW has continued the program and been replacing the dilapidated and malfunctioning valves. Any valve that does not completely close or open is replaced. Each time a valve is replaced, the operator records the valve information including the valve number, location, manufacturer, type, size, valve depth, valve box type, direction of operation, date operated/exercised, number of turns to close or open the valve, position in the distribution system (open or closed), the date the valve was installed and the employee who did the installation.

The LA County PW's goal is to exercise all valves each year. In 2018, only 12 valves were exercised due to the brown water issue. In 2019, all valves were exercised.

2.6.10. Flushing Program

Due to the brown water incident in 2018, the LA County PW has evaluated the appropriate flushing method applicable for the Sativa Water System. In July 2019, after securing the supply from the Liberty Utilities Interconnection, flushing activities were resumed. The LA County PW utilized an unconventional flushing method, the Neutral Output Discharge Elimination System (NO-DES) flushing technology and conducted the required water quality monitoring during flushing. The LA County PW's NO-DES Flushing Operation and Monitoring Plan for the Sativa Water System is provided in Appendix X.

NO-DES flushing activities are done on weeknights from 10 o'clock in the evening to 5 o'clock in the morning of the following day to minimize the impact to customers. The LA County WP personnel oversee the NO-DES flushing operation and the operators are on standby to conduct localized flushing if a brown water spike occurs. Prior to conduct of flushing activities, customers are properly notified. If brown water occurs, customers are advised to flush their faucets and garden hose and call the Sativa Water System operators for assistance. If necessary, bottled water are provided. So far, there has been no brown water complaints during the NO-DES flushing. The LA County PW plans to conduct the NO-DES flushing at least once a year. The next round is scheduled for December 2020. Aside from NO-DES flushing, flushing of dead-ends is performed at least once a month.

Since the implementation of the NO-DES flushing system and regular flushing of dead-ends, the number of customer complaints for discoloration has reduced. In 2019, there were 13 locations with brown water complaints. Staff checked the locations and found the discolorations were due to customers' old and deteriorated internal plumbing systems. Staff checked water quality at water system side pipeline and found the water was clear.

2.6.11. Main Disinfection Program

The LA County PW performs the main disinfection in accordance with AWWA Standards using the AWWA C651. Chlorine residuals and bacteriological tests are

conducted after water main installation and repairs. The water main is placed into service after acceptable water quality is obtained.

2.6.12. Electronic Annual Report

The LA County PW has submitted electronically the Annual Reports to the Drinking Water Program for 2018 and 2019 on a timely manner.

2.6.13. California Environmental Water Quality Act

The LA County is the lead agency and the Division is the responsible agency pursuant to California Environmental Quality Act (CEQA) for the change of disinfection systems at Wells 3 and 5. The LA County PW has determined that the project is categorically exempt from the CEQA. The project was adopted and approved by the LA County Board of Supervisors. A Notice of Exemption (NOE) has been filed with the Los Angeles County Clerk's Office on October 15, 2020 for this project and posted until November 16, 2020. No objection or notice of legal action against the project was received.

The Division has reviewed the CEQA Exemption Worksheets submitted by LA County PW (Appendix Y) on November 2, 2020. The Division concurred that this project does not require further environmental review. Pursuant to Title 14, Section 15302 and Title 22, Section 60101 (b), CCR, the change of disinfection facilities from gas chlorination systems at Wells 3 and 5 to 12.5 sodium hypochlorite chlorination systems falls under CEQA Class 2, Replacement or Reconstruction, exemption. The Division will file a NOE through the Governor's Office of Planning and Research State Clearinghouse upon issuance of this permit amendment. The California Division of Fish and Game filing fees do not apply to exempted projects.

3. APPRAISAL OF SANITARY HAZARDS AND PUBLIC HEALTH SAFEGUARDS

The LA County PW is the designated successor by LA LAFCO of the water system previously owned and operated by SLACWD. Since taking over the operation of the water systems, the LA County PW has made many improvements to the water system. However, it will take time and more resources to fully address all the issues listed in Compliance Order No. 04-22-18R-002, such as the source capacity and minimum pressure requirements.

The Liberty Utilities Interconnection is a temporary active source for the Sativa Water System. Without the Liberty Utilities Interconnection, Wells 3 and 5 cannot meet the PHD. In addition, the Sativa Water System has to rely upon the emergency interconnection to comply with the requirements of Section 64554 (a) (1), Title 22, CCR.

The 620 linear feet of 12-inch water main line along N. Paulsen Avenue connecting to the 12-inch water main line along W. 137th Street and, subsequently, to the 8-inch Liberty Utilities Interconnection is owned and constructed by Liberty Utilities as part of

the Watermain Improvement Project for their Compton/Willowbrook water system. As part of the Agreement with the Sativa Water system, Liberty Utilities allows the Sativa Water System to temporarily use this pipeline solely to transmit water from the interconnection to the Sativa Water System's distribution system while they are constructing the rest of the Watermain Improvement Project pipelines. It is unclear for how long Liberty Utilities will allow the Sativa Water System to use this 12-inch pipeline. Therefore, the LA County WP should secure a permanent reliable source for the Sativa Water System.

The Sativa Water System has no storage facility other than the three hydropneumatics tanks. The hydropneumatic tanks do not provide much of the storage capacity and cannot be counted on for firefighting. The LA County PW should consider construct a storage facility in the future.

The Sativa Water System's distribution system contains old and undersized pipes. Due to the lack of proper flushing in the past, there are legacy sediment buildup in the pipeline. When triggered, these sediments may release and cause discoloration in the water distributed to customers. LA County PW must continue the pipeline replacement project. The LA County PW also need to continue to evaluate if the current source, storage and pipeline capacities are adequate to meet the fire flow requirement and the minimum system pressure requirement (20 psi) at the same time; if not, more improvement should be planned.

Since Liberty Utilities has indicated the intention to switch to 100 percent imported surface water from MWDSC, which contains chloramines, when groundwater alone cannot meet the system demand. The LA County PW must notify the public served by the Sativa Water System, including the dialyses centers, if any, the possibility of receiving chloraminated water as soon as possible. The LA County PW should also have a notification plan in place to inform the public as soon as possible after learning from Liberty Utilities of the pending conversion to chloraminated water or the presence of chloramines in the water. The LA County PW must answer questions that the general public and dialyses centers may have.

If the Sativa Water System must utilize the Liberty Utilities Interconnection while Liberty Utilities relies 100 percent on treated MWDSC water, it will be a major change in water quality. Special water quality parameters sampling and lead and copper tap sampling must be conducted to ensure the switch does not cause adverse impact on lead and copper leaching in the area receiving chloraminated water from the interconnection. LA County PW must also develop a transition plan to address the potential water quality issues during the transition period, including the potential lost of disinfectant residuals due to the mixing of chloraminated surface water and chlorinated well water in the system, which may cause bacteriological quality problem. Also, the Sativa Water System will be required to meet the minimum residual requirements of the Surface Water Treatment Rule during the time it receives treated surface water. The Sativa Water System's GWR Amendment needs to be updated to reflect the Liberty Utilities Interconnection as an additional source.

The LA County PW has adequate number of operators with the proper grade level to meet the operator certification requirements. The Sativa Water System is in compliance with the direct additives regulations and has adequate valve exercise and flushing programs.

4. CONCLUSIONS AND RECOMMENDATIONS

Issuance of a domestic water supply permit by the Division to the Los Angeles County Public Works (hereinafter, LA County PW) as owner of the Sativa Water System is recommended subject to the following conditions:

General

1. The LA County PW shall comply with all the requirements set forth in the California Safe Drinking Water Act, California Health and Safety Code and any regulations, standards, or orders adopted thereunder.

2. The only sources approved for domestic water supply for the Sativa Water System are listed in Table 1 and Table 2:

Table 1. Groundwater Sources

Source	Primary Station (PS) Code	Status	Capacity (gpm)
Well 3	1910147-002	Active	424
Well 5	1910147-005	Active	650

Table 2. Interconnection

Source	PS Code	Location	Status	Capacity (gpm)
Liberty Utilities – Compton/Willowbrook	1910147-010	137th Street & Paulsen Avenue 8” One Way Connection	Active	1,500
City of Compton	1910147-009	Oris Street & Willowbrook Avenue 6” One Way Connection	Emergency	900

3. The only approved treatment facilities for Sativa Water System are those listed in Table 3:

Table 3. Treatment Facilities

Treatment Plant	Treatment Processes
Wells 3 and 5 Chlorination Facilities	Chlorination for precautionary purposes with 12.5 percent sodium hypochlorite solution.

4. No additions, changes, or modifications to the sources of water supply or water treatment facilities outlined in Conditions 3 and 4 shall be made without prior receipt of an amended domestic water supply permit from the Division.

Inactive Source

5. Well 2 has been inactive for more than one year. The well is no longer viable to use for domestic purposes due to contamination with *E. coli* bacteria. LA County PW shall plan to destroy the well. The destruction permit and report shall be submitted to the Division.

Water Quality

6. All water supplied by the Sativa Water System for domestic purposes shall meet all Maximum Contaminant levels (MCLs) established by the Division. If the water quality does not comply with the California Drinking Water Standards, additional treatment shall be provided to meet standards. The plans and specifications for the proposed treatment facilities shall be submitted to the Division for review and approval prior to construction.

7. The LA County PW shall monitor all groundwater sources listed in Table 1 in accordance with Title 22, Chapter 15, CCR and the Division's most recent Vulnerability Assessment and Monitoring Frequency Guidelines.

8. Except for bacteriological analyses and constituents without chemical storet numbers, all water quality monitoring results obtained at a certified laboratory shall be submitted to the Division by Electronic Data Transfer using the appropriate Primary Station (PS) Codes. Analytical results of all sample analyses completed in a calendar month shall be reported to the Division no later than the tenth day of the following month.

9. The LA County PW shall notify the governing body of the local agency in which users of the drinking water reside (i.e. city council and county board of supervisors) when a notification level is exceeded in drinking water that is provided to consumers.

Operator Certifications

10. The distribution system and treatment facilities shall be operated by personnel who have been certified in accordance with Chapter 13, Title 22, CCR, *Operator Certification Regulations*. The chief and shift operator(s) for the Sativa Water System's distribution facilities shall have, at minimum, D2 and D1 certifications, respectively. The minimum certification requirements for all disinfection facilities for which no *Giardia* or Virus reduction is required shall either be certified distribution operators or certified treatment operators that have been trained to operate these facilities.

Cross-connection Control Program

11. The LA County PW shall comply with Title 17, CCR, to prevent the Sativa Water System and its facilities from being contaminated by possible cross-connections. The LA County PW shall maintain a program for the protection of the domestic water system against backflow from premises having dual or unsafe water systems in accordance with Title 17. All backflow prevention assemblies shall be tested annually.

Direct Additives

12. The LA County PW shall only use additives that have been tested and certified as meeting the specifications of NSF International/American National Standard Institute (NSF/ANSI) Standard 60. This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by ANSI.

Indirect Additives

13. The LA County PW shall only use chemicals, materials, lubricants, or products that have been tested and certified as meeting the specifications of NSF/ANSI Standard 61 in the production, treatment or distribution of drinking water that will result in its contact with the drinking water, including process media, protection materials (i.e. coating, linings, liners), joining and sealing materials, pipe and related products, and mechanical devices used in treatment/transmission/ distribution system, unless conditions listed in Section 64593, Title 22, CCR are met. This requirement shall be met under testing conducted by a product certification organization accredited for this purpose by ANSI.

Active Wells

14. Well 3 does not have an annular seal. LA County PW shall keep the well site clean and secured at all times to prevent contamination from outside sources and elements. In addition, LA County PW shall monitor the well for coliform bacteria monthly.

Chloramines

15. The LA County PW shall inform the public served by Sativa Water System the possibility of receiving chloraminated water. The LA County WP shall reach out to kidney dialysis facilities, if any, and home patients to ensure their treatment units can remove chloramines. The LA County PW shall answer questions that the general public and dialyses centers may have.

16. Since Liberty Utilities has indicated the intention to switch to 100 percent imported surface water from MWDSC, which contains chloramines, when groundwater alone

cannot meet the system demand. The LA County PW shall develop and implement a transition plan to address the potential water quality issues, in case water imported from Liberty Utilities containing chloramines. If the Sativa Water System needs to rely on chloraminated water for an extended period, the LA County PW shall develop a nitrification monitoring and control plan. Special water quality parameters sampling and lead and copper tap sampling shall be conducted to ensure the switch does not cause adverse impact on lead and copper leaching in the area receiving chloraminated water from the interconnection.

17. The Sativa Water System shall comply with the minimum residual requirements of the Surface Water Treatment Rule during the time the water system receives treated surface water.

Chlorination Facilities

18. Within **90 days** of receiving this permit, the LA County PW shall submit to the Division the revised Emergency Chlorination Plan for review and approval. The revised plan shall reflect the current chlorination facilities at Wells 3 and 5.

19. The LA County PW shall maintain the following daily operation records of the chlorination facilities at Wells 3 and 5:

    - current dosage rate, in mg/L, and chlorine consumption in lbs./day,
    - amount of water treated in each well in gallons per day or MG/day
    - chlorine residuals test results
    - unusual conditions, mechanical problems, emergencies, or unusual test results

Hydropneumatic Tanks

20. The hydropneumatic tanks shall be disinfected and sampled for bacteriological quality in accordance with AWWA procedures and standards, when placed back to service after repairs and routine maintenance.

Minimum Pressure Requirement

21. The LA County PW shall continue to evaluate if the current source, storage and pipeline capacities are adequate to meet the fire flow requirement and the minimum system pressure requirement (20 psi) at the same time; if not, more improvement should be planned.

Water System Operation and Maintenance Plan

22. The LA County PW shall ensure that all water produced from each source is reliably measured to determine total production. The flow meters at each site shall be calibrated annually.

23. The LA County PW shall notify the Division by telephone immediately upon discovery of any condition judged to create a significant potential or existing health hazard to users. Such conditions include, but are not limited to actual or threatened sabotage, vandalism and/or water outages, which result from inadequate source, storage and/or pumping capacity or any other unplanned loss of system pressure.

Emergency Response Plan

24. The LA County PW shall update Sativa Water System's Emergency Response Plan. The updated plan shall be submitted to the Division within 120 days of receiving this permit.

Annual Reports

25. The LA County PW shall submit Annual Reports on the status and condition of the Sativa Water System, as directed by the Division

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A. SATIVA WATER SYSTEM CONSOLIDATION DOCUMENTS OF MARCH 19, 2019
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C. PERMIT AMENDMENT APPLICATION FOR THE 12.5 PERCENT SODIUM HYPOCHLORITE CHLORINATION SYSTEMS FOR WELLS 3 AND 5
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J. LIBERTY UTILITIES INTERCONNECTION LOCATION AND LAYOUT
K. SPECIFICATIONS OF STENNER SVP SERIES DIGITAL PERISTATIC CHEMICAL METERING PUMP AND NSF/ANSI STANDARD 61 CERTIFICATION FOR SANTOPRENE MATERIALS
L. SPECIFICATIONS AND NSF/ANSI STANDARD 61 CERTIFICATION FOR LMI CHEMICAL SOLUTION TANK
M. CONFIGURATIONS OF DISINFECTION FACILITIES AT WELLS 3 AND 5, AND CHLORINE DISINFECTION DATA SHEETS
N. HASA, INC. NSF/ANSI STANDARD 60 CERTIFICATION FOR 12.5 PERCENT SODIUM HYPOCHLORITE SOLUTION
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P. LIBERTY UTILITIES' 12-INCH TRANSMISSION MAINS ALONG NORTH PAULSEN AVENUE
Q. SATIVA WATER SYSTEM'S 8-INCH WATER MAINS ALONG NORTH PAULSEN AVENUE
R. SATIVA WATER SYSTEM'S 8-INCH WATER MAINS ALONG LUCIEN STREET
S. WEST SIDE INTERCONNECT SCENARIO (LIBERTY UTILITIES)
T. GROUNDWATER WELLS MONITORING MATRIX: 2020-2022 VULNERABILITY ASSESSMENT AND MONITORING FREQUENCY GUIDELINES FOR WELLS 3 AND 5
U. SUMMARY OF MONITORING DATA FROM THE DIVISION'S WATER QUALITY DATABASE FROM JANUARY 1, 1994 TO AUGUST 30, 2020 FOR WELLS 3 AND 5
V. SATIVA WATER SYSTEM'S DISTRIBUTION SYSTEM CLASSIFICATION SHEET
W. SATIVA WATER SYSTEM'S SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM NARRATIVE SHEET
X. NO-DES FLUSHING OPERATION AND MONITORING PLAN FOR SATIVA WATER SYSTEM
Y. CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

APPENDIX A

SATIVA WATER SYSTEM CONSOLIDATION DOCUMENTS OF MARCH 19, 2019

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

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June 19, 2019

IN REPLY PLEASE
REFER TO FILE: SWP-0

TO: Paul Novak, Executive Director
Local Agency Formation Commission

FROM: Mark Pestrella
Director of Public Works

SATIVA WATER SYSTEM
QUARTERLY REPORT ENDING JUNE 2019

In accordance with Resolution No. 2019-00RMD of the Local Agency Formation Commission for Los Angeles County, attached is the first quarterly report on the County of Los Angeles' temporary management of the Sativa Water System.

Please address any questions regarding this report or other matters concerning the Sativa Water System to Deputy Director, Daniel J. Lafferty. Mr. Lafferty can be reached at dlaff@pw.lacounty.gov or (626) 458-4012.

RB:me
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Attach.

Sativa Water System
LAFCO Quarterly Report
March 19, 2019 to June 19, 2019

On March 19, 2019, the Sativa Water System (Sativa) was consolidated with Los Angeles County (County). This report summarizes notable actions taken by the County during the first quarter of its temporary management of Sativa.

PROVISIONS OF RETAIL WATER SERVICE

The County continues to provide water service to Sativa's 7,000 customers and to oversee day-to-day management of the water system.

Water Quality Testing

State-mandated water quality testing of Sativa's water continued during this reporting period. Certified tests continued to show that Sativa's water meets all Primary Drinking Water Standards and is safe to drink. However, those same tests continued to show that Sativa's water was near and occasionally slightly above Secondary Drinking Water Standards for manganese. Secondary standards are set on the basis of aesthetic concerns such as taste, odor, and color.

Brown Water Research

The County continued to conduct various diagnostic tests to determine the source of Sativa's brown water. Testing showed brown water conditions were intermittent and loosely correlated with sudden changes in circulation patterns, periods of high demand, and other disturbances to their distribution system. Over time, the source of the brown water was tracked back to Sativa's wells. It's believed that over many years, sediment and other material from the wells have built up in their distribution system and when disturbed, mix with the water created a brown tint.

Sativa's water system has little to no resiliency. The system has no storage tanks to store water when their wells are offline, and both of their wells must be in operation in order to meet peak water demand from customers. Because of this, the wells cannot be taken offline to continue diagnostic testing and confirm they are the source of the brown water. Additionally, because the wells are believed to be the source of the brown water, well water cannot be used to conduct flushing of Sativa's distribution system to remove the built up sediment.

Financial Audit

The County completed preparations for a financial audit of Sativa's Fiscal Year 2017-18 activities and hired a Certified Public Accountant (CPA) firm to conduct the independent financial audit. The CPA firm is expected to complete their work by the end of June 2019.

The final audit report, including all of the auditor's findings, will be published online, made available to Sativa's customers and the public, and a copy will be provided to LAFCO.

Staffing

As of the end of this reporting period, two of the original six Sativa employees remain employed by Sativa. The County is operating Sativa with temporary contract employees and support from the County workforce as necessary. The remaining Sativa employees and contract staff have gone through the County's standard process for background checks.

Lawsuits

Prior to the County becoming the Administrator of Sativa, a class action lawsuit Martha Barajas, et al v Sativa LA County Water District, et al. case no, BC713381 (Barajas v Sativa) was filed by a few ratepayers of Sativa regarding the water quality and other claims. On April 29, 2019, after the County became the successor agency, the County was named a defendant in the Barajas v Sativa matter. The County is having to defend itself in this action as the successor agency notwithstanding that Health and Safety Code section 116687 subsection (f) purports to provide immunity to the successor agency.

CAPITAL IMPROVEMENTS

An alternate source of water supply must be established before the cause of brown water conditions can be addressed. As soon as this became clear, the County immediately shifted its focus to establishing an interconnection with an adjacent water system to bring new water supply to Sativa.

Interconnection with City of Compton

Sativa has an existing interconnection for emergency water supply with the City of Compton. However, because of infrastructure issues, the City of Compton has not been able to provide water to Sativa for a considerable period of time. The County worked with the State Water Board to address the situation and as of May 7, 2019, the interconnection is back online. While this is good news for system resiliency, Sativa's agreement with the City of Compton requires Sativa to be billed for any water received at Compton's standard customer rates. It would be cost-prohibitive to use this interconnection for system flushing or other non-emergency purposes.

Interconnection with Liberty Utilities

Prior to the County's appointment as Administrator, Sativa was in negotiations with Liberty Utilities to construct an interconnection between Liberty Utilities' water system and Sativa's. However, the project stalled, and the interconnection was not constructed. After taking over operations, the County restarted negotiations and Liberty Utilities agreed to

temporarily provide continuous water supply to Sativa until conditions at Sativa stabilized. An acceptable billing arrangement was negotiated, and a formal agreement was executed. Construction began in early April 2019. It is estimated the interconnection will be online and Sativa will be able to begin serving customers with this new clean water source in mid-July 2019.

Once the interconnection with Liberty Utilities is online, the resiliency of Sativa's water system will be greatly increased. Diagnostic testing can resume and much needed system maintenance activities like flushing out the brown water causing sediment can begin.

Flushing Program

Sativa's distribution system has a number of operational challenges, which make traditional flushing techniques less effective. In April 2018, Sativa attempted to flush out the sediment in their pipes. Due to a number of factors, that work resulted in a massive system-wide brown water incident. Flushing was immediately stopped, an emergency was declared, and bottled water was temporarily provided to all Sativa customers.

Flushing work must be completed in order to improve the brown water situation at Sativa. However, the County is concerned that resuming flushing work may cause another system-wide brown water incident. County experts have consulted with experts from other water agencies and the State Water Board about the best way to carry out a flushing program at Sativa. In order to minimize the possibility of another system-wide brown water incident, the County has decided to partner with a vendor that uses cutting-edge technology and a patented process to carry out a new flushing method. Additionally, flushing work will be done between 10 p.m. and 5 a.m., the period of lowest water usage, to minimize impacts to customers. Customers will be notified before flushing activities begin.

Flushing of Sativa's distribution system is being scheduled for immediately after the interconnection with Liberty Utilities is online, likely in mid-July, and will be carried out over a period of 3 weeks.

Upcoming Work

Once the interconnection is online and flushing of the distribution system has been completed, the County can begin construction of infrastructure improvements.

- Well and Pipeline Repairs – The County has secured a grant from the State Water Board to rehabilitate Sativa's wells and to repair damage to a key segment of pipeline. Refer to the GRANTS section for additional information. This work is planned for fall 2019.

- Manganese Treatment System – Prior to the County's appointment as Administrator, the Water Replenishment District agreed to explore installation of a manganese treatment system at Sativa's well. A technical evaluation study of methods for manganese removal was completed, but additional work was put on hold due to Sativa's deteriorating administrative situation. After taking over operations, the County reached out to the Water Replenishment District and they agreed to restart their work. The Water Replenishment District has since completed the California Environmental Quality Act process for the project and is now designing the treatment system. Design is estimated to be completed by fall 2019. The County is currently pursuing grant funds for construction of the treatment system through the State Department Water Resources' Integrated Regional Water Management (IRWM) Program. Please see GRANTS Section of this report.

GRANTS

In June 2018, the State Water Board issued a compliance order to Sativa to develop a corrective action plan for known operational issues at Sativa. A draft plan was prepared and it was determined the estimated cost for Sativa to address the issues was approximately $14 million (note: Sativa's annual revenue is approximately $1.4 million). Immediately upon being appointed Administrator, the County carried out a rapid assessment of Sativa's infrastructure and determined the extent of operational issues at Sativa was far in excess of what was known by the State Water Board. That list continued to grow in length and severity over the following months.

State Water Board – Infrastructure Grant

The County has aggressively pursued grant funding from the State Water Board for Sativa's infrastructure issues. After a series of negotiations, the State Water Board recommended the County receive $1.77 million in grant funds to address the most serious infrastructure issues at Sativa. A grant agreement is now being prepared. Grant funding will be allocated as follows:

- Pipeline Repair: $600,000 – Repair damage to a critical segment of Sativa pipeline under the Blue Line railroad tracks.

- Well Rehabilitation: $350,000 – Disassemble, clean, and repair the major components of Sativa's two wells.

- Electrical/Mechanical Replacements at Well Sites: $175,000 – Completely replace all electrical systems and mechanical equipment used to pump water from Sativa's two wells.

- Chlorination System Conversion: $60,000 – Replace or rebuild Sativa's chlorination system to be safer and more secure.

- Supervisory Control and Data Acquisition (SCADA) System: $120,000 – Install technology at Sativa's wells to allow remote monitoring and remote control of operations.

- Associated Design and Administration: $465,000

Preparations for the above bulleted work is currently underway. Construction is planned for fall 2019.

State Water Board – Training for Sativa Staff

The County has also aggressively sought support from the State Water Board to provide training to Sativa's field staff on best practices for maintenance techniques, safety procedures, and other field issues. While not technically a grant, the State Water Board was able to identify an existing training program and assign trainers to Sativa. Training will occur over six, half-day sessions and is being conducted on-site at Sativa. The first two training sessions occurred in late May and early June 2019. The remaining four sessions are scheduled and will be completed by August 2019. The training is conducted at no cost to the County.

State Department of Water Resources – Manganese Removal Grant

The County has applied for grant funding from the State Department of Water Resources' IRWM Program for a manganese treatment system for Sativa. The application process has multiple stages. This project has been well received by reviewers and has passed the first stages of the application process. It is expected the State Department of Water Resources will make a final decision on grant awards in late 2019.

COMMUNITY ENGAGEMENT

Building trust with Sativa's customers is one of the County's highest priorities at Sativa. In addition to improving customer service, the County is working on building trust through sharing information with customers and improving transparency of its operations. The following notable community meetings and customer service improvements were carried out.

Community Meetings

During this reporting period the County met multiple times in small group settings with Community leaders. A large-scale community meeting and open house event was held on May 18, 2019. In order to improve attendance, the meeting was held on a Saturday and food and music were provided. English and Spanish invitation flyers were sent out with customer bills and a 4 foot by 12-foot banner was hung outside Sativa's office building. The County also arranged for the flushing vendor to attend and bring one of

their actual pumping and filtration trailers for customers to inspect. As always, Spanish translation of speakers and presentation materials was provided.

While updates were provided on the audit of Sativa's financial records and there was discussion regarding the identification of a permanent service provider to take over operation of Sativa, the main theme of this community meeting was preparing Sativa's customers for the impacts of upcoming work on Sativa's distribution system. Customers were walked through construction, flushing activities, and advised of possible service interruptions and brown water spikes. The County also shared that it was preparing an emergency response plan in the event of a system-wide brown water spike.

At the conclusion of the meeting, in an effort to further break down barriers and build trust, attendees were taken on a tour of Sativa's office and adjacent facilities.

Customer Service

Installation of a 24-hour payment box – A secure payment box was installed in the exterior wall of Sativa's office building. Customers can now pay their Sativa water bill in person with cash, money order, or check 24 hours a day, 365 days a year. Prior to installation of the 24-hour payment box, customers paying in person could only do so during business hours. Flyers in English and Spanish advising customers of the 24-hour payment box were included with customer bills.

Clarification of Billing Policies – In response to customer concerns that Sativa's former Board of Director had not been applying fees and charges uniformly, the County created a flyer notifying customers of Sativa's billing policies. The flyer included information on how and when late fees and shutoff fees are applied, how customers are notified of water service shutoff due to failure to pay their bill, and advised customers that Sativa's billing policies would be applied uniformly to all customers without exception. The flyer was written in English and Spanish and was posted on the Sativa website and included with customer bills.

Signage – Large informational signs in English and Spanish have been installed on the exterior of Sativa's office building. These signs advise Sativa customers of Sativa's business hours, the various methods customers can use to pay their Sativa water bills, and the telephone number for water emergencies.

Customer Newsletters

Beginning in April, the County started publishing a monthly newsletter that summarizes recent and upcoming activities at Sativa. Topics have included progress on brown water issues, upcoming construction, new methods for customers to pay their water bill, the financial audit, and others. The newsletter is included with customer bills and is written in both English and Spanish.

BOARD OF SUPERVISORS ACTIONS

At their May 14, 2019 meeting, the Board of Supervisors unanimously approved a Motion by Supervisors Mark Ridley-Thomas and Janice Hahn directing County staff to identify and provide funding for the County's temporary operation of Sativa.

The motion indicated that the cost to the County to serve as Interim Administrator and then Successor Agency is estimated to be $13.8 million through June 2021. However, Sativa's revenue and the grant funds secured by the County are projected to only be $5.7 million. The County will use $8 million of its general funds to close the gap.

IDENTIFICATION OF A PERMANENT WATER SERVICE PROVIDER (RFP PROCESS)

The County has identified and brought onboard a team of experts familiar with the processes required to identify a permanent water service provider for Sativa and then transfer operation of Sativa to that entity. The permanent service provider will be identified through a Request for Proposals (RFP) process.

Work has begun to prepare a water system evaluation report. The report will provide an inventory of Sativa's assets and debts including infrastructure facilities, water rights, real estate, contract obligations, and fixed assets; a summary of upcoming infrastructure improvements; and other relevant information. Once the report is completed, that information will be used to conduct an appraisal and valuation of Sativa.

Work is also underway to develop criteria that will be used to evaluate proposers' ownership and operating qualifications and as a basis for ranking of proposals.

The report, appraisal, evaluation criteria, and other information will be assembled into a bidder's notebook. The notebook will serve to provide sufficient information to proposers about Sativa, allowing for responsive and complete proposals. The bidder's notebook will be made available to governmental agencies and investor owned utilities.

A schedule is under development for the RFP bid solicitation process to become Sativa's permanent service provider. The following are tentative dates for milestone activities:

- RFP Issued: mid-fall 2019
- Proposals Due: late 2019
- Evaluation of Proposal Complete: early 2020
- Target Board of Supervisors Meeting Date: late winter 2020
- Transfer to permanent water service provider: late winter 2020 to mid- 2021.

CALIFORNIA PUBLIC UTILITIES COMMISSION APPROVAL OF A PERMANENT WATER SERVICE PROVIDER (IF APPLICABLE)

If an investor owned utility is selected as Sativa's permanent water service provider, that entity will be required to submit an application to the California Public Utilities Commission (CPUC) requesting approval to take over operation of Sativa. The CPUC approval process could last up to 18 months. The identification of a permanent water service provider has not been completed; therefore, CPUC has no role in Sativa at this time.

RESOLUTION NO. 2019-02RMD

A RESOLUTION OF THE LOCAL AGENCY FORMATION COMMISSION FOR THE COUNTY OF LOS ANGELES MAKING DETERMINATIONS APPROVING AND ORDERING DISSOLUTION NO. 2018-09 OF THE SATIVA COUNTY WATER DISTRICT

BE IT RESOLVED by the Local Agency Formation Commission for the County of Los Angeles (the "Commission"), that;

WHEREAS, the Sativa County Water District ("Sativa" or "District") was incorporated by the State of California Secretary of State on December 30, 1938, under the County Water District Law; and

WHEREAS, Sativa is a legally-established county water district pursuant to Division 12 of the State of California Water Code; and

WHEREAS, the affected territory includes all land within the boundaries of Sativa, the boundaries of which are found to be definite and certain, as depicted in the map attached as Exhibit "A" to the Executive Officer's staff report dated February 13, 2019 ("staff report"); and

WHEREAS, the affected territory within the boundaries of Sativa is inhabited as defined in Government Code § 56046; and

WHEREAS, the Commission initiated the proposed dissolution of Sativa by adopting a resolution of application pursuant to Government Code § 56375(a)(2)(B) at its meeting of July 11, 2018 for a change of organization to dissolve Sativa ("Proposal"); and

WHEREAS, the proposed dissolution is being considered because, for many years, if not decades, the District has suffered from financial, managerial, operational, and governance challenges; and

WHEREAS, at the July 11, 2018 Meeting, and in accordance with Government Code § 56375(a)(3), the Commission adopted the determinations specified in Government Code § 56881(b) that the public services costs are likely to be less than or substantially similar to the cost of alternative means of providing the service and that this action will promote public access and accountability for community service needs and financial resources; and

WHEREAS, the territory within the boundaries of the Sativa County Water District consists of approximately 180 acres with approximately 1,300 water service connections located within a residential area in the unincorporated community of Willowbrook and three small non-contiguous areas within the City of Compton; and

WHEREAS, the Commission is required, pursuant to Government Code § 56000 *et seq* (the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000), to determine and update, as necessary, the Sphere of Influence (SOI) of each local agency, as provided in Government Code §56425(a), and to review and update each SOI as necessary, every five years thereafter, as provided in Government Code § 56425(g); and

WHEREAS, the Commission adopted a Coterminous Sphere of Influence, wherein the boundaries of the District and its SOI are the same, for Sativa, on October 24, 1984; and

WHEREAS, the Final Municipal Services Review ("MSR") for Water Services for the Gateway Region (in which Sativa is located) in November of 2005 was prepared pursuant to Government Code §§ 56425 and 56430; and

WHEREAS, the Final MSR for Water Services for the Gateway Region in November of 2005 recommended that the Commission adopt a Zero Sphere of Influence for the District, but

based upon public testimony, the Commission approved the November 2005 MSR for Sativa and confirmed the District's Coterminous SOI on February 22, 2006; and

WHEREAS, the August 2012 Sativa County Water District MSR was prepared pursuant to Government Code §§ 56425 and 56430; and

WHEREAS, the August 2012 Sativa County Water District MSR recommended that the Commission adopt a Zero SOI and consolidate the District; and

WHEREAS, on May 14, 2014, the Commission adopted the Round 2 MSR and SOI Update and assigned a Zero Sphere of Influence for the District; and

WHEREAS, the proposed dissolution of the District is consistent with the Zero Sphere of Influence for the District, and, further, implements the Commission's original intent when the Zero SOI designation was adopted; and

WHEREAS, Government Code § 56035 defines dissolution as "the disincorporation, extinguishment, or termination of the existence of a district and the cessation of all its corporate powers, except as the Commission may otherwise provide pursuant to § 56886 or for the purpose of winding up the affairs of the district;" and

WHEREAS, on June 1, 2018, the State Water Resources Control Board (SWRCB) issued Compliance Order No. 04_22_18R_003 to the District, wherein the SWRCB determined that the District had violated the California Safe Drinking Water Act by providing water to customers that exceeded secondary drinking water standards for discoloration (turbidity) and by failing to maintain adequate water pressure at four fire hydrants during flushing procedures; and

WHEREAS, on October 31, 2018, the SWRCB appointed Los Angeles County ("County") as the State Administrator for the District, pursuant to § 116687 of the Health and Safety Code; and

WHEREAS, concurrent to the SWRCB appointment of the County as State Administrator, the Sativa County Water District Board of Directors ceased to exist; and

WHEREAS, on November 1, 2018, a representative of the County Department of Public Works staff assumed full administrative, managerial, and financial control of the District, and has been operating the District from that time to the present; and

WHEREAS, Revenue and Taxation Code § 99 requires an agreement for the exchange of property tax revenues in the event of a jurisdictional change of local agencies; and

WHEREAS, the County Board of Supervisors adopted the property tax transfer resolution, determining that there will be no exchange of property tax revenue from the proposed dissolution because the District does not currently receive any share of the ad valorem (1%) property taxes; and

WHEREAS, pursuant to Government Code § 56658(f), the Executive Officer issued the Certificate of Filing on December 18, 2018; and

WHEREAS, pursuant to Government Code § 56658(h), which requires that the public hearing be set within 90 days of issuance of the Certificate of Filing; the Executive Officer set the Proposal for hearing on Wednesday, February 13, 2019, at 9:00 a.m., at the County Board of Supervisors Hearing Room, Kenneth Hahn Hall of Administration Room 381-B, located at 500 West Temple Street, Los Angeles, California, 90012; and

WHEREAS, notice of the Commission's review of this Proposal was advertised (English language version) in the Daily Commerce on December 20, 2018; and advertised (English language version) in the Compton Bulletin on December 26, 2018; and advertised in La Opinión (Spanish language version) on December 25, 2018; all of which are newspapers of general circulation within Los Angeles County, pursuant to Government Code § 56153; and that said publication occurred at least twenty-one (21) days prior to the date of the February 13, 2019 public hearing, pursuant to the requirements of Government Code § 56154; and

WHEREAS, notice (English language version and Spanish language version) of the Commission's review of this Proposal was sent first class, and deposited, postage prepaid, in the United States Mail, pursuant to Government Code § 56155; to all landowners within the affected territory, to all landowners within 300 feet of the exterior boundary of the affected territory, to all registered voters within the affected territory, and to all registered voters within 300 feet of the exterior boundary of the affected territory, pursuant to Government Code § 56157 (d) and (f); and that said notice was mailed at least 21 days prior to the date of the February 13, 2019 public hearing, pursuant to the requirements of Government Code § 56156; and

WHEREAS, the Executive Officer has reviewed the Proposal and prepared a report, including recommendations thereon, the Proposal and report having been presented to and considered by the Commission; and

WHEREAS, the Commission called for and held a public hearing on February 13, 2019, the hearing having been held on the date and at the time and place noticed therefore, and,

after all parties wishing to testify before the Commission were sworn in, the Commission heard, received, and considered all oral and written comments and evidence which were made, presented, or filed, and all persons were given an opportunity to hear and be heard with respect to the Proposal and the Executive Officer's report; and

WHEREAS, the Commission has considered all factors pursuant to Government Code § 56668, the staff report, and the "Sativa County Water District Plan of Services (aka 'Sativa Los Angeles County Water District') Pursuant to Government Code § 56653" ("Plan of Services"), attached as Exhibit "I" to the staff report.

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING, BE IT RESOLVED as follows:

1. This resolution making determinations is made pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, California Government Code § 56000 *et seq*;
2. The Proposal is assigned the following short-form designation: "Dissolution No. 2018-09 of the Sativa County Water District;"
3. The boundaries of the District are as they exist on February 13, 2019, and as depicted on the map in Exhibit "A" attached to the staff report;
4. The dissolution is consistent with the Zero Sphere of Influence adopted by the Commission on May 14, 2014;
5. The Commission finds that the proposed dissolution is exempt from the California Environmental Quality Act (CEQA) pursuant to State CEQA Guidelines § 15061, because

it can be seen with certainty that there is no possibility that the dissolution of the District will have a significant effect on the environment;

6. The Commission finds that the dissolution of the District is not a project for purposes of CEQA because it is an organizational activity of government with no direct nor indirect effects on the physical environment, pursuant to § 15378(b) of the State CEQA Guidelines;

7. Pursuant to Government Code Section 56881(b)(1), the Commission hereby determines that the public service costs of a proposal that the Commission is authorizing are likely to be less than or substantially similar to the costs of alternative means of providing the service, in that the successor agency has, and a future long-term service provider will have, the necessary extensive and documented financial, technical, and management capabilities relative to providing retail water service consistent with all federal, state, and local water quality standards, and that the successor agency and future service provider will bring significant resources to bear in order to address the infrastructure deficiencies, operational shortcomings, and accounting inconsistencies formerly perpetrated by Sativa's board of directors and staff;

8. Pursuant to Government Code Section 56881(b)(2), the Commission hereby determines that the proposed dissolution will promote public access and accountability for community service needs and financial resources, in that the Commission has designated a successor agency, the County, which has a documented history of being accessible to the public, and conducting its affairs in a transparent manner, and the

County as successor agency will require the future long-term service provider to conduct its affairs in a transparent manner, in contrast to the prior practices of Sativa's board of directors and staff;

9. The Commission hereby dissolves the Sativa County Water District, subject to the following terms and conditions:

   a. The dissolution of the District is not subject to majority protest nor election procedures, pursuant to Health and Safety Code § 116687 (c)(3), which provides that this dissolution "shall not be subject to the provisions of § 57113 of the Government Code, nor to any other requirement for a protest proceeding or election," and "[t]he commission shall not impose any condition on the successor agency that requires a protest proceeding or an election;"

   b. The dissolution is subject to completion of the 30-day reconsideration period provided under Government Code § 56895, and said reconsideration period ends at 5:00 p.m. on Monday, March 18, 2019;

   c. In accordance with Government Code §§ 56886(p) and 57202, the effective date of the dissolution of the District is the date of recordation of the Certificate of Completion with the Los Angeles County Registrar-Recorder/County Clerk;

   d. Upon the effective date, the District will be dissolved, disincorporated, and extinguished, and all of its corporate powers shall cease;

   e. Upon the effective date, the County shall be the successor agency for the District, for the purposes of succeeding to all of the rights, duties and obligations of the

District with respect to enforcement, performance, or payment of outstanding bonds or other contracts and obligations of the District and winding up the affairs of the District pursuant to Government Code §§ 56886(m) and 57451(c) and subject to Health and Safety Code §116687;

f. The County shall provide retail water service within the affected territory pursuant to the Plan of Services, until such time as an alternative service provider is identified and service responsibility is transferred to that provider;

g. All of the moneys or funds, including cash on hand and moneys due but uncollected, and all property, real or personal of the District is vested in the County as the successor agency for the purpose of winding up the affairs of the dissolved District pursuant to Government Code §57452;

h. As the successor agency, and upon the effective date, and for the sole and exclusive purpose of winding up the affairs of the dissolved District, the County shall have the power to exchange, sell, or otherwise dispose of all property, real and personal, of the District; to compromise and settle claims of every kind and nature; to sue or be sued in the same manner and to the same extent as the District and the officers and legislative body of the dissolved District, to the extent permitted by law pursuant to Government Code § 57453 and subject to Health and Safety Code § 116687(f);

i. All property tax revenues and voter-approved special tax or special assessment revenues (if any), received or receivable by the District as of the effective date shall

be collected or collectible by the County, to be used for the purposes for which said taxes or special assessments were imposed;

j. Subject to any authorizations provided in Health and Safety Code § 116687, until payment or provision for payment of amounts owing on account of outstanding bonds, contracts, or other obligations that are outstanding upon the effective date of the dissolution, which are payable in whole or in part from the revenues of a revenue-producing enterprise of the District, the County, prior to distribution, or any city or county, after distribution, shall not sell, encumber or otherwise dispose of all or any part of the revenue-producing enterprise or the revenues derived from that enterprise, except as expressly authorized by the ordinance, resolution, or indenture authorizing or providing for the issuance of any bonds, contracts, or other obligations. Prior to distribution, the County shall succeed to all rights and liabilities of the dissolved District under the ordinance, resolution or indentures authorizing such bonds, contracts or other obligations and may sue or be sued upon those rights and liabilities in the same manner and to the same extent as the dissolved District;

k. The ownership, possession, and control of all books, records, papers, offices, equipment, supplies, moneys, funds, appropriations, licenses, permits, entitlements, agreements, contracts, claims, judgments, land, infrastructure, and other assets, 474 acre feet of adjudicated water rights in the Central Basin, priorities of use, right of use of water, capacity rights of public improvements or facilities, and property, real or personal, owned or leased by, connected with the administration of, or held for

the benefit or use of, the District, shall be vested in the County as the successor agency, and shall be administered to wind up the affairs of the District;

l. Said books, records, papers, offices, equipment, supplies, moneys, funds, appropriations, licenses, permits, entitlements, agreements, contracts, claims, judgments, land, infrastructure, and other assets and property, real or personal, owned or leased by, connected with the administration of, or held for the benefit or use of, the District, includes, but is not limited to, the following:

Water Rights:

Four hundred seventy-four (474) acre feet of adjudicated Central Basin water rights;

Real Property:

1. Grant Deed recorded March 21, 1952 as Document No. 94 in Book 38524 Page 35 of Official Records, Lots 1 and 2 in Block D of Tract 4631, as per map recorded in Book 49 page 90 and 91 of Maps, AIN 6152-019-900;

2. Grant Deed recorded June 1, 2009 as Document No. 20090807841 of Official Records, Lots 46 and 47 in Block D of Tract 4631, as per map recorded in Book 49 page 90 and 91 of Maps, AIN 6152-019-901;

3. Grant Deed recorded December 23, 1943 as Document No. 1822 in Book 20440 Page 384 of Official Records, Lots 18 and 19 in Block 8 of the East Richland Tract, as per map recorded in Book 10 Page 1 of Maps, AIN 6154-010-900;

4. Grant Deed recorded July 1, 1992 as Document No. 92-1204743 of Official Records, Lots 58 and 58 in Block M of Tract 4631, as per map recorded in Book 49 page 90 and 91 of Maps, AIN 6155-005-900 and 6155-005-901;

Real Property (continued):

5. Grant Deed recorded October 26, 1940 as Document No. 189 in Book 17899 Page 280 of Official Records, Lots 35 and 36 in Block Q or Tract No. 4631, as per map recorded in Book 49 page 90 and 91 of Maps, AIN 6155-017-900;

Vehicles:

1. 2000 Ford F250 (VIN 1FTNF20L3YBC85558);
2. 2008 Nissan Frontier (VIN 1N6BD06T78C426127);
3. 2005 Chrysler Town & Country (VIN 2C4GP44R75R227368);

m. Consistent with Government Code § 57462, the funds "of a dissolved district which have been impressed with any public trust, use or purpose shall continue to be so impressed;"

n. Consistent with Government Code § 57463, any funds, money or property of the dissolved District may be used by the County for the purpose of winding up the affairs of the District, and after any distribution to any city, County or district, so far as practicable, the funds, money or property shall be used for the benefit of the lands, inhabitants, and taxpayers within the territory of the dissolved District.

o. The County shall comply with all existing obligations and commitments to existing employees, consistent with State law, any existing employment agreements or contracts, and any adopted personnel policies, however this condition is not to be construed as creating an employment relationship between the County as the successor agency and any employee(s) of the District;

p. The County shall "represent the interests of the public and the ratepayers within the former territory of the district," pursuant to Health and Safety Code § 116687(c)(4);

q. Within one hundred twenty (120) days of the effective date of the dissolution, and consistent with authority granted in Health and Safety Code § 116687(c)(4), the County as the successor agency shall issue a Request for Proposals ("RFP"), or equivalent, to solicit proposals to provide long-term water service for the customers of the dissolved District;

r. If additional time is required to comply with Condition 9.q., above, the County shall notify the Commission in advance, in writing, with an anticipated schedule for completion;

s. Consistent with language in Health and Safety Code § 116687(c)(4), which authorizes the successor agency to solicit proposals "in consultation with the commission," the County shall appoint a LAFCO representative (or representatives) to the evaluation committee (or equivalent) which reviews all RFP submittals and makes a recommendation to the Los Angeles County Board of Supervisors, unless said appointment is prohibited by law;

t. Consistent with its efforts to "represent the interests of the public and the ratepayers within the former territory of the district," and in making its recommendation to the Board of Supervisors, the County shall consider the proposed rate structures submitted in responses by bidders to the RFP, unless said consideration is prohibited by law;

u. Within the RFP, the County shall require all bidders to include:

   i. a projection of water rates following acquisition of the system;

   ii. anticipated schedule for design, funding, and construction of capital projects as described in the RFP;

   iii. a proposed schedule, identifying key milestones and anticipated completion dates, for submittal, consideration, and approval of the bidder's application to the California Public Utilities Commission (CPUC) to expand the bidder's existing, authorized service territory as currently approved by the CPUC, if applicable, as described in the RFP;

   iv. a community outreach program, defining how the successful bidder intends to communicate with Sativa ratepayers upon acquisition of the system and thereafter;

v. The County shall convene meetings with the community no less than four (4) times per year, until the County completes the RFP process, selects a long-term operator of the system, and/or the CPUC provides approval of the bidder's application to the CPUC to expand the bidder's existing, authorized service territory as currently approved by the CPUC, if applicable;

w. The County shall maintain, and regularly update, a website, which shall contain the following information and documents:

   i. Staff contact information, including telephone number, e-mail addresses, and hours of operation;

ii. Information about the District's location, service territory, and contact information for the County Department of Public Works staff overseeing the dissolved District;

iii. Information about establishing service and paying bills;

iv. Notice of all upcoming community meetings, with notice posted to the website at least ten (10) days before each community meeting;

v. Information, schedule (critical dates/milestones), and progress reports concerning the RFP;

x. Upon the effective date of this dissolution, and at the conclusion of each ensuing quarter year (every ninety (90) days) thereafter, the County shall provide the Commission with written reports that contain the following:

i. Documenting the County's provision of retail water service to customers of the former District;

ii. the status of capital improvements;

iii. information concerning any grant applications or awards;

iv. a summary of recent community meetings;

v. any actions taken by the Board of Supervisors concerning the former District;

vi. the status of the RFP process; and

vii. the status of the successful bidder's application and approval by the CPUC, if applicable;

The County shall provide said written reports until the completion of the RFP process and selection of a long-term operator of the system, and/or the effective date of the CPUC approval of the bidder's application to the CPUC to expand the bidder's existing, authorized service territory as currently approved by the CPUC, if applicable;

10. The Executive Officer is hereby authorized and directed to mail certified copies of this resolution as provided in Government Code § 56882; and

11. As allowed under Government Code § 56107, the Commission hereby authorizes the Executive Officer to make non-substantive corrections to this resolution to address any technical defect, error, irregularity, or omission.

PASSED AND ADOPTED this 13th Day of February 2019, by the Commission, by the following

MOTION:	Hahn SECOND: Mirisch APPROVED: 9-0-0
AYES:	Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach
NOES:	None.
ABSTAIN:	None.
ABSENT:	Finlay

LOCAL AGENCY FORMATION COMMISSION FOR THE COUNTY OF LOS ANGELES

PAUL A. NOVAK, AICP, Executive Officer

APPENDIX B

COMPLETED STAFF TMF ASSESSMENT REVIEW FORM

TMF Assessment Review Form for Change of Ownership or New Water System

Water System Name: Los Angeles County Department of Public Works – Sativa Water System	**System Number**: CA1910147
Assessment Type: ☒ Change of Ownership ☐ New Water System	
District: Angeles District / District 22	**TMF Assessment Date**: October 22, 2020
Evaluation Performed By: Ofelia Oracion	**Staff Evaluation Date**: October 22, 2020

Has the water system demonstrated capacity in the following elements per the TMF Assessment Form?

Mandatory TMF Elements

1. **Consolidation Feasibility**:	☒ Yes	☐ No	comments:_____
2. **Ownership**:	☒ Yes	☐ No	comments:_____
3. **Water Rights**:	☒ Yes	☐ No	comments:_____
4. **Budget/CIP**	☒ Yes	☐ No	comments:_____
5. **Budget Control**:	☒ Yes	☐ No	comments:_____
6. **System Description**:	☒ Yes	☐ No	comments:_____
7. **Certified Operators**:	☒ Yes	☐ No	comments:_____
8. **Source Capacity**:	☒ Yes	☐ No	comments:_____
9. **Operations Plan**:	☒ Yes	☐ No	comments:_____
10. **Organization**:	☒ Yes	☐ No	comments:_____
11. **Emergency Response Plan**:	☐ Yes	☒ No	comments: The plan needs to update.

Necessary TMF Elements

12. **Training**:	☒ Yes	☐ No	comments:_____
13. **Policies**:	☒ Yes	☐ No	comments:_____

All "Necessary" TMF Elements that have not been satisfied:

☒ There will be a permit condition to be completed within one months of the TMF assessment date.

SWRCB or LPA Staff Name: Ofelia Oracion, Sanitary Engineer
District 22, Division of Drinking Water

Signature & Date: Oracion 10-22-2020

Rev. January 7, 2015

APPENDIX C

PERMIT AMENDMENT APPLICATION FOR THE 12.5 PERCENT SODIUM HYPOCHLORITE CHLORINATION SYSTEMS FOR WELLS 3 AND 5

STATE OF CALIFORNIA
APPLICATION
FOR
DOMESTIC WATER SUPPLY PERMIT AMENDMENT
FROM

Applicant Los Angeles County Waterworks Districts (LACWD)
(Enter the name of legal owner, person(s) or organization)

Address: 2015 East Hatchway Street, Compton, CA 90222

System Name: Sativa Water System

System Number: CA1910147

TO: Shu-Fang Orr, P.E.
Angeles District, Senior Sanitary Engineer
Division of Drinking Water
State Water Resources Control Board
500 North Central Avenue, Suite 500
Glendale, CA 91203

Pursuant and subject to the requirements of the California Health and Safety Code, Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 7, Section 116550, relating to changes requiring an amended permit, application is hereby made to amend an existing water supply permit to change the disinfectant systems in both Sativa Well 3 and Well 5 sites from gas chlorine to liquid sodium hypochlorite.

FOR OFFICIAL USE

Date Received:

I (We) declare under penalty of perjury that the statements on this application and on the accompanying attachments are correct to my (our) knowledge and that I (we) are acting under authority and direction of the responsible legal entity under whose name this application is made.

Signed By: Bing Hua

Title: Associate Civil Engineer

Address: 900 S. Fremont Ave., Alhambra, CA 91803

Telephone: 626-300-3337

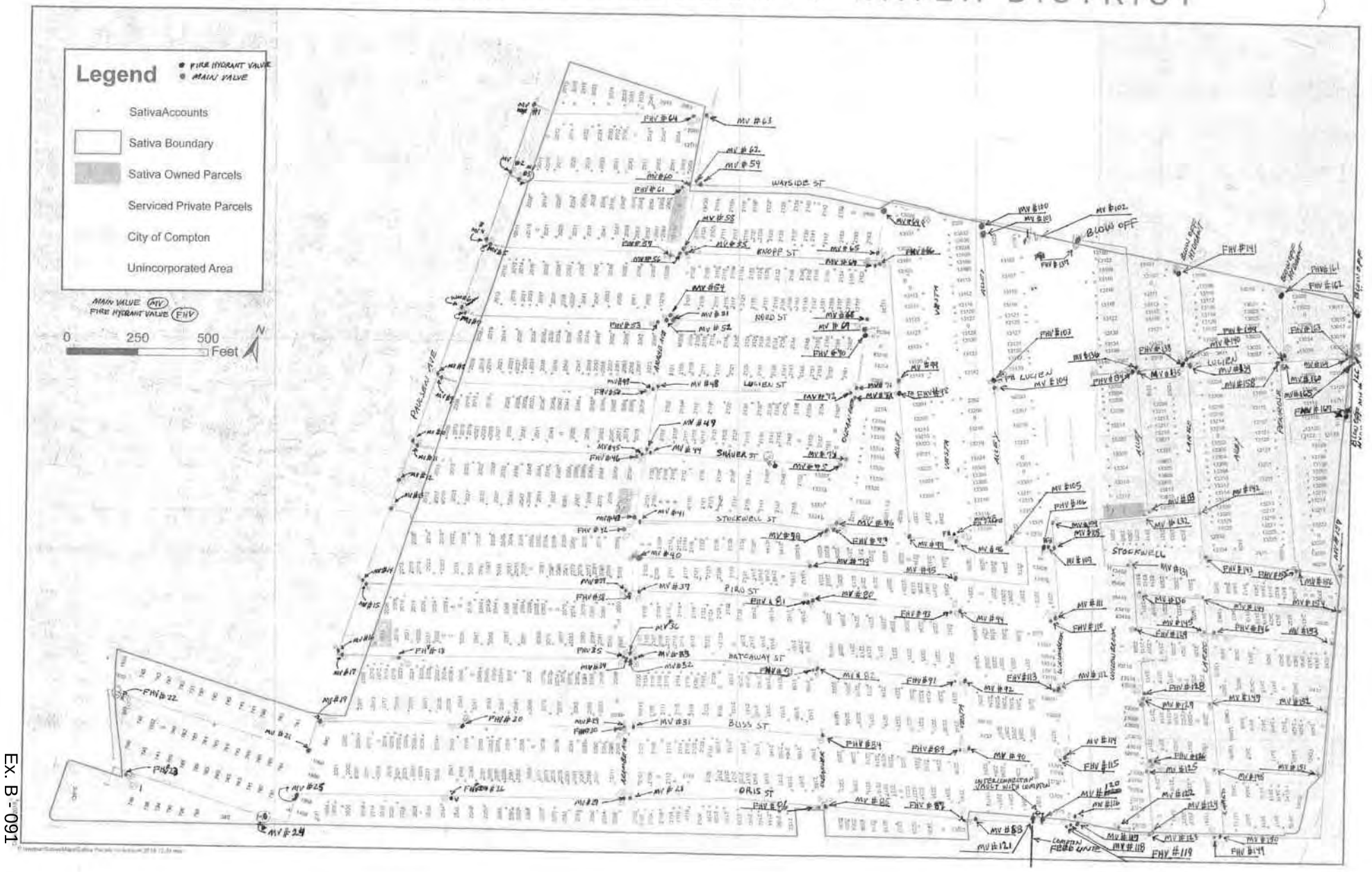
Dated: 8/24/2020

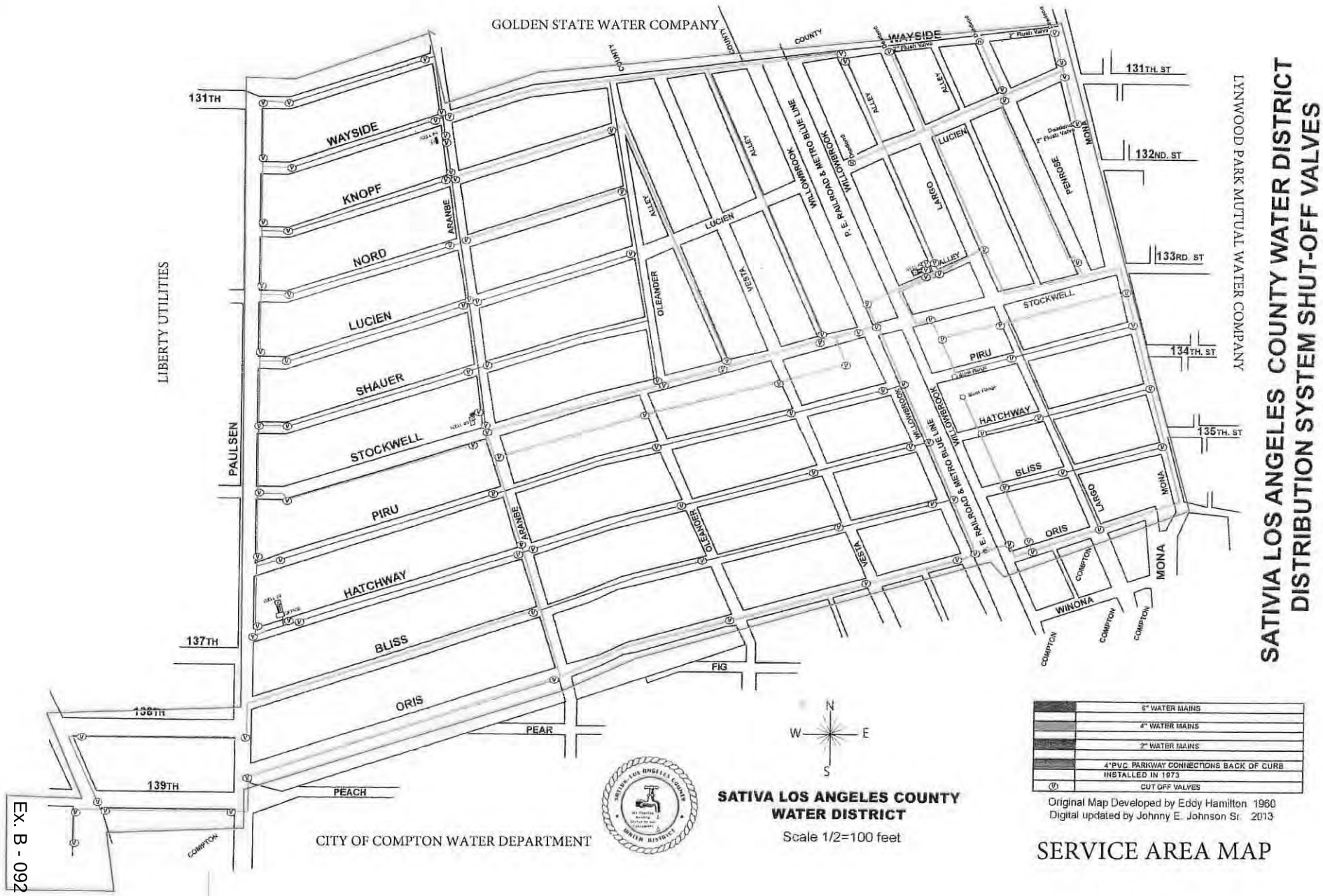
Revised : 07/2014

APPENDIX D

SATIVA WATER SYSTEM SERVICE AREA MAP

SATIVA LOS ANGELES COUNTY WATER DISTRICT

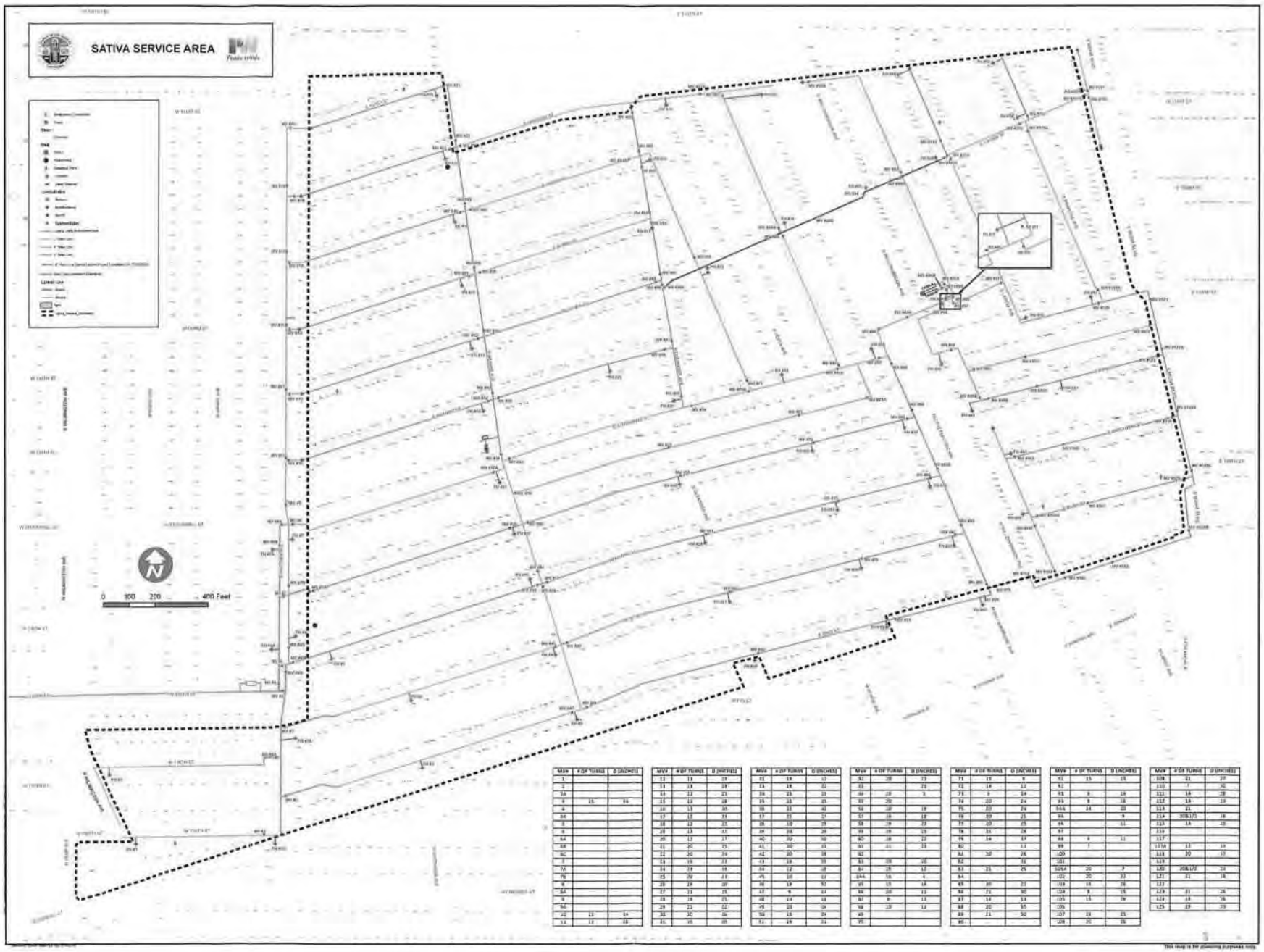



GOLDEN STATE WATER COMPANY
LIBERTY UTILITIES
LYNWOOD PARK MUTUAL WATER COMPANY
CITY OF COMPTON WATER DEPARTMENT
131TH
137TH
139TH
PAULSEN
WAYSIDE
KNOPF
NORD
LUCIEN
SHAUER
STOCKWELL
PIRU
HATCHWAY
BLISS
ORIS
PEAR
PEACH
FIG
ARANBE
ALLEY
OLEANDER
VESTA
WILLOWBROOK
P. E. RAILROAD & METRO BLUE LINE
LARGO
PENROSE
MONA
COMPTON
WINONA
131TH. ST
132ND. ST
133RD. ST
134TH. ST
135TH. ST
COUNTY
N
W
E
S
SATIVA LOS ANGELES COUNTY WATER DISTRICT
DISTRIBUTION SYSTEM SHUT-OFF VALVES
6" WATER MAINS
4" WATER MAINS
2" WATER MAINS
4"PVC PARKWAY CONNECTIONS BACK OF CURB INSTALLED IN 1973
CUT OFF VALVES
SATIVA LOS ANGELES COUNTY WATER DISTRICT
Scale 1/2=100 feet
Original Map Developed by Eddy Hamilton 1960
Digital updated by Johnny E. Johnson Sr. 2013
SERVICE AREA MAP

Ex. B - 092

APPENDIX E

SCHEMATIC OF THE WATER SUPPLY SYSTEM



MH#	# OF TURNS	D (INCHES)
1		
2		
3A		
3	15	24
4		
4A		
5		
6		
6A		
6B		
6C		
7		
7A		
7B		
8		
8A		
9		
9A		
10	13	24
11	13	18

MH#	# OF TURNS	D (INCHES)
12	13	19
13	13	19
14	13	23
15	13	19
16	13	19
17	13	19
18	13	23
19	13	31
20	17	19
21	20	25
22	20	19
23	19	23
24	19	19
25	19	19
26	19	19
27	21	25
28	19	25
29	21	22
30	20	16
31	15	19

MH#	# OF TURNS	D (INCHES)
32	15	13
33	16	22
34	23	19
35	23	19
36	21	19
37	21	17
38	19	19
39	20	19
40	20	19
41	20	19
42	20	19
43	19	19
44	17	19
45	16	13
46	19	32
47	9	13
48	14	19
49	23	19
50	19	19
51	19	19

MH#	# OF TURNS	D (INCHES)
52	20	19
53		25
54	19	6
55	20	
56	20	19
57	19	19
58	19	23
59	19	19
60	18	19
61	11	19
62		
63	19	19
64	19	19
65	19	19
66	20	19
67	9	13
68	19	19
69		
70		

MH#	# OF TURNS	D (INCHES)
71	19	6
72	14	13
73	9	24
74	20	24
75	20	24
76	20	25
77	20	25
78	21	28
79	19	37
80		13
81	20	24
82		31
83	21	25
84		
85	20	21
86	21	30
87	19	13
88	20	35
89	21	30
90		

MH#	# OF TURNS	D (INCHES)
91	15	25
92		
93	9	18
94	9	18
94A	24	25
95		9
96		31
97		
98	7	
99		
100		
101		
101A	20	7
102	20	31
103	15	28
104	9	19
105	15	19
106		
107	19	25
108	20	28

MH#	# OF TURNS	D (INCHES)
109	31	37
110	7	31
111	18	28
112	19	19
113	21	
114	30&1/2	18
115	14	28
116		
117		
117A	13	14
118	20	17
119		
120	20&1/2	14
121	31	18
122		
123	31	24
124	19	36
125	29	28

This map is for planning purposes only.

APPENDIX F

PUMP EFFICIENCY TESTS CONDUCTED ON SEPTEMBER 10, 2020 BY SOUTHERN CALIFORNIA EDISON COMPANY FOR WELLS 3 AND 5

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Confidential/Proprietary Information

September 11, 2020

GARY HILLIARD
LOS ANGELES COUNTY SATIVA
260 E AVENUE K-8
LANCASTER, CA 93535

HYDRAULIC TEST RESULTS: SATIVA WELL #3
Location: 13320 S WILLOWBROOK AVE, COMPTON, CA 90222-3057
Cust #: 0-018-0287 Serv. Acct. #: 013-8239-66
Meter: 254000-011006 Pump Ref. #: 41804

In accordance with your request, an energy efficiency test was performed on your turbine well pump on September 10, 2020. If you have any questions regarding the results which follow, please contact Rick Koch at (805) 654-7312.

Equipment
HP: 50.0
Pump: N/A No: NO PLATE
Motor: US No: V0976011940055M0004

Results	Test 1	Test 2	Test 3
Discharge Pressure, PSI	**62.9**	**55.9**	**69.5**
Standing Water Level, Feet	**115.9**	**115.9**	**115.9**
Drawdown, Feet	**33.0**	**37.7**	**27.7**
Discharge Head, Feet	**145.3**	**129.1**	**160.5**
Pumping Water Level, Feet	**148.9**	**153.6**	**143.6**
Total Head, Feet	**294.2**	**282.7**	**304.1**
Capacity, GPM	**382**	**424**	**342**
GPM per Foot Drawdown	**11.6**	**11.2**	**12.3**
Acre Feet Pumped in 24 Hours	**1.688**	**1.874**	**1.512**
kW Input to Motor	**33.5**	**34.8**	**32.1**
HP Input to Motor	**44.9**	**46.7**	**43.0**
Motor Load (%)	**84.9**	**88.2**	**81.4**
Measured Speed of Pump, RPM	**1,783**		
Customer Meter, GPM		**382**	
kWh per Acre Foot	**476**	**446**	**510**
Overall Plant Efficiency (%)	**63.2**	**64.9**	**61.0**

The above test results indicate various operating conditions on this pump. The pump operates in the pressure range of 55 psi to 69 psi. Test #1 was performed at the midpoint of the operating range. Test #2 & #3 represent to low and high part of the range respectively. The cost per kWh was calculated using the charges from SCE and the CCA.

Russell Johnson
Manager
Hydraulic Services

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

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September 11, 2020

GARY HILLIARD
LOS ANGELES COUNTY SATIVA
260 E AVENUE K-8
LANCASTER, CA 93535

PUMPING COST ANALYSIS: SATIVA WELL #3
Location: 13320 S WILLOWBROOK AVE, COMPTON, CA 90222-3057

CSS Cust #:	0-018-0287	CRM Cust #:	0059040788	Pump Ref. #:	41804
CSS Serv. Acct.:	013-8239-66	CRM Serv. Acct.:	0050707973	Meter:	254000-011006

The following energy efficiency analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during the Edison pump test performed on September 10, 2020, billing history for the past 12 months, and your current rate of TOU-PA2D.

	Existing
Total kWh	**24,384**
kW Input	**33.5**
kWh per Acre Foot	**476**
Acre Feet per Year	**51.2**
Average Cost per kWh	**$0.29**
Average Cost per Acre Foot	**$140.32**
Overall Plant Efficiency (%)	**63.2**
Total Annual Cost	**$7,184.21**

The hydraulic test results indicate that this pump is operating in an efficient manner.

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact Rick Koch at (805) 654-7312.

Russell Johnson
Manager
Hydraulic Services

SOUTHERN CALIFORNIA EDISON
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September 11, 2020

GARY HILLIARD
SATIVA WATER CO.
260 E AVENUE K-8
LANCASTER, CA 93535

HYDRAULIC TEST RESULTS: WELL #5
Location: 2083 E STOCKWELL ST, COMPTON, CA 90222-3502
Cust #: 0-008-3961 Serv. Acct. #: 008-2224-67
Meter: 259000-025849 Pump Ref. #: 41808

In accordance with your request, an energy efficiency test was performed on your turbine well pump on September 10, 2020. If you have any questions regarding the results which follow, please contact Rick Koch at (805) 654-7312.

Equipment
HP: 100.0
Pump: GOULDS No: NO PLATE
Motor: US No: A0677155720020M0002

Results	Test 1 @ 56.7 Hz	Test 2 @ 60.0 Hz	Test 3 @ 60.0 Hz
Discharge Pressure, PSI	**59.0**	**59.0**	**99.3**
Standing Water Level, Feet	**117.8**	**117.8**	**117.8**
Drawdown, Feet	**35.0**	**40.9**	**31.8**
Discharge Head, Feet	**136.3**	**136.3**	**229.4**
Pumping Water Level, Feet	**152.8**	**158.7**	**149.6**
Total Head, Feet	**289.1**	**295.0**	**379.0**
Capacity, GPM	**602**	**699**	**585**
GPM per Foot Drawdown	**17.2**	**17.1**	**18.4**
Acre Feet Pumped in 24 Hours	**2.661**	**3.090**	**2.586**
kW Input to Motor	**50.3**	**60.2**	**57.4**
HP Input to Motor	**67.5**	**80.7**	**77.0**
Motor Load (%)	**64.3**	**77.0**	**73.4**
Measured Speed of Pump, RPM	**1,691**	**1,790**	
Customer Meter, GPM	**632**	**711**	
kWh per Acre Foot	**454**	**468**	**533**
Overall Plant Efficiency (%)	**65.2**	**64.5**	**72.7**

The above test results indicate various operating conditions on this pump. Test #1 was performed at the midpoint of the operating pressure ranges with the VFD set at 1700 rpm to represent the normal operating point. Test #2 was performed at the midpoint pressure at 60 Hz. Test #3 was throttled at 60 Hz. The cost per kWh was calculated using the charges from SCE and the CCA.

Russell Johnson
Manager
Hydraulic Services

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Confidential/Proprietary Information

September 11, 2020

GARY HILLIARD
SATIVA WATER CO.
260 E AVENUE K-8
LANCASTER, CA 93535

PUMPING COST ANALYSIS: WELL #5
Location: 2083 E STOCKWELL ST, COMPTON, CA 90222-3502

CSS Cust #:	0-008-3961	CRM Cust #:	0065007784	Pump Ref. #:	41808
CSS Serv. Acct.:	008-2224-67	CRM Serv. Acct.:	0054135346	Meter:	259000-025849

The following energy efficiency analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during the Edison pump test performed on September 10, 2020, billing history for the past 12 months, and your current rate of TOU-PA2D.

	Existing
Total kWh	**8,088**
kW Input	**50.3**
kWh per Acre Foot	**454**
Acre Feet per Year	**17.8**
Average Cost per kWh	**$0.51**
Average Cost per Acre Foot	**$232.93**
Overall Plant Efficiency (%)	**65.2**
Total Annual Cost	**$4,151.64**

The hydraulic test results indicate that this pump is operating in an efficient manner.

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact Rick Koch at (805) 654-7312.

Russell Johnson
Manager
Hydraulic Services

APPENDIX G

WELL 3 DATA SHEET

WELL DATA SHEET (Page 1 of 2)

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Sativa Water System	*DDW database*
System Number	1910147	*DDW database*
Source of Information *(well log, DDW/County files, system, etc)*	Well Log, DDW, LACDPW	
Organization Collecting Information *(DDW, County, System, other)*	DDW, LACDPW	
Date Information Collected/Updated	09/30/2020	
WELL IDENTIFICATION		
* Well Number or Name	**Well 3**	*DDW database*
* DDW Source Identification Number (PS Code)	1910147-002	*DDW database*
DWR Well Log on File? ("YES" or "NO")	Yes	
State Well Number (from DWR)	03S/13W-15G01 S	
Well Status (Active, Standby, Inactive)	Active	*DDW database*
WELL LOCATION		
Latitude	335400	*DDW database*
Longitude	1181300	*DDW database*
Ground Surface Elevation (ft above Mean Sea Level)	Unknown	
Street Address	13320 Willowbrook Ave.	
Nearest Cross Street	E. Stockwell St.	
City	Willowbrook	
County	Los Angeles	
* Neighborhood/Surrounding Area (see Note 1)	Re	
Site plan on file? ("YES" or "NO")	Yes	
DWR Ground Water Basin	Central Basin	*DWR*
DWR Ground Water Sub-basin	Unknown	*to come from DWR*
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	>100	Estimated
Distance to Active Wells (ft)	>100	Estimated
Distance to Abandoned Wells (ft)	1,056	Actual
Distance to Surface Water (ft)	Not Applicable	Actual
** Size of controlled area around well (square feet)	5,000	Estimated
* Type of access control to well site (fencing, building, etc)	Building & Fencing	
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	2/2/18	Actual
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	No	
* Drainage away from well? ("YES" or "NO")	Yes	
ENCLOSURE/HOUSING		
Enclosure Type (building, vault, none, etc.)	Building	
Floor material	Concrete	
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)	Not Applicable	
WELL CONSTRUCTION		
Date drilled	1944	
Drilling Method	Cable Tool	
Depth of Bore Hole (feet below ground surface)	320	Actual
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	0/320	Actual
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.	14	Actual

WELL DATA SHEET (Page 2 of 2)

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
Casing Material; 2nd Casing Material; 3rd Casing, etc.	10 Gage Steel	Actual
Conductor casing used? ("YES", "NO" or "UNKNOWN") (See Note 2)	Unknown	
Conductor casing removed? ("YES", "NO" or "UNKNOWN")	Unknown	
* Depth to highest perforations/screens (ft below surface) (or "UNKNOWN")	236	Actual
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval, etc.	236/247; 264/281	Actual
* Total length of screened interval (ft) (default = 10% pump capacity in gpm) (or "UNKNOWN")	28	Actual
* Annular Seal?("YES", "NO" or "UNKNOWN") (See Note 3)	No	
* Depth of Annular Seal (ft)	None	
Material of Annular Seal (cement grout, bentonite, etc.)	Not Applicable	
Gravel pack, Depth to top (ft below ground surface)	No	
Total length of gravel pack (ft)	Not Applicable	
AQUIFER		
* Aquifer Materials (list all that apply: sand, silt, clay, gravel, rock, fractured rock)	sand, silt, clay, gravel	
* Effective porosity (decimal percent) (default = 0.2) (or "UNKNOWN")	0.2	Default
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	Yes	
Thickness of confining layer, if known (ft)	21; 15; 152; 17; 39	Actual
Depth to confining layer, if known (ft below ground)	36; 60; 84; 247; 281	Actual
* Static water level (ft below ground surface)	115.6	Actual
Static water level measurement: Date/Method	September 8, 2016/Sounder	
Pumping water level (ft below ground surface)	153.5	Actual
Pumping water level measurement: Date/Method	September 8, 2016/Sounder	
WELL PRODUCTION		
Well Yield (gpm)	424	Actual
Well Yield Based On (i.e., pump test, etc.)	Pump Test/Edison Co.	
Date measured	9/10/2020	
Is the well metered? ("YES" or "NO")	Yes	
Production (gallons per year)	1,322,880	Estimated
Frequency of Use (hours/year)	52	Estimated
Typical pumping duration (hours/day)	1	Actual and as needed
PUMP		
Make	Peerless	
Type	DWT	
Size (hp)	50	
* Capacity (gpm)	424	Actual
Depth to suction intake (ft below ground surface)	Unknown	
Lubrication Type	Oil	
Type of Power: (i.e., electric, diesel, etc.)	Electric	
Auxiliary power available? ("YES" or "NO")	No	
Operation controlled by: (i.e., level in tank, pressure, etc.)	Pressure	
Pump to Waste capability? ("YES" or "NO")	Yes	
Discharges to: (i.e., distribution system, storage, etc.)	Hydropnuematic Tanks	2 units
REMARKS AND DEFECTS (use additional sheets as necessary)		
The well is more than 76 years old and has no annular seal. In February 2016, the well was taken out of service due to excessiv		
sand pumping. According to the District an aquifer had collapsed. The well's suction pipe was lifted up.		

WELL DATA SHEET (Page 3 of 2)

NOTES		
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other		
2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		

APPENDIX H

WELL 5 VIDEO SURVEY REPORTS, SPINNER LOG AND MASS BALANCE ANALYSES, AND AS-BUILT WELL LINER DIAGRAM

Pacific Surveys

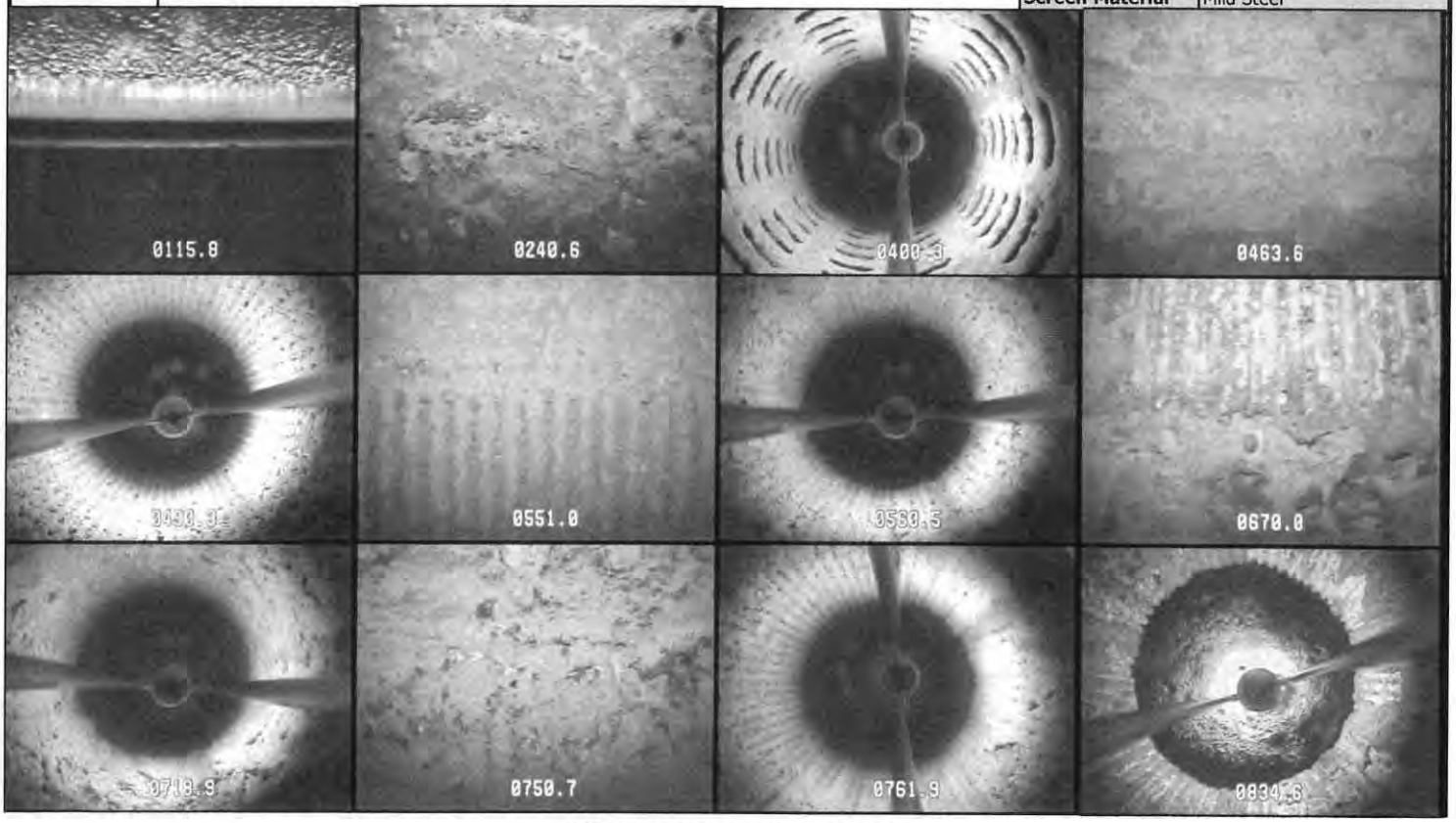
a full service geophysical well logging company

Video Survey Report

Company:	General Pump Company, Inc.	**Date:**	09-Sep-19
Well:	Sativa Well 5	**Run No.**	Two **Truck** PS-6
Field:	Compton	**Job Ticket:**	26005
State:	California	**Total Depth:**	836.8 ft
Location:	2080 Stockwell St.	**Water Level:**	115.8 ft SWL
		Oil on Water:	No **Amount:** N/A
GPS:	33.909912, -118.233852	**Operator:**	Conner
Zero Datum:	Top of CSG **Tool Zero:** Side-Scan		**Dead Space** 1.75 ft
Reason for Survey:	General Inspection	**Guides Set @**	14 in

Depth	Observations
5.0 ft	Began survey 5 ft below top of casing; well located inside pump house. EZ-Over tool used.
22.0 ft	Spalling on casing walls.
115.8 ft	SWL; water is clear; visibility is good.
130.0 ft	Minor growth on casing walls.
202.4 ft	Top of perforated interval; appears to be mostly plugged.
228.0 ft	Moderate growth on casing walls; perfs appear to be mostly plugged.
240.6 ft	Bottom of perforated interval.
382.3 ft	Top of perforated interval; appears to be mostly open.
490.3 ft	Bottom of perforated interval.
490.9 ft	Top of screened interval; appears to be plugged.
510.3 ft	Bottom of screened interval.
513.0 ft	Increased growth on casing walls.
551.0 ft	Top of screened interval; appears to be plugged.
670.0 ft	Bottom of screened interval.
750.7 ft	Top of screened interval; appears to be plugged.
836.8 ft	Camera light bar comes to rest on hard fill material. Screen still visible at fill.
	Survey ends.

Well Details		
Perforation:		**From Survey**
Standard Louvers		202.40 ft to 240.60 ft
		382.30 ft to 490.30 ft
Wire-Wrap		490.90 ft to 510.30 ft
		551.00 ft to 670.00 ft
		750.70 ft to 836.80 ft
Casing Size (in):		**From Survey**
O.D.	**I.D.**	
16.00	15.25	0.00 ft to 836.80 ft
Casing Material		Mild Steel
Screen Material		Mild Steel



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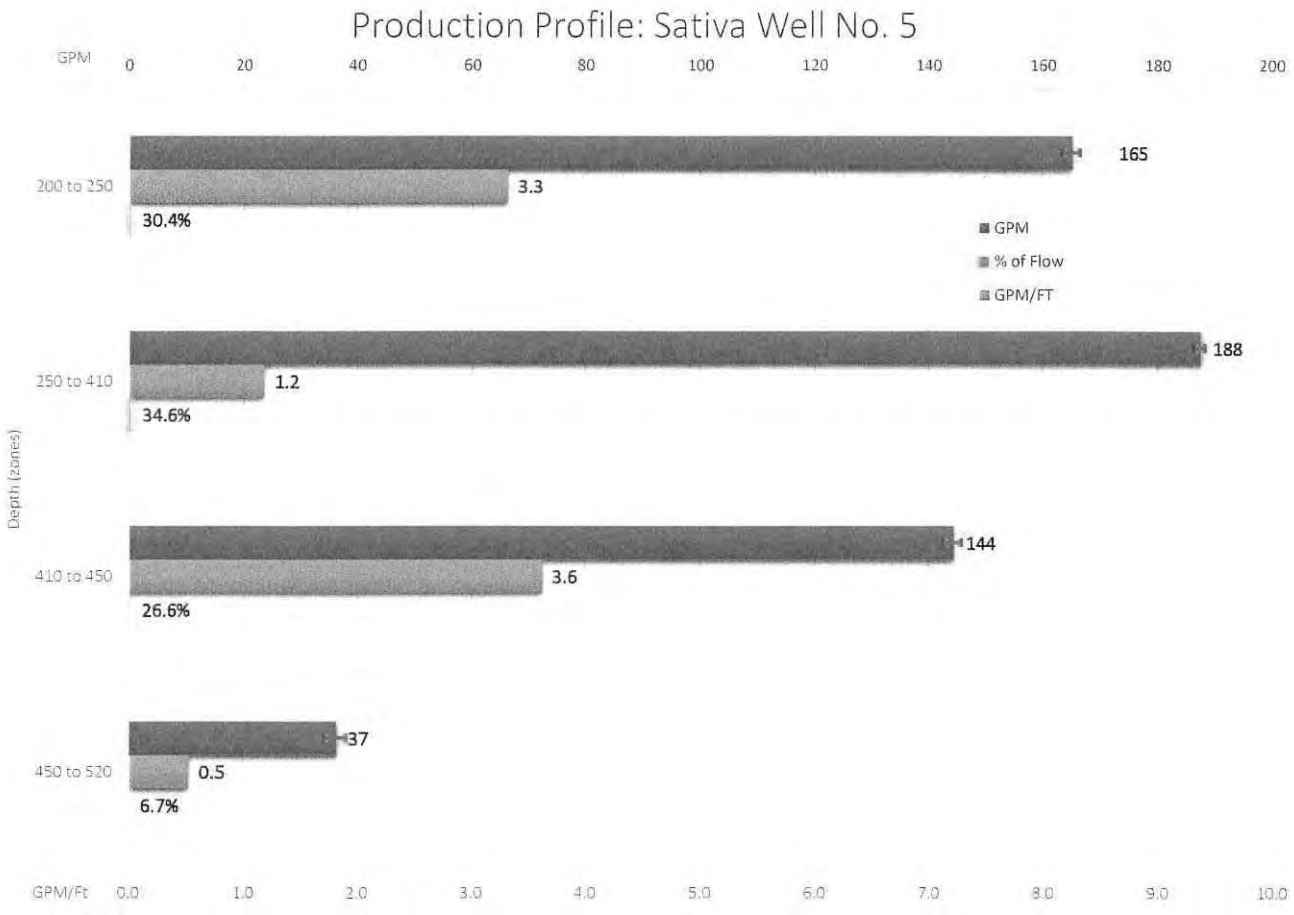
SPINNER LOG ANALYSIS

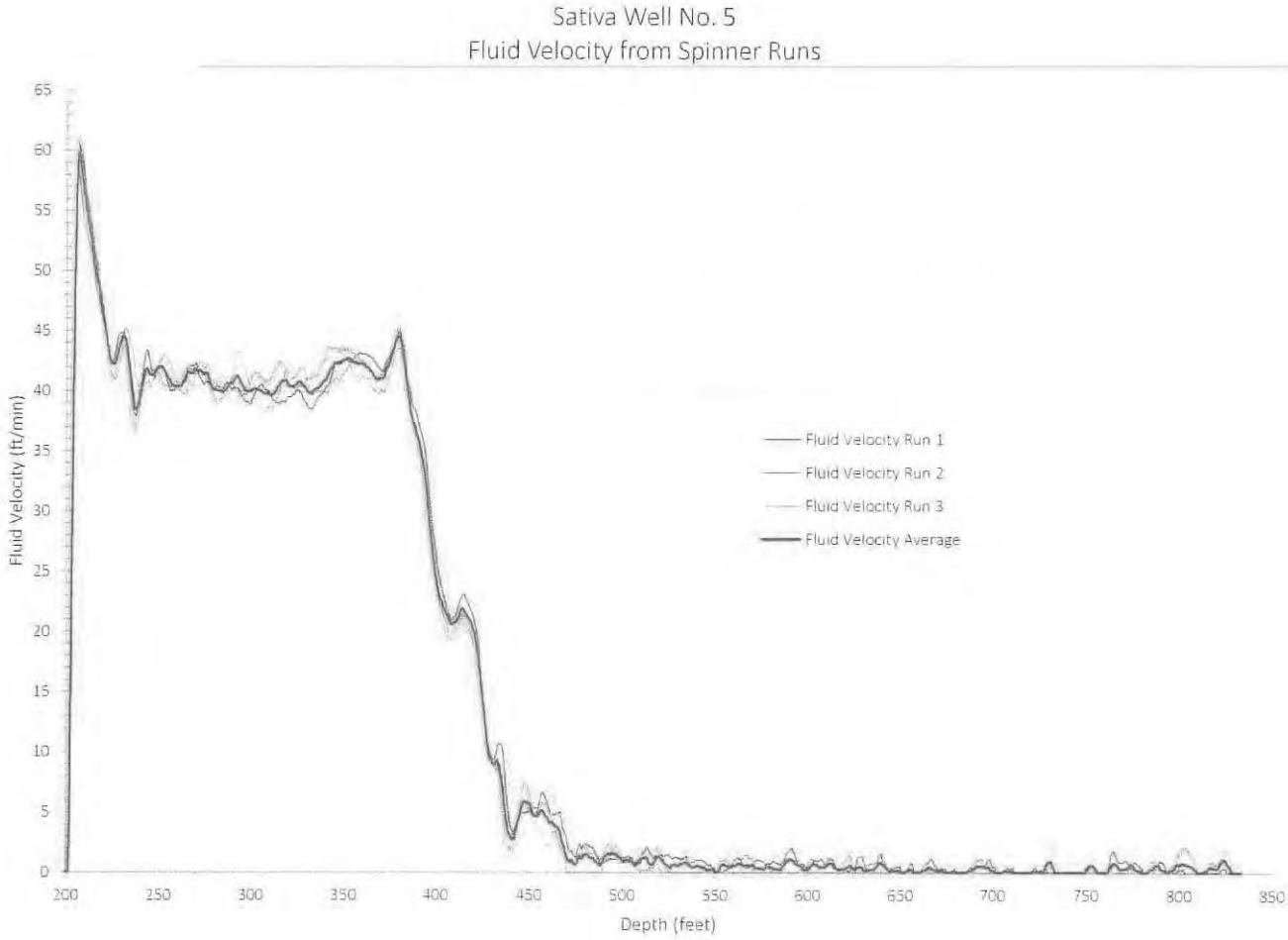
Pacific Surveys
Geophysical Well Logging
21-Nov-2019
Job # 26221

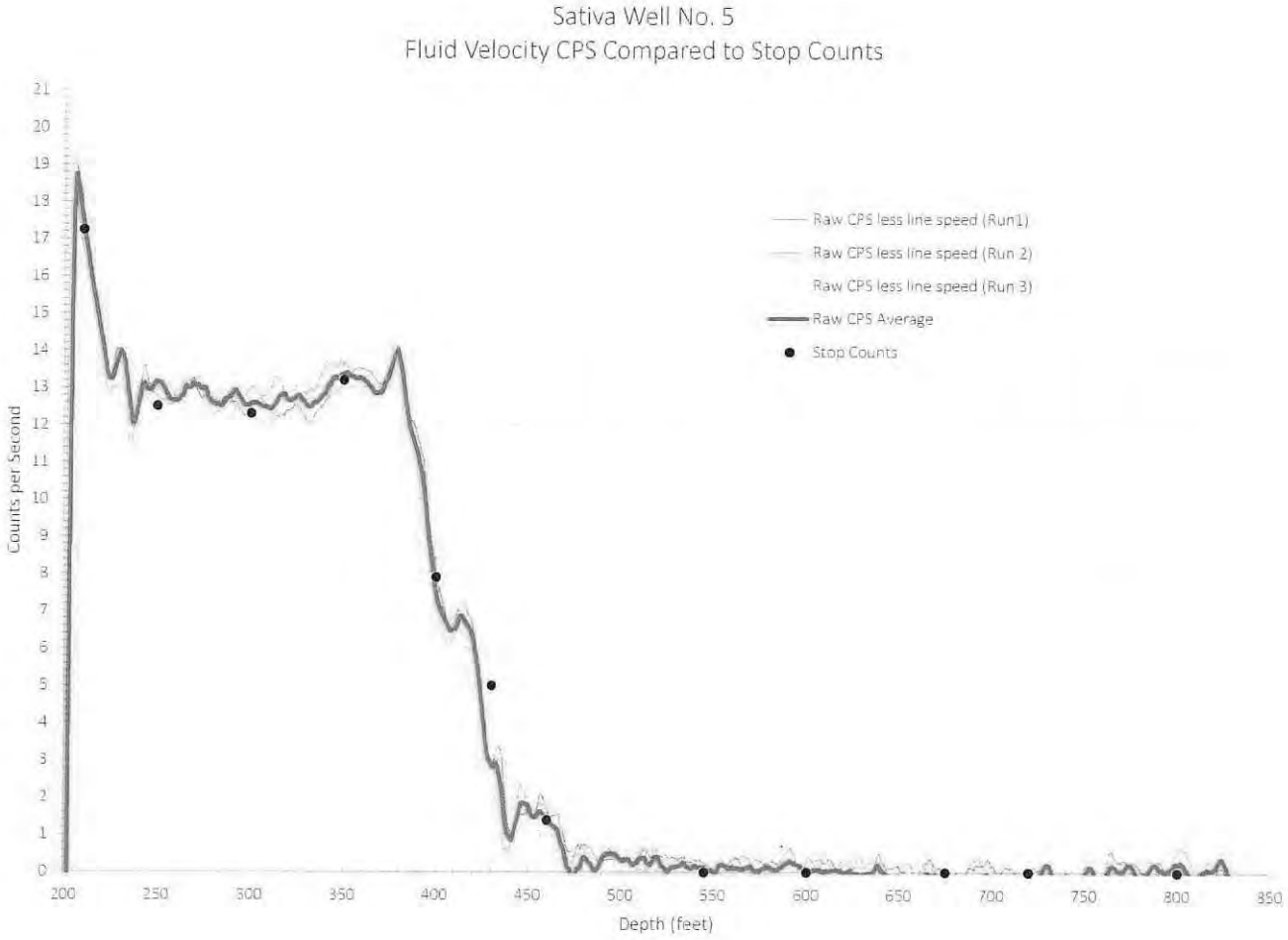
Company: Best Drilling & Pump
Well: IRWD DRFW Well No. 5
County: Orange

SURFACE FLOW RATE 543 GPM

SAMPLE INTERVALS	PRODUCTION (GPM)	% OF FLOW (ZONES)	GPM/FT	STD DEV (GPM)	STD ERROR (+/- GPM)
200 to 250	165	30%	3.3	15.6	1.4
250 to 410	188	35%	1.2	9.1	0.8
410 to 450	144	27%	3.6	8.0	1.4
450 to 520	37	7%	0.5	10.3	1.8
520 to 844	9	2%	0.0	5.8	1.0

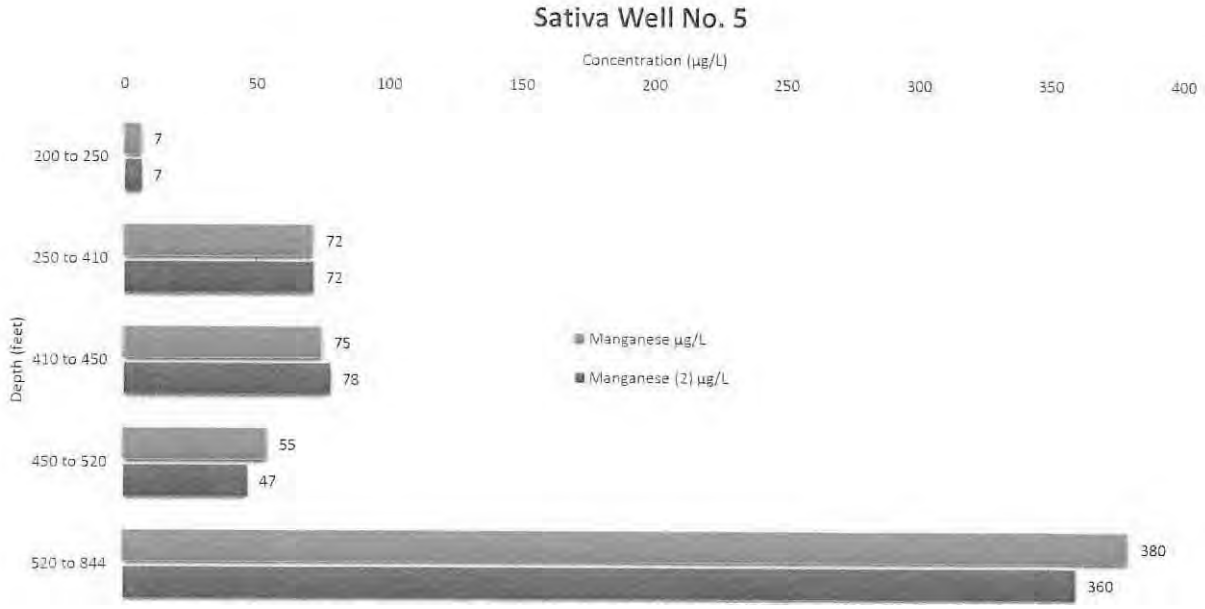

Production Profile: Sativa Well No. 5
GPM
0
20
40
60
80
100
120
140
160
180
200
200 to 250
165
3.3
30.4%
250 to 410
188
1.2
34.6%
410 to 450
144
3.6
26.6%
450 to 520
37
0.5
6.7%
Depth (zones)
GPM
% of Flow
GPM/FT
GPM/Ft
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0


Sativa Well No. 5
Fluid Velocity from Spinner Runs
Fluid Velocity (ft/min)
65
60
55
50
45
40
35
30
25
20
15
10
5
0
200
250
300
350
400
450
500
550
600
650
700
750
800
850
Depth (feet)
Fluid Velocity Run 1
Fluid Velocity Run 2
Fluid Velocity Run 3
Fluid Velocity Average


Sativa Well No. 5
Fluid Velocity CPS Compared to Stop Counts
Counts per Second
Depth (feet)
Raw CPS less line speed (Run1)
Raw CPS less line speed (Run 2)
Raw CPS less line speed (Run 3)
Raw CPS Average
Stop Counts

Sativa Well No. 5
Mass Balance Analysis
11-25-2019

Sample Zone	Sample Zone Depth (feet)	Sample Depth (feet)	Flowrate (GPM)	Measured Concentration		Calculated Concentration		Measured
				Manganese µg/L	Manganese (2) µg/L	Manganese µg/L	Manganese (2) µg/L	pH
1	200 to 250	Surface	165	57	57	7	7	N/A
2	250 to 410	250	188	79	79	72	72	N/A
3	410 to 450	410	144	86	86	75	78	N/A
4	450 to 520	450	37	120	110	55	47	N/A
5	520 to 844	520	9	380	360	380	360	N/A



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SATIVA WELL 5 COMPUTATION TABLES > MASS BALANCE (as Sampled on 11/25/19)

TABLE 1: SATIVA WELL 5 COMPUTATION TABLES > MASS BALANCE (as Measured and Calculated)

Mn Sample Zone	Sample Zones (ft)	Sample Depth (ft)	Flow (GPM)	Measured Concentration		Calculated Concentration		Measured
				Manganese µg/L	Manganese (2) µg/L	Manganese µg/L	Manganese (2) µg/L	pH
1	200 to 250	Surface	165	57	57	7	7	N/A
2	250 to 410	250	188	79	79	72	72	N/A
3	410 to 450	410	144	86	86	75	78	N/A
4	450 to 520	450	37	120	110	55	47	N/A
5	520 to 844	520	9	380	360	380	360	N/A
			543					

TABLE 2: SATIVA WELL 5 > MASS BALANCE (with Casing & Screen Zones)

Perforations	Mn Sample Zone	Sample Depth (ft bgs)	Flow (gpm)	Flow (% of Total GPM)	"Calculated" Manganese (1) (ppb)	"Calculated" Manganese (2) (ppb)	Sampled Manganese at Surface (1) (ppb)	Sampled Manganese at Surface (2) (ppb)
0'- 200' (Blank Casing)	1	0'	165	30.4%	7	7	57.0	56.9
200'-240' (Louvers)								
240'-380' (Blank Casing)	2	250'	188	34.6%	72	72		
380'-488' (Louvers)	3	410'	144	26.5%	75	78		
488'-500' (Wire-Wrap)	4	450'	37	6.8%	55	47		
500' - 547' (Blank Casing)	5	520'	9	1.7%	380	360		
547'-667' (Wire-Wrap)								
667' to 746' (Blank Casing)								
746'-845' (Wire-Wrap)								
			543	100.0%				

TABLE 3: SATIVA WELL 5 > MASS BALANCE (Using the "Calculated" Manganese Perf Zone Values with Zone 510' to 845' Blocked)

Perforations	Mn Sample Zone	Sample Depth (ft bgs)	Flow (gpm)	Flow (% of Total GPM)	"Calculated NEW" Manganese (1) (ppb)	"Calculated NEW" Manganese (2) (ppb)	Calculated NEW Manganese at Surface (1) (ppb)	Calculated NEW Manganese at Surface (2) (ppb)
New GPM =			534					
0'- 200' (Blank Casing)	1	0'	165	30.9%	7	7	51.5	51.8
200'-240' (Louvers)								
240'-380' (Blank Casing)	2	250'	188	35.2%	72	72		
380'-488' (Louvers)	3	410'	144	27.0%	75	78		
488'-500' (Wire-Wrap)	4	450'	37	6.9%	55	47		
500' - 547' (Blank Casing)	BLOCKED OFF ZONES							
547'-667' (Wire-Wrap)								
667' to 746' (Blank Casing)								
746'-845' (Wire-Wrap)								

GENERAL PUMP COMPANY

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CAMARILLO, CA 93010 * PHONE: (805) 482-1215
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Lic. #496765

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002

February 5, 2020

Attn: Gary Hilliard, P.E.

Subject: Sativa Well 5 Liner Technical Data

General Pump Company is pleased to provide this technical information associated with the installation of the 12" Stainless Steel liner and formation stabilizer at the referenced well site.

The technical portion of the casing, screen, and fillers are as follows:

12" *ROSCOE MOSS* WELL SCREEN - 304 SS WELL SCREEN	140' Ft.			
Material	**304 Stainless**			
Nominal Size	12	in	*180*	*mm*
Top x Bottom Fitting Configuration	6" WR x 2" WR			
Estimated Total Well Depth	510	ft	*366*	*meters*
Estimated Feet of Screen	140	ft	*40*	*meters*
Design Slot Size	0.060	in	*1.5*	*mm*
Approx. Outside Diameter	12.85	in	*326*	*mm*
Screen Barrel Inside Diameter	12.05	in	*306*	*mm*
Approx. Clear ID at Fittings	11.88	in	*302*	*mm*
Approx. Weight Per Ft	25	lbs	*11*	*kg*
Wire Width	0.130	in	*3.3*	*mm*
Wire Height	0.250	in	*6.4*	*mm*
Calc. Collapse Strength *	176	PSI	*12*	*kg/sq.cm*
Open Area	31.6%			
Intake Area	153	sq.in./ft	*3,237*	*sq.cm./meter*
Transmitting Capacity-at 0.1 ft/sec	47	gpm/ft	*10*	*lps/meter*
Support Rod Diam	0.217	in	*5.5*	*mm*
Number of Rods	64			
Cross Sectional Rod Area	2.37	sq.in.	*15.28*	*sq.cm.*
Design Yield Strength	30,000	PSI	*2,109*	*kg/sq.cm*
Calc.Tensile Strength *	49,700	lbs	*22,500*	*kg*
Max.Recomended Hang Wt. *	24,900	lbs	*11,300*	*kg*
Column Load *	46,800	lbs	*21,200*	*kg*

The blank *Custom Pipe* Stainless-Steel Casing will be 12" ID X .375 Wall 304 SST Casing with beveled ends (370 feet of blank casing welded to 140 feet of well screen as needed).

The Bottom will have a Blank Stainless-Steel bull-nose cap welded to the bottom piece of casing.

The Glass *Sili® Beads* consist of 9 Super Sacks of DB-4503/4911 Size 451011 (2.5-3.5 mm) – (.094 to .140 Inch) Resistant Glass Beads (12 cubic yards total). The Glass *Sili® Beads* are placed from 520' to bottom to well at 510'. Then the Glass *Sili® Beads* are placed in the 2" annular space between the original well liner and the new well liner from 510 feet below surface to top of well.

The original Sativa Well 5 Liner failed to contain the original annular gravel pack. The original gravel pack had filled the interior of original liner from 910 feet to 845 feet below surface. The original well casing will be filled in with clean pea gravel from 845 feet to 530 feet below surface (17 cubic yards total). The pea gravel to be capped from 530 feet to 520 feet with "time released' 3/8" bentonite pellets from 530 feet to 520 feet (approx. 5 cubic yards).

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us.

Thank you.

Ray Reece
General Manager

Pacific Surveys

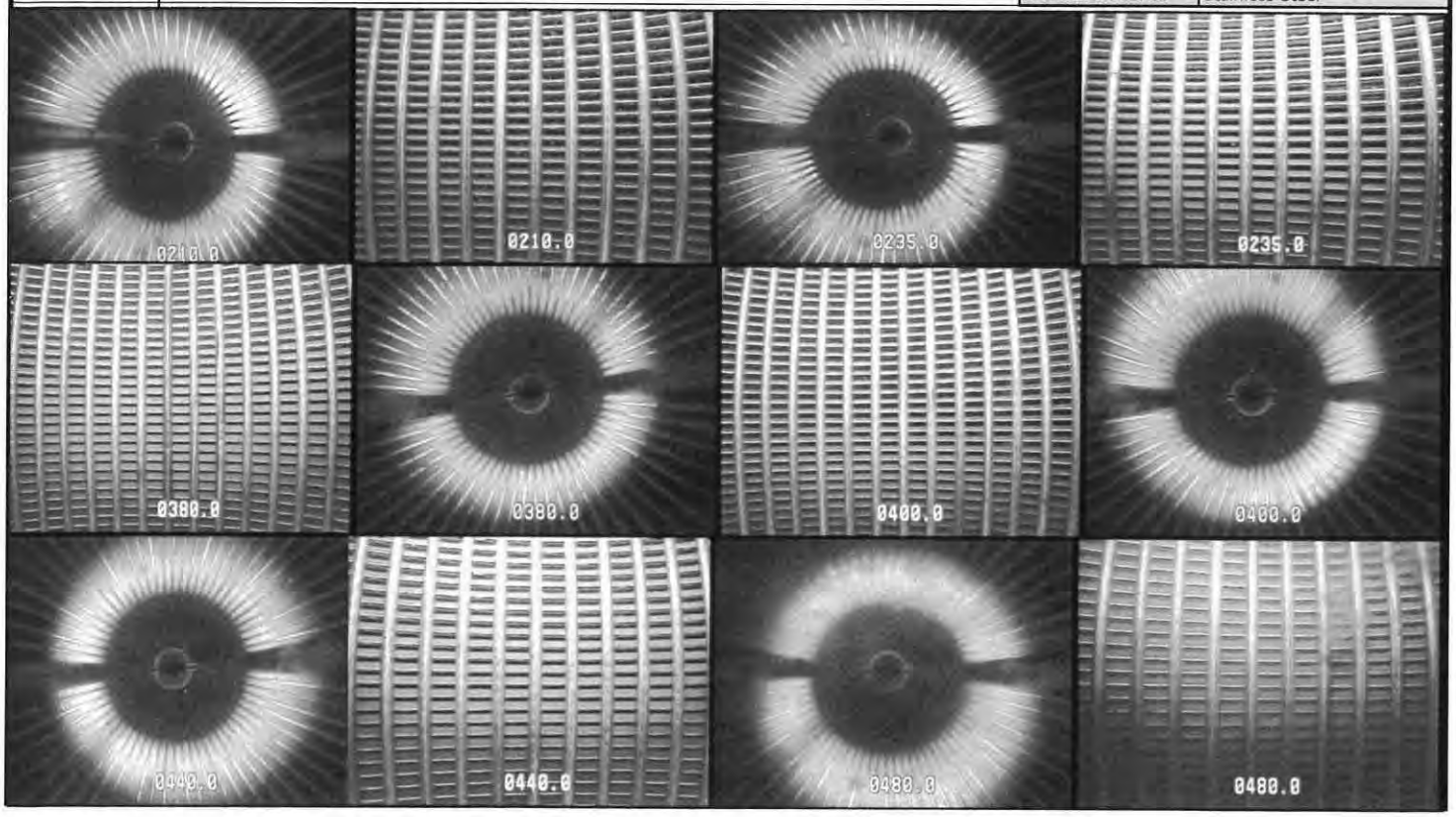
a full service geophysical well logging company

Video Survey Report

Company:	General Pump Company, Inc.	**Date:**	23-Mar-20
Well:	Sativa Well 5	**Run No.**	Four **Truck** PS-6
Field:	Compton	**Job Ticket:**	26644
State:	California	**Total Depth:**	508.8 ft
Location:	2080 Stockwell St	**Water Level:**	109.8 ft SWL
		Oil on Water:	No **Amount:** N/A
GPS:	33.909912 -118.233852	**Operator:**	Hoffman
Zero Datum:	Top of CSG **Tool Zero:** Side-Scan		**Dead Space** 1.75 ft
Reason for Survey:	Post Liner Installation	**Guides Set @**	10 inches

Depth	Observations
1.5 ft	Begin survey at 1.5 feet in 12-inch liner due to using the easy over tool.
7.7 ft	First casing joint. Casing joints are various lengths between 10 and 25 feet and appear to be installed correctly unless otherwise noted.
109.8 ft	SWL, clear.
198.9 ft	Top of wire wrap screen liner; appears to be open and installed correctly.
238.5 ft	Bottom of wire wrap.
245.0 ft	Patch of trace biogrowth.
379.0 ft	Top of wire wrap screen liner; appears to be open and installed correctly. Abundant fine sediment has settled in slots.
498.2 ft	Bottom of wire wrap.
508.5 ft	Top of fill.
508.8 ft	Camera comes to a stop, end survey.

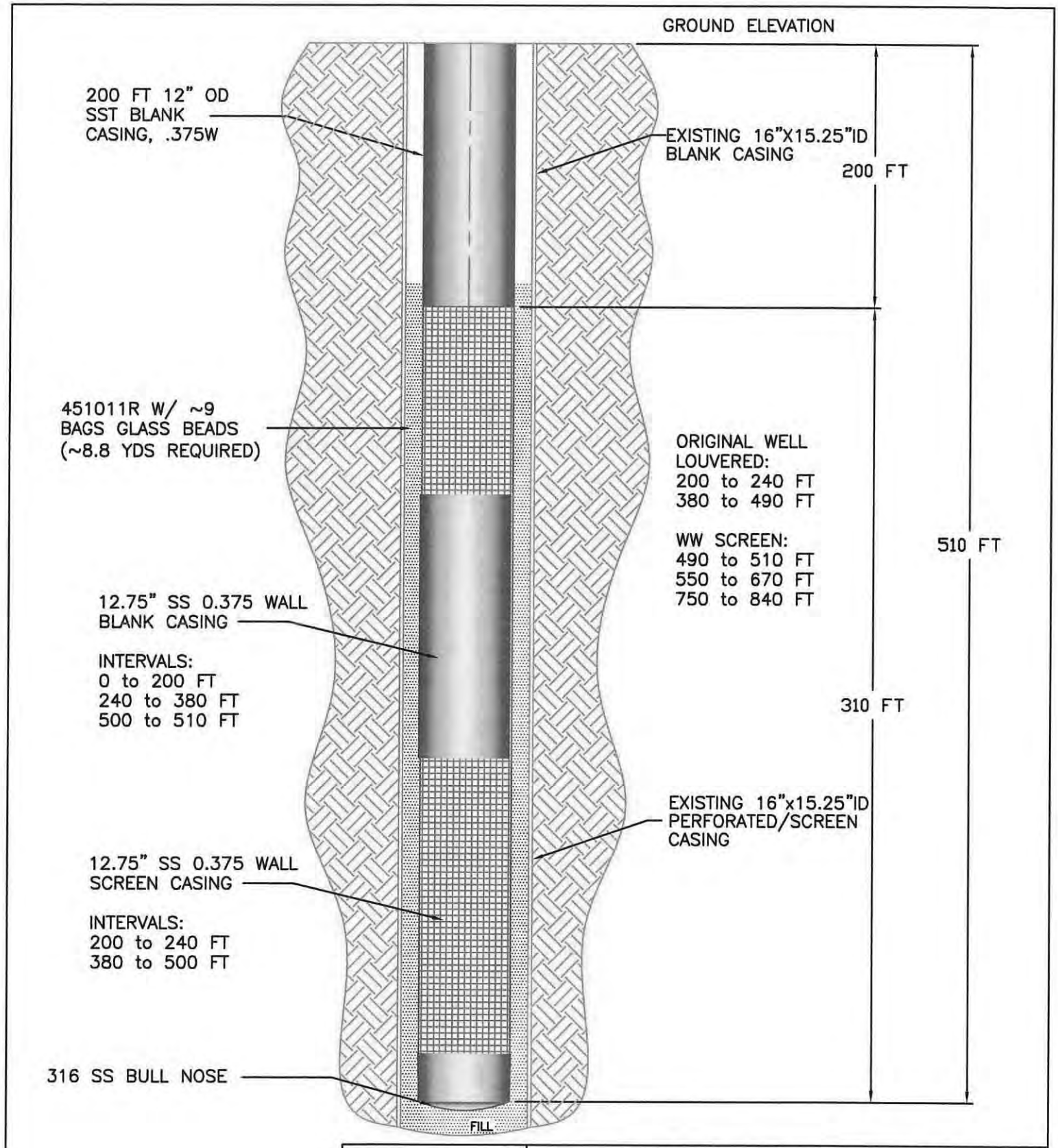
Well Details		
Perforation:		**From Survey**
Wire-Wrap		198.9 ft to 238.5 ft
		379.0 ft to 498.2 ft
Casing Size (in):		**From Survey**
O.D.	**I.D.**	
12.625	12	0.00 ft to 508.8 ft
Casing Material		Stainless Steel
Screen Material		Stainless Steel



800.919.7555
909.625.6262

1785 w. arrow rte., bdlg. d, ste. 3,4
upland, ca 91786
www.pacificsurveys.com

fax: 909.399.3180



OUTLINE DRAWING NOT TO SCALE

159 North Acacia Street
San Dimas, Ca 91773
Phone: (909) 599-9606
Fax: (909) 599-6238

GENERAL PUMP COMPANY
WATERWELL & PUMP SERVICE SINCE 1952

CUSTOMER : LACDPW – SATIVA WELL NO. 5		
DESCRIPTION : AS BUILT WELL LINER		
MATERIAL : APPROX 25,500# STRING WT.		DWG NO. 81078AB
PCS. REQ'D : 1	GPC ENGINEERING	
BY: RAY	DATE: 02-17-2020	JOB NO 81078

APPENDIX I

MODIFIED WELL 5 DATA SHEET, AND SPECIFICATIONS OF THE NEW PUMPING EQUIPMENT AND WATER LEVEL TRANSDUCER

WELL DATA SHEET (Page 1 of 2)

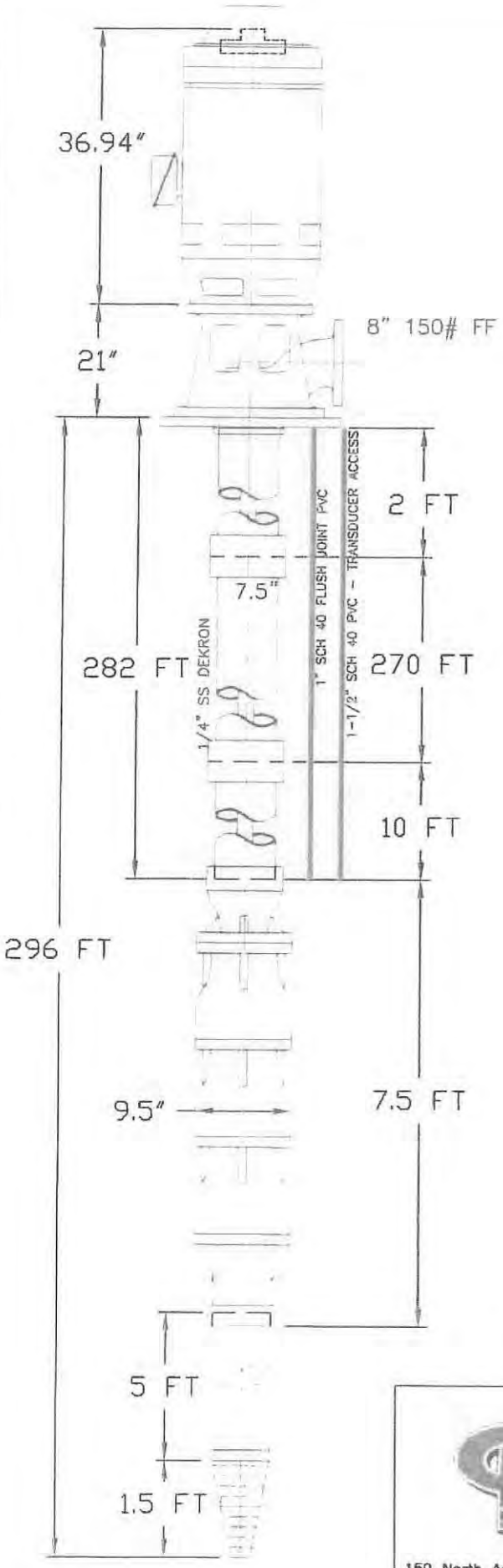
Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.		
** Indicates items required for Source Water Assessment*		
*** Indicates additional items required for assessments and Ground Water Rule*		
AFTER REHABILATATION	*(separate multiple entries in field with semi-colon)*	Actual, Estimated or Default?
DATA SHEET GENERAL INFORMATION		
System Name	Sativa Water System	*DDW database*
System Number	1910147	*DDW database*
Source of Information *(well log, DDW/County files, system, etc)*	Well Log, DDW, LACDPW	
Organization Collecting Information *(DDW, County, System, other)*	DDW, LACDPW	
Date Information Collected/Updated	8/25/2020	
WELL IDENTIFICATION		
* Well Number or Name	**Well 5**	*DDW database*
* DDW Source Identification Number (FRDS ID No.)	1910147-005	
DWR Well Log on File? ("YES" or "NO")	Yes	
State Well Number (from DWR)	03S/13W-15M05 S	
Well Status (Active, Standby, Inactive)	Active	*DDW database*
WELL LOCATION		
Latitude	335400	*DDW database*
Longitude	1181400	*DDW database*
Ground Surface Elevation (ft above Mean Sea Level)	Unknown	
Street Address	2081 Stockwell St.	
Nearest Cross Street	S. Aranbe Ave.	
City	Willowbrook	
County	Los Angeles	
* Neighborhood/Surrounding Area (see Note 1)	Re	
Site plan on file? ("YES" or "NO")	Yes	
DWR Ground Water Basin	Central Basin	*DWR*
DWR Ground Water Sub-basin	Unknown	*to come from DWR*
SANITARY CONDITIONS		
** Distance to closest Sewer Line, Sewage Disposal, Septic Tank (ft)	75	Estimated
Distance to Active Wells (ft)	>100	Estimated
Distance to Abandoned Wells (ft)	Not Applicable	Estimated
Distance to Surface Water (ft)	Not Applicable	Actual
** Size of controlled area around well (square feet)	5,000	Estimated
* Type of access control to well site (fencing, building, etc)	Building, Fencing	
* Surface Seal? (Concrete slab)("YES", "NO" or "UNKNOWN")	Yes	
* Dimensions of concrete slab: Length(ft)/ Width(ft)/ Thick(in)	4'/4'/18"	Actual
* Within 100 year flood plain? ("YES", "NO" or "UNKNOWN")	No	
* Drainage away from well? ("YES" or "NO")	Yes	
ENCLOSURE/HOUSING		
Enclosure Type (building, vault, none, etc.)	Building	
Floor material	Concrete	
Located in Pit? ("YES" or "NO")	No	
Pit depth (feet) (if applicable)	Not Applicable	
WELL CONSTRUCTION		
Date drilled / Date Rehabiliation was Completed	6/2020	
Drilling Method	Reverse Circulation	Installed Liner
Depth of Bore Hole (feet below ground surface)	510	
Casing Beginning Depth/Ending Depth(ft below surface); 2nd Casing Beginning Depth/Ending Depth; 3rd Casing, etc.	0/200; 240/380; 510/510	
Casing Diameter (inches); 2nd Casing Diameter; 3rd Casing, etc.	16	12-inch liner

WELL DATA SHEET (Page 2 of 2)

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
WELL CONSTRUCTION (continued)		
Casing Material; 2nd Casing Material; 3rd Casing, etc.	10 Gage Steel	0.375 casing&screens
Conductor casing used? ("YES", "NO" or "UNKNOWN") (See Note 2)	Yes	
Conductor casing removed? ("YES", "NO" or "UNKNOWN")	No	
*Depth to highest perforations/screens(ft below surface)(or "UNKNOWN")	200	200
Screened Interval Beginning Depth/Ending Depth (ft below surface); 2nd Screened Interval Beg. Depth/Ending Depth; 3rd Screened Interval,etc.	200/240; 380/500	
* Total length of screened interval (ft) (default = 10% pump capacity in gpm) (or "UNKNOWN")	160	
* Annular Seal?("YES", "NO" or "UNKNOWN") (See Note 3)	Yes	
* Depth of Annular Seal (ft)	180	Actual
Material of Annular Seal (cement grout, bentonite, etc.)	Bentonite	
Gravel pack, Depth to top (ft below ground surface)	180	Glass Beads
Total length of gravel pack (ft)	510	
AQUIFER		
* Aquifer Materials (list all that apply: sand, silt, clay, gravel, rock, fractured rock)	sand, silt, clay, gravel	
* Effective porosity (decimal percent) (default = 0.2) (or "UNKNOWN")	0.2	Default
* Confining layer (Impervious Strata) above aquifer? ("YES", "NO" or "UNKNOWN")	Yes	
Thickness of confining layer, if known (ft)	20; 80; 110; 30; 20; 10; 40; 10; 40; 10; 5; 10; 20; 120	Actual
Depth to confining layer, if known (ft below ground)	60; 120; 240; 360; 430; 460; 520; 570; 590; 690; 725; 740; 760; 820	Actual
* Static water level (ft below ground surface)	116.7	Actual
Static water level measurement: Date/Method	Transducer 7/23/2020	
Pumping water level (ft below ground surface)	147	Actual
Pumping water level measurement: Date/Method	Transducer 7/23/2020	
WELL PRODUCTION		
Well Yield (gpm)	650	
Well Yield Based On (i.e., pump test, etc.)	Pump Test/Edison Co.	
Date measured	9/10/2020	
Is the well metered? ("YES" or "NO")	Yes	
Production (million gallons per year)	179,437,500	Estimated
Frequency of Use (hours/year)	4,125	Estimated
Typical pumping duration (hours/day)	24	
PUMP		
Make	Goulds	
Type	9RCHC	
Size (hp)	100	
* Capacity (gpm)	725	
Depth to suction intake (ft below ground surface)	296	
Lubrication Type	Water	
Type of Power: (i.e., electric, diesel, etc.)	Electric	
Auxiliary power available? ("YES" or "NO")	Yes	
Operation controlled by: (i.e., level in tank, pressure, etc.)	Pressure	
Pump to Waste capability? ("YES" or "NO")	Yes	
Discharges to: (i.e., distribution system, storage, etc.)	Pressure Tank	
REMARKS AND DEFECTS (use additional sheets as necessary)		

WELL DATA SHEET (Page 3 of 2)

NOTES		
1. Neighborhood/Surrounding Area (list all that apply): A= Agricultural, Ru = Rural, Re = Residential, Co = Commercial, I = Industrial, Mu = Municipal, P = Pristine, O = Other		
2. Conductor Casing - Oversized casing used to stabilize bore hole during well construction. Should be removed during installation of annular seal.		
3. Annular Seal - Seal of grout in the space between the well casing and the wall of the drilled hole. Sometimes called "sanitary seal".		



DATE 03-26-2020
CUSTOMER LACDPW
JOB NAME SATIVA WELL 5

MOTOR
H.P. 100 MFGR. USEM
R.P.M. 1770 FRAME 404TP
N.R.R or S.R.C. NRR
PHASE/CYCLE/VOLTS 3/60/460
V.H.S. or V.S.S. V.H.S.
MOTOR INFO: BORE 1 1/2
CD = 36.94"

DISCHARGE HEAD
TYPE DI SIZE 24 X 8
MATERIAL CAST IRON

COLUMN ASSEMBLY
PIPE SIZE/LENGTH 6" / 282'
SHAFT SIZE 1 1/2"

BOWL ASSEMBLY
GPM: 530 T.D.H. 390
MODEL 9RCHC STGS 9
MFGR. GOULDS

MATERIALS
BOWL CAST IMP. SST
SHFT. SST BRG. BRONZE
COLLET SST BOLTS SST
BOWL W.R. N/A
IMP. W.R. N/A

STRAINER
TYPE CONE
MATERIAL 316SS

OTHER
WELL DIA. 12"
WELL DEPTH: 510 FT
LATERAL LIFT: 7/8" AVAILABLE
LIFT IMPELLERS 3/8" AFTER FREE SPIN

Transducer Set @ 260 ft.

DRAWING NOT TO SCALE

159 North Acacia Street
San Dimas, Ca 91773
Phone: (909) 599-9606
Fax: (909) 599-6238

MATERIAL & PUMP SETTING

CUSTOMER: LACDPW - SATIVA WELL 5
DESCRIPTION : AS BUILT OUTLINE DWG.
STRING WEIGHT: 9,450#'s
STATIC SHAFT WEIGHT:
DWG NO. 81078AB
PCS. REQ'D : ONE | GPC ENGINEERING
BY: RAY | DATE: 03-26-2020 | JOB NO. 81078

Pump Data Sheet - Turbine 60 Hz

Company: GPC- LACDPW
Name: Sativa Well #5 - Multi Speed
Date: 03/17/2020

Customer:

GOULDS WATER TECHNOLOGY
a xylem brand

Pump:

Size:	9RCHC (stages: 9)	Dimensions:	
Type:	Lineshaft	Suction:	---
Synch Speed:	1800 rpm	Discharge:	---
Dia:	6.6875 in	Vertical Turbine:	
Curve:	---	Eye Area:	
		Bowl Size:	9.25 in
		Max Lateral:	0.88 in
		Thrust K Factor:	4.9 lb/ft

Search Criteria:

Flow:	530 US gpm	Near Miss:	---
Head:	390 ft	Static Head:	0 ft

Pump Selection Warnings:

None

Fluid:

Name:	Water		
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft³	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		
Temperature:	60 °F		

Pump Limits:

Temperature:	---	Sphere Size:	0.75 in
Wkg Pressure:	---		

Motor:

Standard:	NEMA	Size:	75 hp
Enclosure:	WPI	Speed:	1800 rpm
Frame:	365		
Sizing Criteria:	Max Power on Design Curve		

--- Duty Point ---

Flow:	530 US gpm
Head:	390 ft
Eff:	85.1%
Power:	61.4 hp
NPSHr:	9.14 ft
Speed:	1767 rpm

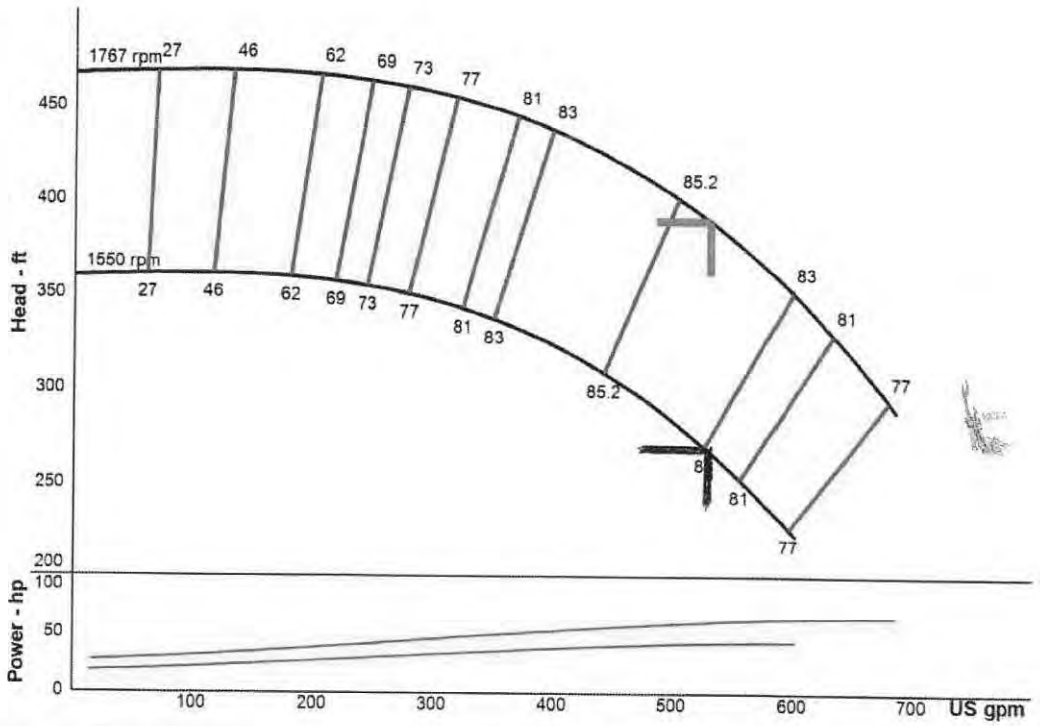
--- Design Curve ---

Shutoff Head:	469 ft
Shutoff dP:	203 psi
Min Flow:	126 US gpm

BEP: 85.2% @ 505 US gpm
NOL Power:
66 hp @ 687 US gpm

--- Max Curve ---

Max Power:
70.7 hp @ 699 US gpm



Operating Points:

Data Point	Speed	Flow	Head	Hz	NPSHr	Efficiency	Power	Min Flow
	rpm	US gpm	ft		ft	%	hp	US gpm
Primary	1767	530	390	60	9.14	85.1	61.4	126
Secondary	1550	530	265	52		83.0		

Selected from catalog: Xylem.TTO.Goulds Lineshaft.60, Vers 4.0

NIDEC MOTOR CORPORATION
8050 WEST FLORISSANT AVE.
ST. LOUIS, MO 63136

DATE: 2/18/2019

P.O. NO.: DT79
Order/Line NO.: 22206 MN 100

TO:

Model Number: DT79
Catalog Number: HO100V2SLG
VHS Weather Protected
CONF,MOTOR,VHS WPI

REVISIONS:
(NONE)

ALL DOCUMENTS HEREIN ARE CONSIDERED CERTIFIED BY NIDEC MOTOR CORPORATION.
THANK YOU FOR YOUR ORDER AND THE OPPORTUNITY TO SERVE YOU.

Features:

```
Horsepower ..... 00100.00~00000.00 ~ KW: 74.6
Enclosure ..... WPI
Poles ..... 04~00 ~ RPM: 1800~0
Frame Size ..... 404~TP
Phase/Frequency/Voltage.. 3~060~460
Winding Type ..... Random Wound
Service Factor ..... 1.15
Insulation Class ..... Class "F" ~ Insulife 2000
Altitude In Feet (Max) .. 3300 Ft.(1000 M) ~ +40 C
Efficiency Class ..... Premium Efficiency
Application ..... Vertical Centrifugal Pump
Inverter Duty NEMA MG1 Part 31
Customer Part Number ....
16.5" Base ~ Coupling Size: 1-1/2" Bore, 3/8" Key
Non-Reverse Ratchet ~ Steady Bushing Not Requested
Pricebook Thrust Value (lbs).. 6700
Customer Down Thrust (lbs) ... 6700
Customer Shutoff Thrust (lbs).
Up Thrust (lbs): ~
Inverter Duty Rating Details:
Load Type (Base Hz & Below) .. Variable Torque
Speed Range (Base Hz & Below). 10:1
Temperature Rise (Sine Wave): "F" Rise @ SF (Resist)
Starting Method ..... PWS (Dual Volt-Low Volt Only)
Duty Cycle ..... Continuous Duty
Efficiency Value ..... 95.4 % ~ Typical
Load Inertia: NEMA ~ Standard Inertia: 441.00 LB-FT2
Number Of Starts Per Hour: NEMA
Motor Type Code ..... RUSI
Rotor Inertia (LB-FT²)          17.0 LB-FT²
Qty. of Bearings PE (Shaft)     1
Qty. of Bearings SE (OPP)       1
Bearing Number PE (Shaft)       6212-J
Bearing Number SE (OPP)         7222 BEM
```

Nidec trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

NIDEC MOTOR CORPORATION

8050 WEST FLORISSANT AVE.
ST. LOUIS, MO 63136

DATE: 2/18/2019

P.O. NO.: DT79
Order/Line NO.: 22206 MN 100

TO:

Model Number: DT79
Catalog Number: HO100V2SLG
VHS Weather Protected
CONF,MOTOR,VHS WPI

REVISIONS:
(NONE)

ALL DOCUMENTS HEREIN ARE CONSIDERED CERTIFIED BY NIDEC MOTOR CORPORATION.
THANK YOU FOR YOUR ORDER AND THE OPPORTUNITY TO SERVE YOU.

Accessories:

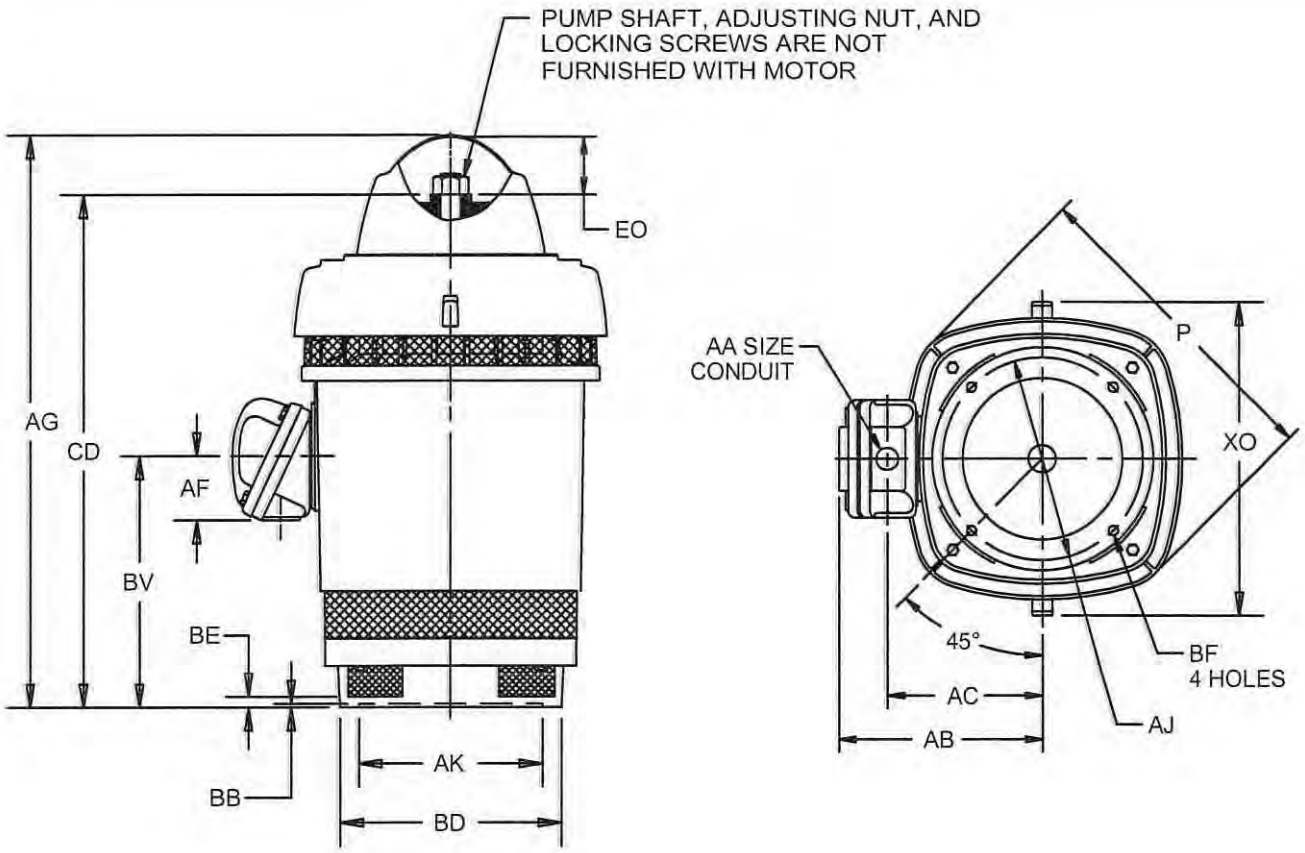
Counter CW Rotation FODE
Aegis Ground Ring
Insul. Bearing - Upper Bracket
115 Volt Space Heaters
Special Balance
Thermostats - Normally Closed
N/A
Standard Leadtime: NA
Est. Weight (lbs ea): 1110 ~ F.O.B.:

USE THE DATA PROVIDED BELOW TO SELECT THE APPROPRIATE DIMENSION PRINT

Horsepower	100
Pole(s)	04
Voltage(s)	460
Frame Size	404TP
Outlet Box AF	3.38
Outlet Box AA	3.00

Nidec trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

EFFECTIVE: 02-MAR-11	VERTICAL MOTORS WEATHER PROTECTED TYPE I FRAME: 404, 405TP, TPA TYPE: RU, RUE, RUI, RUS	PRINT: 09-2293
SUPERSEDES: 31-JUL-03		SHEET: 1 OF 1



DIMENSIONS ARE IN INCHES AND MILLIMETERS

	UNITS	P [2]	AG	AJ	AK +.005	BB MIN	BE	BF	BV	CD	EO	XO
	IN	23.75	42.69	14.750	13.500	.25	.75	.69	18.13	36.94	5.50	24.13
	MM	603	1084	374.65	342.90	6	19	18	461	938	140	613

	FRAME	CONDUIT BOX MATERIAL	UNITS	AA	AB	AC	AF
	400	STEEL	IN	3.00	16.97	12.69	3.38
			MM		431	322	86
		CAST IRON	IN	3 NPT	17.75	13.38	4.63
			MM		451	340	118

	FRAME	UNITS	BD MAX
	404, 405TP	IN	16.50
		MM	419
	404, 405TPA	IN	20.00
		MM	508

1: ALL ROUGH DIMENSIONS MAY VARY BY .25" DUE TO CASTING AND/OR FABRICATION VARIATIONS.
2: LARGEST MOTOR WIDTH.
3: TOLERANCES SHOWN ARE IN INCHES ONLY.
4: CONDUIT BOX OPENING MAY BE LOCATED IN STEPS OF 90° REGARDLESS OF LOCATION. STANDARD AS SHOWN WITH CONDUIT OPENING DOWN.

TOLERANCES	
FACE RUNOUT	.007 T.I.R.
PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET	.007 T.I.R.

09-2293/B

Nidec Motor Corporation
St. Louis, Missouri

INFORMATION DISCLOSED ON THIS DOCUMENT IS CONSIDERED PROPRIETARY AND SHALL NOT BE REPRODUCED OR DISCLOSED WITHOUT WRITTEN CONSENT OF NIDEC MOTOR CORPORATION

ISSUED BY	R. KING
APPROVED BY	M. TREJO

IHP_DP_NMCA (MAR-2011) SOLIDEDGE

NAMEPLATE DATA

CATALOG NUMBER:	HO100V2SLG			NAMEPLATE PART #:	422707-005		
MODEL	DT79	FR	404TP	TYPE	RUSI	ENCL	WPI
SHAFT END BRG	6212-J - QTY 1			OPP END BRG	7222 BEM - QTY 1		
PH	3	MAX AMB	40 C	ID#			
INSUL CLASS	F	Asm. Pos.		DUTY	CONT		

HP	100	RPM	1785	HP		RPM	
VOLTS	460			VOLTS			
FL AMPS	114.0			FL AMPS			
SF AMPS	131.0			SF AMPS			
SF	1.15	DESIGN	B	CODE	G	SF	DESIGN	CODE
NEMA NOM EFFICIENCY	95.4	NOM PF	86.3	KiloWatt	74.6	NEMA NOM EFFICIENCY	NOM PF	
GUARANTEED EFFICIENCY	94.5	MAX KVAR		HZ	60	GUARANTEED EFFICIENCY	MAX KVAR	HZ

HAZARDOUS LOCATION DATA (IF APPLICABLE):

DIVISION		CLASS I		GROUP I	
TEMP CODE		CLASS II		GROUP II	

VFD DATA (IF APPLICABLE):

VOLTS	460		
AMPS	119.7		
TORQUE 1	294.3LB-FT	TORQUE 2	
VFD LOAD TYPE 1	VT/PWM	VFD LOAD TYPE 2	
VFD HERTZ RANGE 1	6-60	VFD HERTZ RANGE 2	
VFD SPEED RANGE 1	180-1800	VFD SPEED RANGE 2	
SERVICE FACTOR	1.00	FL SLIP	
NO. POLES		MAGNETIZING AMPS	
VECTOR MAX RPM		Encoder PPR	
Radians / Seconds		Encoder Volts	

NEMA Premium™

TEAO DATA (IF APPLICABLE):

HP (AIR OVER)	HP (AIR OVER M/S)	RPM (AIR OVER)	RPM (AIR OVER M/S)
FPM AIR VELOCITY	FPM AIR VELOCITY M/S	FPM AIR VELOCITY SEC	

ADDITIONAL NAMEPLATE DATA:

Decal / Plate	WD=165975,CP=132839	Customer PN	
Notes		Non Rev Ratchet	NRR
Max Temp Rise		OPP/Upper Oil Cap	5 QT/4.7 L
Thermal (WDG)	OVER TEMP PROT 2	SHAFT/Lower Oil Cap	GREASE
Altitude		Usable At	
Regulatory Notes		Regulatory Compliance	
COS		Marine Duty	
Balance	0.08 IN/SEC	Arctic Duty	
3/4 Load Eff.	95.5	Inrush Limit	
Motor Weight (LBS)	1110	Direction of Rotation	
Sound Level		Special Note 1	
Vertical Thrust (LBS)	6700	Special Note 2	
Thrust Percentage	100% HT	Special Note 3	
Bearing Life		Special Note 4	
Starting Method		Special Note 5	
Number of Starts		Special Note 6	
200/208V 60Hz Max Amps		SH Max. Temp.	
190V 50 hz Max Amps		SH Voltage	SH VOLTS=115V
380V 50 Hz Max Amps		SH Watts	SH WATTS=144W
NEMA Inertia		Load Inertia	
Sumpheater Voltage		Sumpheater Wattage	
Special Accessory Note 1		Special Accessory Note 16	
Special Accessory Note 2		Special Accessory Note 17	
Special Accessory Note 3		Special Accessory Note 18	
Special Accessory Note 4		Special Accessory Note 19	
Special Accessory Note 5		Special Accessory Note 20	
Special Accessory Note 6		Special Accessory Note 21	
Special Accessory Note 7		Special Accessory Note 22	
Special Accessory Note 8		Special Accessory Note 23	
Special Accessory Note 9		Special Accessory Note 24	
Special Accessory Note 10		Special Accessory Note 25	
Special Accessory Note 11		Special Accessory Note 26	
Special Accessory Note 12		Special Accessory Note 27	
Special Accessory Note 13		Special Accessory Note 28	
Special Accessory Note 14		Special Accessory Note 29	
Special Accessory Note 15		Special Accessory Note 30	
Heater in C/B Voltage		Heater in C/B Watts	
Zone 2 Group		Division 2 Service Factor	
Note 1		Note 2	
Note 3			

NIDEC MOTOR CORPORATION

ST. LOUIS, MO

TYPICAL NAMEPLATE DATA
ACTUAL MOTOR NAMEPLATE LAYOUT MAY VARY
SOME FIELDS MAY BE OMITTED

Nidec trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

MOTOR PERFORMANCE

MODEL NO.	CATALOG NO.	PHASE	TYPE	FRAME
DT79	HO100V2SLG	3	RUSI	404TP
ORDER NO.		22206	LINE NO.	

MPI:	141574
HP:	100
POLES:	4
VOLTS:	460
HZ:	60
SERVICE FACTOR:	1.15
EFFICIENCY (%):	
S.F.	94.8
FULL	95
3/4	95.5
1/2	95.1
1/4	92.4
POWER FACTOR (%):	
S.F.	86.4
FULL	86.3
3/4	84.5
1/2	78.5
1/4	59.7
NO LOAD	5.1
LOCKED ROTOR	32.9
AMPS:	
S.F.	131
FULL	114
3/4	87
1/2	63
1/4	42
NO LOAD	32.8
LOCKED ROTOR	737.5
NEMA CODE LETTER	G
NEMA DESIGN LETTER	B
FULL LOAD RPM	1785
NEMA NOMINAL / EFFICIENCY (%)	95.4
GUARANTEED EFFICIENCY (%)	94.5
MAX KVAR	22.2
AMBIENT (°C)	40
ALTITUDE (FASL)	3300
SAFE STALL TIME-HOT (SEC)	25
SOUND PRESSURE (DBA @ 1M)	70
TORQUES:	
BREAKDOWN{% F.L.}	230
LOCKED ROTOR{% F.L.}	186
FULL LOAD{LB-FT}	294.3

NEMA Nominal and Guaranteed Efficiencies are up to 3,300 feet above sea level and 25 ° C ambient

The Above Data Is Typical, Sinewave Power Unless Noted Otherwise

NIDEC MOTOR CORPORATION
ST. LOUIS, MO

Nidec trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

Submersible pressure sensor
For superior applications
Model LF-1

WIKA data sheet LM 40.04

Applications

- Level measurement in vessel and storage systems
- Overfilling and no-load operation monitoring
- Level measurement in rivers and lakes
- Deep well and groundwater monitoring
- Battery-operated level measuring systems

Special features

- Suitable for measurements in contaminated and aggressive media
- An optimised discharge behaviour and a large pressure port prevent the instrument from clogging and ensure a minimum maintenance effort
- Can be used in explosion-protected areas
- Developed for wireless applications



Fig. left: **With conduit and FEP cable**
Fig. right: **With PUR cable**

Description

Permanently reliable
Extensive test cycles not only guarantee a permanent resistance and long service life in all commonly used oils and fuels, including aggressive crude oils and biofuels, but also in flowing and stagnant waters and in wastewater treatment applications.

Thanks to newly developed special cables, components made of high-alloyed stainless steel and an optional overvoltage protection against lightning, the submersible pressure sensor is perfectly suited for the measurement of liquid levels, also in the outdoor area.

Precise level and temperature measurement with HART® communication
A measurement uncertainty of max. 0.5 %, a long-term drift of 0.1 % and slight temperature errors make the LF-1 a reliable measurement solution for the monitoring of storage tanks and bodies of water.

The additional analogue temperature output facilitates the compensation of a temperature-induced density error especially at temperatures of up to -40 ... +80 °C [-40 ... +176 °F].
The integrated HART® communication can be used for scaling the measuring range and for the parameterisation of unit, error signal, and others.

Optimised electronics for battery operation
The modern electronic system guarantees not only a high accuracy in the long term but also ensures a very long battery life thanks to low power supply, low current consumption, fast response time and low-power output signals.

Safety also in hazardous areas
The optional intrinsically safe electronic system is authorised according to the common international standards and allows a safe worldwide application in explosive gases and vapours.

Data sheets showing similar products:
Submersible pressure sensor, standard version; model LS-10; see data sheet PE 81.55
High-performance submersible pressure sensor; model LH-20; see data sheet PE 81.56

Part of your business

Measuring ranges

Gauge pressure							
bar	0 ... 0.1	0 ... 0.16	0 ... 0.25	0 ... 0.4	0 ... 0.6	0 ... 1	0 ... 1.6
	0 ... 2.5	0 ... 4	0 ... 6				
inWC	0 ... 50	0 ... 100	0 ... 150	0 ... 250			
psi	0 ... 5	0 ... 10	0 ... 15	0 ... 25	0 ... 50	0 ... 100	
mH_2O	0 ... 1	0 ... 1.6	0 ... 2.5	0 ... 4	0 ... 6	0 ... 10	0 ... 16
	0 ... 25	0 ... 40	0 ... 60				

Absolute pressure				
bar	0 ... 1.6	0 ... 2.5	0 ... 4	0 ... 6
psi	0 ... 25	0 ... 50	0 ... 100	

The given measuring ranges are also available in mbar, kPa and MPa.

Overload safety
≥ 3 times

Temperature measurement (option)

Measuring ranges	
Option 1	-10 ... +50 °C [14 ... 122 °F]
Option 2	-40 ... +80 °C [-40 ... +176 °F]

The temperature output signal corresponds to the selected medium temperature (see operating conditions).

Output signals

Without temperature measurement	
Standard	4 ... 20 mA (2-wire)
Option 1	4 ... 20 mA + HART® (2-wire)
Option 2	DC 0.1 ... 2.5 V (3-wire, low power) [1]

With temperature measurement	
Standard	2 x 4 ... 20 mA (2 x 2-wire, galvanically isolated)
Option 1	2 x DC 0.1 ... 2.5 V (3-wire, low power) [1]

1) Shortening the cable always results in a modification of the voltage signal (see accuracy specifications).

Permissible load in Ω
Current output: $\leq (U_+ - (U_{+min} - 0.5\ V)) / 0.023\ A$
Voltage output: ≤ 1mA

Additional load of the cable:
≤ cable length in m x 0.084 Ω
[≤ cable length in ft x 0.0256 Ω]

For voltage outputs, the load must be specified so that the output current does not exceed 1 mA.

Voltage supply

The power supply depends on the selected output signal and the intrinsically safe electronics (Ex approval).
When being operated in hazardous areas, the submersible pressure sensor must be powered via a repeater power supply (see accessories).

Power supply

Output signal	Standard	With Ex approval
4 ... 20 mA (2-wire)	DC 8 ... 36 V	DC 9 ... 30 V
4 ... 20 mA + HART® (2-wire)	DC 12 ... 36 V	DC 12 ... 30 V
DC 0.1 ... 2.5 V (3-wire, low power)	DC 3.6 ... 36 V	-
2 x 4 ... 20 mA (2 x 2-wire, galvanically isolated)	DC 8 ... 36 V	DC 9 ... 30 V
2 x DC 0.1 ... 2.5 V (3-wire, low power)	DC 3.6 ... 36 V	-

Low power is optimised for the battery operation.

Current consumption

Current output: max. 25 mA per output
Voltage output: max. 5 mA

Reference conditions (per IEC 61298-1)

Temperature

15 ... 25 °C [59 ... 77 °F]

Atmospheric pressure

860 ... 1,060 mbar [86 ... 106 kPa /12.5 ... 15.4 psig]

Air humidity

45 ... 75 % r. h.

Power supply

- DC 24 V with current output
- DC 5 V with voltage output

Mounting position

Calibrated in vertical mounting position with process connection facing downwards.

Accuracy specifications

Accuracy at reference conditions (pressure sensor)

	Accuracy [1]	Non-linearity (per IEC 61298-2) BFSL
Standard	≤ ±1 % of span	≤ ±0.5 % of span
Option	≤ ±0.5 % of span	≤ ±0.25 % of span

1) Including non-linearity, hysteresis, zero offset and end value deviation (corresponds to measured error per IEC 61298-2).

During the adjustment of the voltage signals, the cable length will be compensated. Every shortening of the cable at a later stage results in an offset error of approx. 0.14 % / 10 m [0.13 % / 30 ft].

Accuracy after turndown 5:1 via HART®	
Standard	≤ ±1.25 % of scaled span
Option	≤ ±0.75 % of scaled span

By setting a turndown of greater than 5:1, a higher measuring deviation applies.

Accuracy (temperature sensor)

-10 ... +80 °C [14 ... 176 °F]: ≤ ±1.8 K
-30 ... -10 °C [-22 ... +14 °F]: ≤ ±3.0 K
-40 ... -30 °C [-40 ... -22 °F]: ≤ ±4.5 K

Non-repeatability

≤ 0.1 % of span
≤ 0.2 % of span (with voltage output and cable length > 100 m [325 ft])

Long-term stability (per DIN 16086:2006-01)

Measuring range > 0 ... 0.1 bar: ≤ ±0.1 % of span/year
Measuring range ≤ 0 ... 0.1 bar: ≤ ±0.2 % of span/year

Switch-on time

Output signals without HART®: ≤ 150 ms
Output signals with HART®: ≤ 250 ms

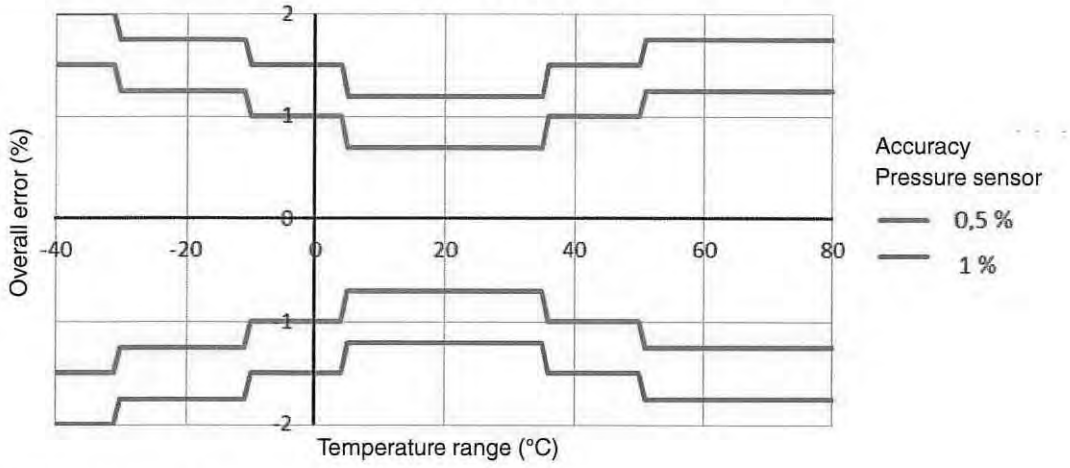
Settling time

Output signals without HART®: ≤ 100 ms
Output signals with HART®: ≤ 250 ms

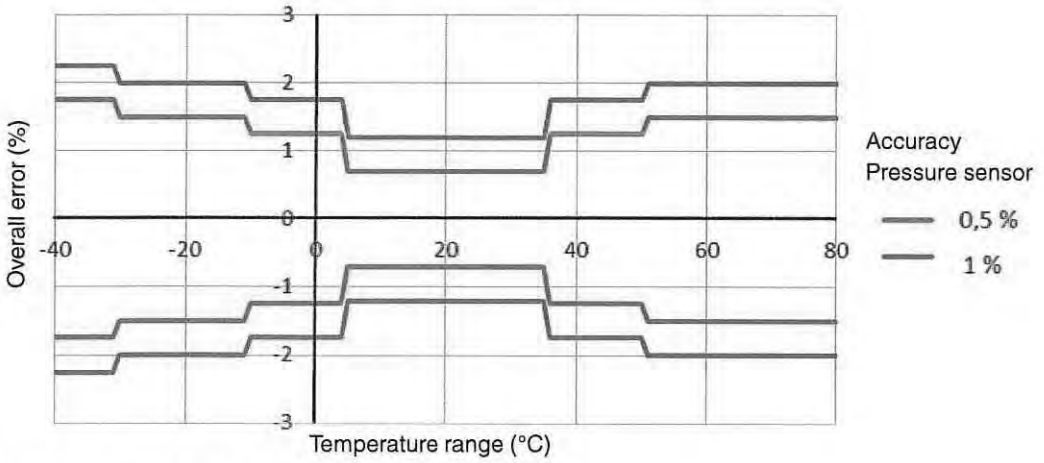
Overall error

Including non-linearity, hysteresis, zero point and span error, temperature error and temperature hysteresis.

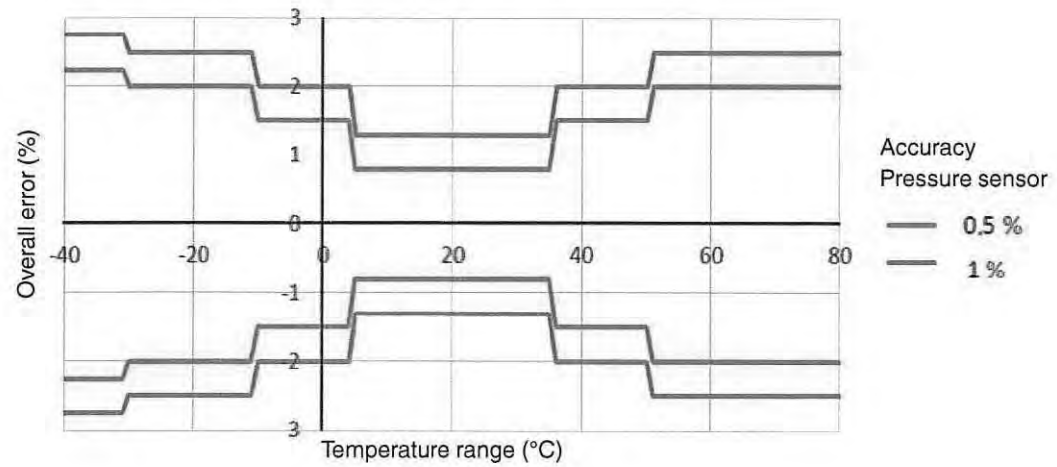
- **Measuring range ≥ 0.6 bar, ≥ 250 inWC, ≥ 10 psi, ≥ 6 mH_2O**



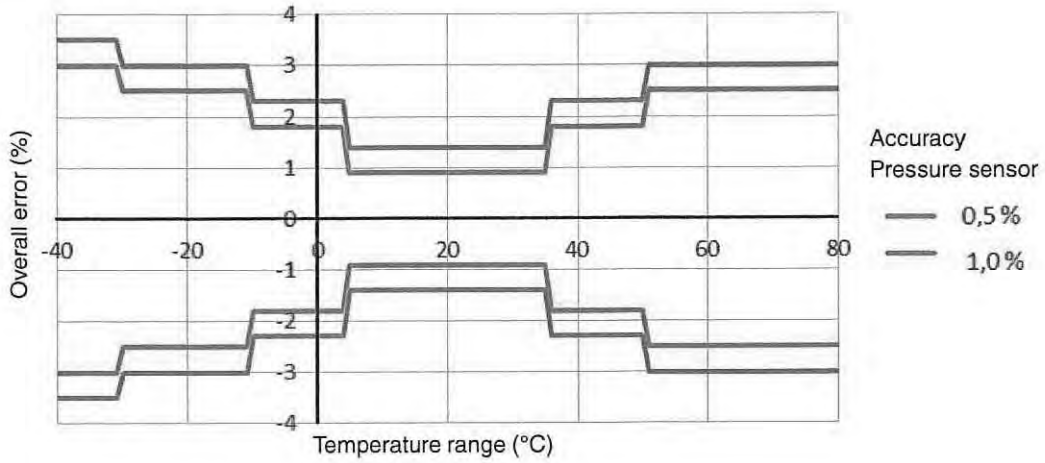
- **Measuring range 0.4 bar, 150 inWC, 4 mH_2O**



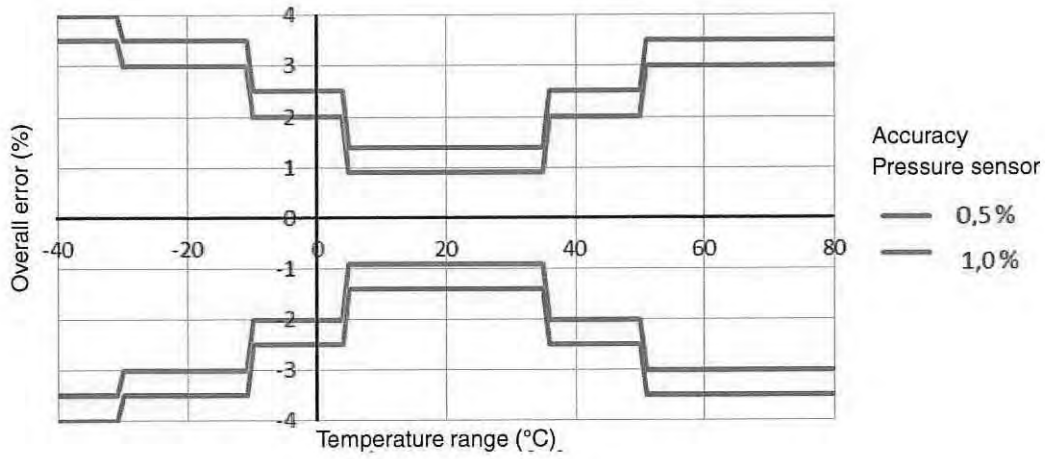
- **Measuring range 0.25 bar, 100 inWC, 5 psi, 2.5 mH_2O**



■ **Measuring range 0.16 bar, 1.6 mH_2O**



■ **Measuring range 0.1 bar, 50 inWC, 1 mH_2O**



Operating conditions

Ingress protection
IP68

Increased overvoltage protection for lightning strikes (option)
Nominal discharge current: ≥ 10 kA
Rise time: 8/20 µs

Immersion depth
max. 100 m (325 ft)

Max. tension force of the cable
1,000 N

Weight
Submersible pressure sensor: approx. 300 g [0.661 lbs]
Cable: approx. 80 g/m [0.538 lbs / 10 ft]
Additional weight: approx. 300 g [0.661 lbs]

Permissible temperature ranges		
Medium	Standard	-10 ... +50 °C [14 ... 122 °F]
	Option	-40 ... +80 °C [-40 ... +176 °F]
Ambient	Standard	-40 ... +80 °C [-40 ... +176 °F]
Storage	Standard	-30 ... +80 °C [-22 ... +176 °F]

Explosion protection (option)

Approval	Marking
ATEX	Zone 0 gas [II 1G Ex ia IIC T4/T5/T6 Ga] Zone 1 gas [II 2G Ex ia IIC T4/T5/T6 Gb]
IECEx	Zone 0 gas [Ex ia IIC T4/T5/T6 Ga] Zone 1 gas [Ex ia IIC T4/T5/T6 Gb]
CSA	Class I, division 1, groups A, B, C, D Class I, zone 0; A/Ex ia IIC; T6 ... T4 Ga Class I, zone 1; A/Ex ia IIC; T6 ... T4 Gb Class I, zone 2; A/Ex ic IIC; T6 ... T4 Gc (see control drawing 14136138)
FM	Class I, division 1, groups A, B, C, D Class I, zone 0, AEx ia IIC, T6 ... T4 Ga Class I, zone 1, AEx ia IIC, T6 ... T4 Gb Class I, zone 2, AEx ic IIC, T6 ... T4 Gc (see control drawing 14136138)
EACEx	Zone 0 Gas [0ExiaIICT6...T4 X] Zone 1 Gas [1ExiaIICT6...T4 X]

Permissible temperature ranges in hazardous areas (ATEX, IECEx, EACEx)

Ambient and media temperature range (Pi = 600 mW)	Ambient and media temperature range (Pi = 800 mW)	Temperature code
$-40 \leq T_a \leq +59$ °C	$-40 \leq T_a \leq +52$ °C	T6
$-40 \leq T_a \leq +74$ °C	$-40 \leq T_a \leq +67$ °C	T5
$-40 \leq T_a \leq +80$ °C	$-40 \leq T_a \leq +76$ °C	T4 - T1

Permissible temperature ranges in hazardous areas (FM, CSA)

Ambient and media temperature range (Pi = 600 mW)	Temperature code
$-40 \leq T_a \leq +59$ °C	T6
$-40 \leq T_a \leq +74$ °C	T5
$-40 \leq T_a \leq +80$ °C	T4 - T1

Materials (wetted)

	Standard	Option (high-resistance)
Case	316L	318LN
Sensor element	316L	Hastelloy C276
Cable	PUR	FEP
Sealing	FKM	FKM
Protection cap	PVDF	PVDF

Electrical connection

Cable outlet	
Standard	Cable outlet without conduit
Option	Cable outlet with conduit

Cable lengths										
Standard	Metres (m)	3	5	10	15	20	25	30	40	50
	Feet (ft)	10	20	30	40	50	75	100	125	150
Option	Metres (m)	For current output, freely definable up to 1,000 m								
		For voltage output, freely definable up to 200 m								
	Feet (ft)	For current output, freely definable up to 3,250 ft								
		For voltage output, freely definable up to 650 ft								

Other lengths on request

Short-circuit resistance
S+ vs. U-

Reverse polarity protection
U+ vs. U-

Resistance to overvoltage
DC 40 V

Insulation voltage

Standard:	DC 850 V
Increased overvoltage protection for lightning strikes:	DC 50 V

Connection diagrams

4 ... 20 mA, 4 ... 20 mA + HART® (2-wire)	
U+	brown (BN)
U-	blue (BU)
Shield	grey (GY)

DC 0.1 ... 2.5 V (3-wire, low power)	
U+	brown (BN)
U-	blue (BU)
S+	black (BK)
Shield	grey (GY)

2 x 4 ... 20 mA (2 x 2-wire, galvanically isolated)	
U+ (pressure sensor)	brown (BN)
U- (pressure sensor)	blue (BU)
U+ (temperature sensor)	green (GN)
U- (temperature sensor)	white (WH)
Shield	grey (GY)

2 x DC 0.1 ... 2.5 V (3-wire, low power)	
U+	brown (BN)
U-	blue (BU)
S+ (pressure sensor)	black (BK)
S+ (temperature sensor)	green (GN)
Shield	grey (GY)

Legend
U+ Positive power supply terminal
U- Negative power supply terminal
S+ analogue output

Approvals (option)

Logo	Description	Country
CE Ex	**EU declaration of conformity** ■ EMC directive EN 61326 emission (group 1, class B) and immunity (industrial application) ■ RoHS directive ■ ATEX directive [1] - Ex i Zone 0 gas [II 1G Ex ia IIC T4/T5/T6 Ga] Zone 1 gas [II 2G Ex ia IIC T4/T5/T6 Gb]	European Union
IEC IECEx	**IECEx** [1] Hazardous areas - Ex i Zone 0 gas [Ex ia IIC T4/T5/T6 Ga] Zone 1 gas [Ex ia IIC T4/T5/T6 Gb]	International
FM APPROVED	**FM** [1] Hazardous areas Class I, division 1, groups A, B, C, D Class I, zone 0, AEx ia IIC, T6 ... T4 Ga Class I, zone 1, AEx ia IIC, T6 ... T4 Gb Class I, zone 2, AEx ic IIC, T6 ... T4 Gc (see control drawing 14136138)	USA
c SP us	**CSA** ■ Safety (e.g. electr. safety, overpressure, ...) ■ Hazardous areas [1] Class I, division 1, groups A, B, C, D Class I, zone 0; A/Ex ia IIC; T6 ... T4 Ga Class I, zone 1; A/Ex ia IIC; T6 ... T4 Gb Class I, zone 2; A/Ex ic IIC; T6 ... T4 Gc (see control drawing 14136138)	USA and Canada
EAC Ex	**EAC** ■ EMC directive ■ Hazardous areas (see approval)	Eurasian Economic Community

1) Only available with output signals 4 ... 20 mA, 2 x 4 ... 20 mA and 4 ... 20 mA + HART®.

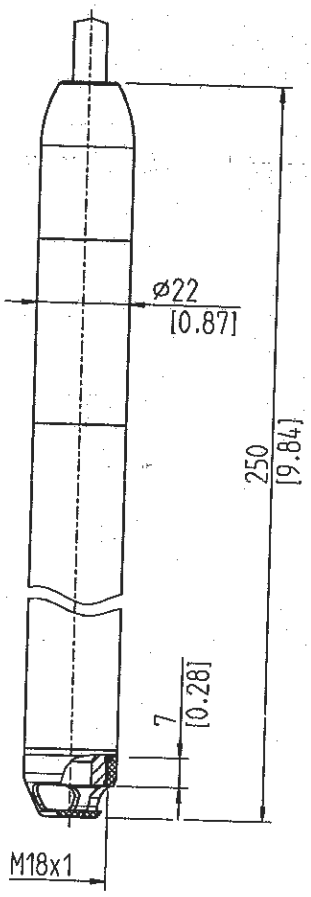
Manufacturer's information and certificates

China RoHS conformity
SJ/T 11364-2014

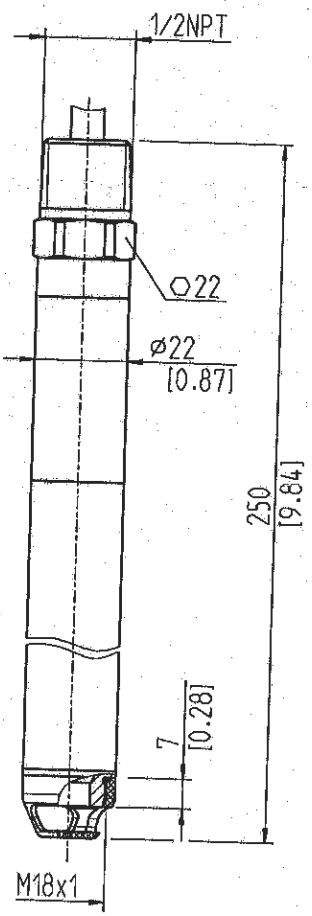
Approvals and certificates, see website

Dimensions in mm [in]

Cable outlet without conduit



Cable outlet with conduit



Exp B 137

Accessories

	Description	Order number
	**Additional weight** The additional weight increases the dead weight of the submersible pressure sensor. It simplifies the lowering in monitoring wells, narrow shafts and deep wells. It effectively reduces negative environmental influences of the measuring medium (e.g. turbulent flows) on the measuring result. Stainless steel 316L, approx. 300 g [0.661 lbs], length 115 mm [4.53 in]	14131008
	**Cable strain relief clamp** The cable strain relief clamp ensures easy and secure mechanical fastening of the submersible pressure sensor's cable. It serves to guide the cable to prevent mechanical damage and to reduce the action of tensile stresses.	14052336
	**Cable box** The cable socket, with IP67 ingress protection and waterproof ventilation element, provides a moisture-free electrical termination for the submersible pressure sensor. It should be mounted in a dry environment, outside any shafts or vessels, or directly in the switch cabinet. Not suitable for hazardous areas!	14052339
	**Intrinsically safe repeater power supply, model IS Barrier** Input 0/4 ... 20 mA, supplying and non-supplying Bidirectional HART® signal transmission For details see data sheet AC 80.14	14117118
	**Indication and programming module HART® DIH50 and DIH52** 5-digit display, 20-segment bar graph, without separate power supply, with additional HART® functionality. Automatic adjustment of measuring range and span. "Secondary-master" functionality: Setting the measuring range and unit of the connected transmitter using HART® standard commands possible. Optionally explosion protection per ATEX.	on request
	**HART® modem with USB, RS-232 or Bluetooth® interface** For scaling the measuring range using a PC via the HART® protocol, a HART® modem with USB, RS-232 or Bluetooth® interface is available. The modem communicates with all registered HART® field instruments and can be used with the most popular HART®-compatible software programs.	7957522 (RS-232 interface) 11025166 (USB interface) 11364254 (Bluetooth® interface)

Ordering information

Model / Measuring range / Output signal / Accuracy / Case material / Cable outlet / Cable material / Cable length / Overvoltage protection / Medium temperature / Approval / Accessories

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The specifications given in this document represent the state of engineering at the time of publishing.
We reserve the right to make modifications to the specifications and materials.

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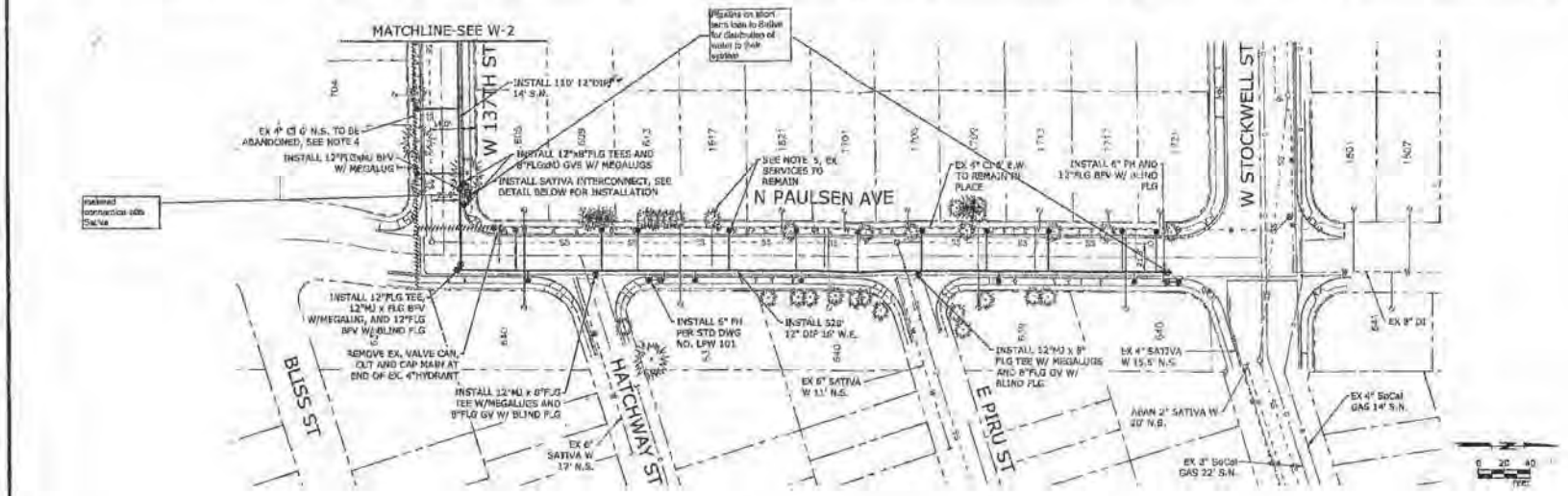
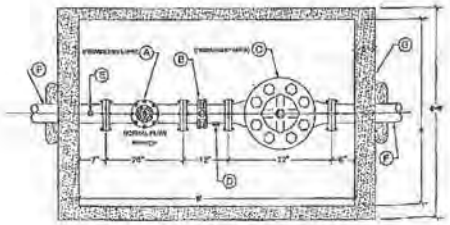
APPENDIX J

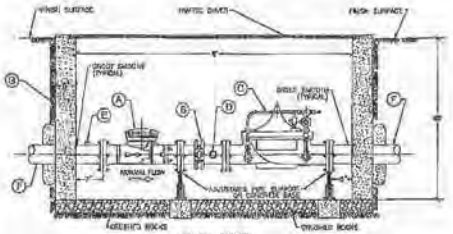
LIBERTY UTILITIES INTERCONNECTION LOCATION AND LAYOUT



SATIVA INTERCONNECTION DETAIL



TOP VIEW



SIDE VIEW

LEGEND

	DESCRIPTION
A	8" DOUBLE GRV—MECHANICAL JOINT/GRV WATER
B	8" GRV FLG x PLG SPOOL W/GRV/GRV AND VICTAULIC COUPLING
C	8" S WAY PRESSURE REDUCING/PRESSURE SUSTAINING GLOBE/ANGLE, 8" 150#-DUCTILE — S WAY, HOLE FLANGE, RUBBER SEATING, EPOXY TRIM — TOWER PRODUCTS OR EQUAL
D	8" SADDLE 4/3" HOLE FOR BRASS CORP STOP
E	8" SADDLE AND 1" BRASS CORP STOP
F	8" 90° FLG x PE SPOOL
G	8" MECHANICAL JOINT x 12" x 90° CAST DUCTILE RESTRAINT GASKET W/STAINLESS STEEL RETAINER GLANDS, CLASS 51/STAINLESS STEEL BOLTS AND NUTS FOR MJ RESTRAINT (MEGALUG OR EQUAL)

NOTE:

1. CONTRACTOR IS RESPONSIBLE FOR WALKING THE PROJECT SITE AND HAVING AN UNDERSTANDING OF ACTUAL FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT.
2. EXISTING UTILITIES ARE SHOWN BASED ON AVAILABLE RECORD INFORMATION AND PARTIAL TOPOGRAPHIC SURVEY DATA. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS ON THE JOB SITE PRIOR TO CONSTRUCTION.
3. THRUST BLOCKS ON FITTINGS ARE TO BE INSTALLED PER STD DWG NO. LPW-107. THRUST BLOCKS ON VALVES ARE TO BE INSTALLED PER STD DWG NO. LPW-105.
4. FOR WATER VALVES ON EXISTING WATER LINES TO BE ABANDONED, CLOSE VALVE, REMOVE VALVE CAN, LID, AND RISER AND BURY. FOR FIRE HYDRANTS ON EXISTING WATER LINES TO BE ABANDONED, REMOVE EXISTING HYDRANT, CAP LATERAL, AND BURY.
5. INSTALL NEW 1" WATER SERVICE CONNECTIONS ALONG PAULSEN AVE. DO NOT TIE OVER NEW SERVICE TO EXISTING CUSTOMER HOUSE LINE. EXISTING WATER SERVICES ALONG PAULSEN AVE TO REMAIN IN PLACE.

REV	DATE	BY	DESCRIPTION

WARNING: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED CAQ
DRAWN MKF
CHECKED BMQ
SCALE 1" = 40'

PREPARED BY: DATE

FEBRUARY 2019
Murraysmith

murraysmith
3111 CAMINO DEL RIO NORTH
SAN DIEGO, CA 92108
P 619.639.0184

LIBERTY UTILITIES (PARK WATER)
9750 WASHBURN RD, DOWNEY, CA 90241

APPROVED: [signature] 2-5-19
PLANT MANAGER, SOUTHWEST — DATE

APPROVED: [signature] 2/5/19
DIRECTOR OF ENGINEERING — DATE

STOCKWELL/136TH/137TH/WILMINGTON (PHASE 1) PLAN
CITY OF COMPTON

PLAN - W 137TH ST, N PAULSEN AVE

SHEET W-3
SHEET 6 OF 8
PROJECT 11183010

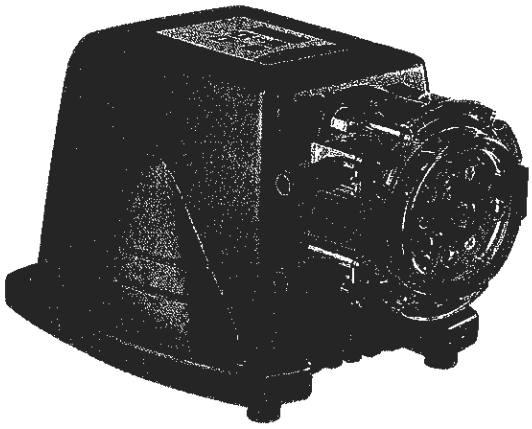
J:\Engineering\CAD\CB\CONST\2019 Jobs\11183010 Stockwell Phase 1\CAD\18-2333 LIBERTY UTILITIES STOCKWELL - 2019\DRIVE_H\EVT_Projects\18\2333 - Liberty Utilities Stockwell SI\CAD\Sheets\18-2333-PIPE-PLANS Rev1-30-19.dwg W-3 2/5/2019 11:08 PM JBELLOSA 9.1e (LMS Tech)

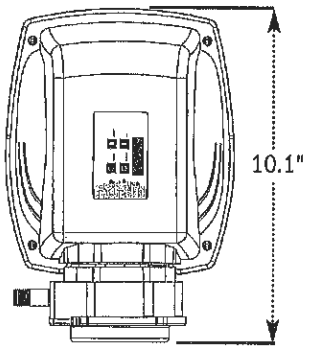
APPENDIX K

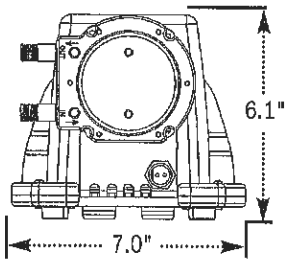
SPECIFICATIONS OF STENNER SVP SERIES DIGITAL PERISTATIC CHEMICAL METERING PUMP AND NSF/ANSI STANDARD 61 CERTIFICATION FOR SANTOPRENE MATERIALS

SVP PUMP SERIES SPECIFICATIONS

STENNER PUMPS







SHIPPING WEIGHT 10 lbs (4.5 kg)

METERING PUMP
UL LISTED
96F0

METERING PUMP
LR79585
C SA US

IPX4
CE

THIS PUMP IS TESTED AND CERTIFIED BY WQA ACCORDING TO NSF/ANSI 61 FOR CONTACT WITH SODIUM HYPOCHLORITE AND WATER ONLY AND NSF/ANSI 372.
C USA

NOTE: Agency listings vary by model. 12VDC pumps do not carry any agency listings. Contact factory for details.

FEATURES

- 4-button keypad with up/down arrows, prime button and on/off switch
- 3-point roller design assists in anti-siphon protection
- Pump head requires no valves, allows for easy maintenance
- Self-priming against maximum working pressure foot valve not required
- Pump does not lose prime or vapor lock
- Pumps off-gassing solutions and can run dry
- Injection check valve included with models rated 100 psi (6.9 bar) maximum
- Output volume is not affected by back pressure
- Easy to change pump tube; lubrication is not required
- Pump tubes and pump heads interchange between models
- Models (Santoprene® only) tested by Water Quality Association to conform to ANSI/NSF STD 61 & 372.

This information is not intended for specific application purposes. Stenner Pump Company reserves the right to make changes to prices, products, and specifications at any time without prior notice.

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SVP PUMP SERIES SPECIFICATIONS

STENNER PUMPS

FLOW RATE OUTPUT CONTROL
Digital keypad,
5%-100%, 1% increments, non-scalable

MAXIMUM WORKING PRESSURE
25 psi (1.7 bar), 100 psi (6.9 bar)

MAXIMUM OPERATING TEMPERATURE
125°F (52°C)

MAXIMUM SUCTION LIFT
25 ft (7.6 m) vertical lift, based on water

MOTOR TYPE 12VDC gear motor

SHAFT RPM (average maximum) 47

DUTY CYCLE Continuous

MOTOR VOLTAGE (Amp Draw)
120V 50/60Hz 1PH (1.5)
220V 50/60Hz 1PH (1.5)
230V 50/60Hz 1PH (1.5)
250V 50/60Hz 1PH (1.5)
12VDC (4.2)

POWER CORD TYPE
120V 60Hz, 220V 60Hz: SJTOW
230V 50Hz, 250V 50Hz: H05VV-F
12VDC: VW-1

POWER CORD PLUG END
120V 60Hz NEMA 5-15P
220V 60Hz NEMA 6-15P
230V 50Hz CEE7/7
250V 50Hz CEE7/7
12VDC Pigtail connection

MATERIALS OF CONSTRUCTION

All Housings Polycarbonate

Pump Tube
Santoprene®*, FDA approved or Versilon®**

Check Valve Duckbill
Santoprene®*, FDA approved or Pellethane®†

Pump Head Rollers Polyethylene

Roller Bushings Oil impregnated bronze

Suction/Discharge Tubing, Ferrules
Polyethylene, FDA approved

Tube and Injection Fittings
PVC or Polypropylene, NSF listed,

Connecting Nuts PVC, NSF listed

3/8" Adapter
PVC or Polypropylene, NSF listed

Suction Line Strainer and Cap
PVC or Polypropylene, NSF listed,
with Ceramic Weight

All Fasteners Stainless steel

Pump Head Latches Polypropylene

Leak Detect Clips, Springs, Pins Hastelloy®††

ACCESSORY KIT SHIPPED WITH EACH PUMP

3 Connecting nuts 1/4" or 3/8"
3 Ferrules 1/4" or 6 mm *Europe*
1 Injection check valve 100 psi (6.9 bar) max.
OR 1 injection fitting 25 psi (1.7 bar) max.
1 Weighted suction line strainer
1/4", 3/8" or 6 mm *Europe*
1 20' roll suction/discharge tubing
1/4" or 3/8", white or UV black
OR 6 mm white *Europe*
1 Additional pump tube
2 Additional latches
1 Manual

* Santoprene® is a registered trademark of Exxon Mobil Corporation.
** Versilon® is a registered trademark of Saint-Gobain Performance Plastics.
† Pellethane® is a registered trademark of Lubrizol Advanced Materials, Inc.

FLOW RATE OUTPUT CHART

25 psi (1.7 bar) maximum

	Model	Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Minute
MANUAL	SVP1L1	**SVP1L1**	1	0.3 to 5.0	0.01 to 0.21	0.03 to 0.44	1.1 to 18.9	0.05 to 0.79	0.76 to 13.13
	SVP1L2	**SVP1L2**	2	0.8 to 17.0	0.03 to 0.71	0.07 to 1.51	3.0 to 64.4	0.13 to 2.68	2.08 to 44.65
	SVP1L3	**SVP1L3**	3	2.0 to 40.0	0.08 to 1.67	0.18 to 3.55	7.6 to 151.4	0.32 to 6.31	5.27 to 105.14
	SVP1L4	**SVP1L4**	4	3.0 to 60.0	0.13 to 2.50	0.27 to 5.33	11.4 to 227.1	0.48 to 9.46	7.92 to 157.71
	SVP1L5	**SVP1L5**	5	4.3 to 85.0	0.18 to 3.54	0.38 to 7.55	16.3 to 321.8	0.68 to 13.40	11.32 to 223.40
4-20MA INPUT*	SVP4L1	**SVP4L1**	1	0.3 to 5.0	0.01 to 0.21	0.03 to 0.44	1.1 to 18.9	0.05 to 0.79	0.76 to 13.13
	SVP4L2	**SVP4L2**	2	0.8 to 17.0	0.03 to 0.71	0.07 to 1.51	3.0 to 64.4	0.13 to 2.68	2.08 to 44.65
	SVP4L3	**SVP4L3**	3	2.0 to 40.0	0.08 to 1.67	0.18 to 3.55	7.6 to 151.4	0.32 to 6.31	5.27 to 105.14
	SVP4L4	**SVP4L4**	4	3.0 to 60.0	0.13 to 2.50	0.27 to 5.33	11.4 to 227.1	0.48 to 9.46	7.92 to 157.71
	SVP4L5	**SVP4L5**	5	4.3 to 85.0	0.18 to 3.54	0.38 to 7.55	16.3 to 321.8	0.68 to 13.40	11.32 to 223.40
				Approximate Outputs @ 50/60Hz					

100 psi (6.9 bar) maximum

	Model	Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Minute
MANUAL	SVP1H1	**SVP1H1**	1	0.3 to 5.0	0.01 to 0.21	0.03 to 0.44	1.1 to 18.9	0.05 to 0.79	0.76 to 13.13
	SVP1H2	**SVP1H2**	2	0.8 to 17.0	0.03 to 0.71	0.07 to 1.51	3.0 to 64.4	0.13 to 2.68	2.08 to 44.65
	SVP1H7	**SVP1H7**	7	2.0 to 40.0	0.08 to 1.67	0.18 to 3.55	7.6 to 151.4	0.32 to 6.31	5.27 to 105.14
4-20MA INPUT*	SVP4H1	**SVP4H1**	1	0.3 to 5.0	0.01 to 0.21	0.03 to 0.44	1.1 to 18.9	0.05 to 0.79	0.76 to 13.13
	SVP4H2	**SVP4H2**	2	0.8 to 17.0	0.03 to 0.71	0.07 to 1.51	3.0 to 64.4	0.13 to 2.68	2.08 to 44.65
	SVP4H7	**SVP4H7**	7	2.0 to 40.0	0.08 to 1.67	0.18 to 3.55	7.6 to 151.4	0.32 to 6.31	5.27 to 105.14
				Approximate Outputs @ 50/60Hz					

* Input Signal Voltage/Resistance maximum 48VDC/128 ohm.

NOTE: Injection check valve included with pumps rated 100 psi (6.9 bar) maximum.

NOTICE: The information within this chart is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. Stenner Pump Company recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs. The information contained in this flyer is not intended for specific application purposes. Stenner Pump Company reserves the right to make changes to prices, products, and specifications at any time without prior notice.

The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Thursday, December 17, 2020** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: http://info.nsf.org/Certified/PwsComponents/Listings.asp?Company=32370&Standard=061&

NSF/ANSI/CAN 61
Drinking Water System Components - Health Effects

NOTE: Unless otherwise indicated for Materials, Certification is only for the Water Contact Material shown in the Listing. Click here for a list of Abbreviations used in these Listings. Click here for the definitions of Water Contact Temperatures denoted in these Listings.

ExxonMobil Chemical Company
22777 Springwoods Village Parkway
Spring, TX 77389
United States

Facility : Cantonment, FL

Mechanical Plumbing Devices

Trade Designation

Potable Water Materials

Santoprene™ 241-55 TPV[1]

[1] Fitting and appurtenance end use. Certified for a maximum surface area to volume ratio of 250 sq. in/L.

Santoprene™ 241-64 TPV[1]

[1] Fitting and appurtenance end use. Certified for a maximum surface area to volume ratio of 250 sq. in/L.

Santoprene™ 241-73W236 TPV[2]

[2] Fitting and appurtenance end use. Certified for a maximum surface area to volume ratio of 185 sq. in/L.

Santoprene™ 241-80W236 TPV[2]

[2] Fitting and appurtenance end use. Certified for a maximum surface area to volume ratio of 185 sq. in/L.

NOTE: All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

Potable Water Materials

Trade Designation	End Use	Water Contact Temp	Water Contact Material
Potable Water Materials			
Santoprene™ 241-55 TPV[1]	A, F, P	C. HOT	TPE
Santoprene™ 241-64 TPV[1]	A, F, P	C. HOT	TPE
Santoprene™ 241-73W236 TPV[2]	A, F, P	C. HOT	TPE
Santoprene™ 241-80W236 TPV[2]	A, F, P	C. HOT	TPE

[1] Certified for a maximum surface area to volume ratio of 500 sq. in/L.
[2] Certified for a maximum surface area to volume ratio of 345 sq.in./L.

NOTE: All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

Number of matching Manufacturers is 1
Number of matching Products is 8
Processing time was 1 seconds

APPENDIX L

SPECIFICATIONS AND NSF/ANSI STANDARD 61 CERTIFICATION FOR LMI CHEMICAL SOLUTION TANK

In stock & ready to ship!

LMI



50-Gallon Tank | 35-Gallon Flooded Suction Tank | 10-Gallon Tank

LMI Chemical Solution Tanks

- **Durable LLDPE and MDLPE construction with UV inhibitors**
- **Great for both indoor and outdoor applications**

LMI tanks offer rigid, lightweight polyethylene construction for maximum durability. They feature a designated molded area for pump mounting. Select tanks have easy-to-read markings along the side. 10-gallon models have one-gallon graduations, and 35-gallon models have five-gallon graduations. All tanks offer a maximum temperature rating of 110°F.

Choose from top-mount or flooded-suction configurations. Flooded-suction tanks virtually eliminate the need for priming. They feature a recessed pump mounting area designed specifically to fit all series A pumps.

Note: NSF/ANSI certification does not apply to tank accessories.

Shipping: Additional shipping fees apply.

Materials of construction

10- & 35-gallon: linear low-density polyethylene (LLDPE) with UV inhibitors

50-gallon: medium-density linear polyethylene (MDLPE) with UV inhibitors

NSF Certified to NSF/ANSI 61

Tanks suitable for use with:

50% aluminum sulfate (alum), 29% ammonium hydroxide, 45% ferric chloride, 23% fluoride, 38% hydrochloric acid, 50% hydrogen peroxide, 50% phosphoric acid, 10% potassium permanganate, 44% sodium bisulfite, 15% sodium hypochlorite. **Call us with questions about compatibility with any chemicals not on this list!**

CAPACITY (GALLONS)	DIMENSIONS (DIA x H)	CONFIGURATION	STOCK #	EACH
10	14" x 18"	Top Mount	61120	$
35	20" x 31"	Flooded Suction	61122	
50	23" x 42.75"	Top Mount	61124	

Replacement Items & Accessories

DESCRIPTION	STOCK #	EACH
Level Controller for 35-Gallon Tank, 115 VAC	67777*	$
Level Controller for 50-Gallon Tank, 115 VAC	67778*	
Replacement Fill Cap for 35-Gallon Tanks	61132	
Replacement Fill Cap for 50-Gallon Tanks	61136	
Replacement Tube Cap for 35- & 50-Gallon Tanks	61134	
Angled Shutoff Valve for 35-Gallon Tanks	61161	

***Alternate voltages available. Contact USABlueBook for more information.**

STENNER PUMPS

In stock & ready to ship!



30-Gallon Translucent Tank | 15-Gallon Opaque Gray Tank

Stenner Series STS Chemical Solution Tanks

- **Perfect for use in small systems**
- **Specifically designed for Stenner Classic and Econ series pumps**

Stenner STS top-mount tanks have a compact, lightweight design that's perfect for tight spaces. They feature a large fill port to prevent spills when pouring, and a small containment area under where the pump mounts to catch any small spills. Tanks let you mount your pump vertically with the head pointing down for protection against chemical leaks.

Choose from translucent tanks for indoor applications or opaque UV-resistant gray tanks for light-sensitive outdoor applications. All tanks include mounting screws and grommets. Mounting kit required for use with Econ series pumps (sold separately; stock # 17976).

Shipping: Additional shipping fees apply.

Materials of construction

Translucent: medium-density linear polyethylene (MDLPE)

Opaque gray: medium-density linear polyethylene (MDLPE) with UV inhibitors

C USA

THIS PUMP IS TESTED AND CERTIFIED BY WQA ACCORDING TO ANSI/NSF 61 FOR CONTACT WITH SODIUM HYPOCHLORITE AND WATER ONLY AND ANSI/NSF 372

Tanks suitable for use with:

Aluminum sulfate (alum), ammonium hydroxide, ammonium sulfate, 5% calcium hypochlorite, ferric sulfate, fluoride, 37% hydrochloric acid, magnesium hydroxide, potassium permanganate, sodium bisulfate, 15% sodium hypochlorite. **Call us with questions about compatibility with any chemicals not on this list!**

CAPACITY (GALLONS)	DIMENSIONS (DIA x H)	TRANSLUCENT STOCK #	TRANSLUCENT EACH	OPAQUE GRAY STOCK #	OPAQUE GRAY EACH
15	20.5" x 25.25"	70262	$	70263	$
30	20.5" x 37.5"	70278		70279	

Accessories

DESCRIPTION	STOCK #	EACH
ECON Series Mounting Kit	17976	$

See pages 102-169 for **Chemical Feed Pumps.**



12.5% Sodium Hypochlorite Solutions

Corporate Headquarters: Hasa Inc.
23119 Drayton Street
Saugus, California 91350
Telephone • 661.259.5848
Fax • 661.259.1538

PRODUCT SPECIFICATION	
Common Chemical Name	Bleach, Bleach Solution, Sodium Hypochlorite, Liquid Chlorinator
Hasa Brand Names	Sani-Clor, Hasa-Chlor, Multi-Chlor, 12.5% NaOCl
Empirical Chemical Formula	NaOCl
CAS Registry Number:	7681-52-9
Chemical Family	Inorganic Halogen Compound

Chemical Composition (percent by weight):	**Minimum**	**Maximum**
Sodium Hypochlorite	12.50	15.60
Sodium Chloride	9.84	12.30
Sodium Hydroxide	0.1	1.0
Sodium Carbonate	0.00	0.05
Inorganic Salts of Iron	0.02	0.03
Inorganic Salts of Copper	0.00	0.01
Other Inorganic Salts	0.00	0.01
Water	77.54	71.40

PHYSICAL AND CHEMICAL PROPERTIES			
Vapor Pressure:	12.1 mm Hg at 20°C (68°F)	**Flash Point:**	Not Applicable
Weight per Gallon	10.0 +/- 0.1 pounds	**pH:**	11.2 +/- 0.2
Density (liquid)	1.20 @ 20°C(68°F)	**Odor:**	Slight bleach
Density (solid)	Not Applicable	**Boiling Point:**	Decomposes
Melting Point	Not Applicable	**Freezing Point:**	-6.7°C (-20°F)
Physical State:	Liquid Solution	**Color:**	Straw Yellow
Solubility in Water:	Complete	**Stability:**	Stable

Certified to ANSI/NSF 60, *Drinking Water Treatment Additives Standard.* Maximum use level 84mg/L
UL No. MH25204 (Eloy, AZ) NSF Certificate Nos. OA681-01 (Pittsburg, CA), OA682-01 (Saugus, California), OA683-01 (Longview, WA)

(Rev. A 02/15/2005)
(Rev. B 04/24/2007)

Information Sheet

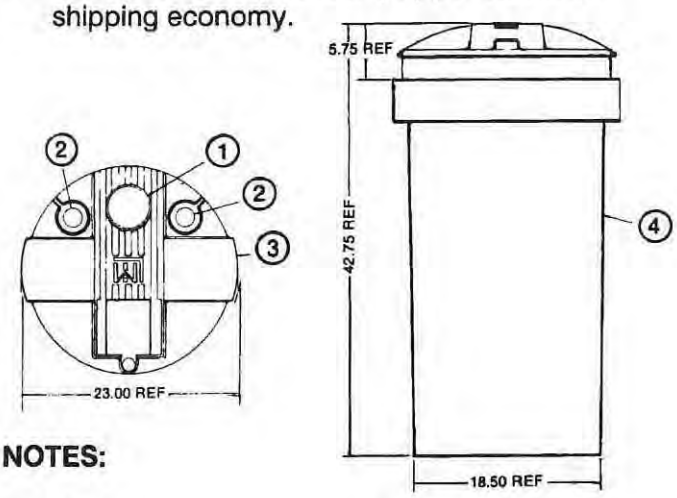
Polyethylene Tank and Cover Assembly and Accessories

MODEL NO. 26350
50 GALLON TANK ASSEMBLY

- Ultraviolet resistant, molded yellow polyethylene tank.
- High rigidity black polyethylene cover with molded recess for mounting of pump, agitator* and liquid level switch.
- 5 gallon (20 liter) graduations
- Self supporting, tapered sides.
- Suitable for most corrosive and noncorrosive solutions.
- Can be nested up to four (4) per carton for shipping economy.



Model No. 26350



COMPONENT PARTS

Ref No.	Part No.	Description	Qty
1	25985	Caplug Assembly Black Polyethylene	1
2	10346	Caplug Assembly Black Polyethylene	2
3*	26637	Cover, Black Polyethylene	1
4	25688	Tank, 50 Gallon Yellow Polyethylene	1

Shipping wt. 25 lbs (11.4 kg)

NOTES:

1. Full, flat bottom support required.
2. Maximum solution/ambient temperature 110° F (43° C)
3. Minimum solution/ambient temperature 0° F (-18°C)
4. Maximum weight limit for cover 50 lbs (23 kg)
5. Not suitable for use with concentrated organic solvents, oils and related materials.

Cover must be drilled at factory for agitator mounting. Please indicate your desire for this option when ordering.

LMI
LIQUID METRONICS DIVISION
MILTON ROY
A unit of Sundstrand Corporation

8 Post Office Square
Acton, MA 01720 USA
TEL: (978) 263-9800
FAX: (978) 264-9172
http://www.lmipumps.com

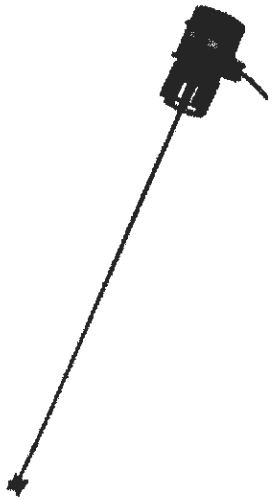
ISO9001

Replaces same of Rev. C 6/96
1057.D 3/97

AGITATORS WITH SUCTION TUBE SHIELD

115V Model	Shaft Length	Impeller	Motor
No. 10590	34" S.S. +	303 S.S.+	1600 RPM, 115 VAC, 50/60 Hz., 1.5 AMP. 175 WATTS, 1/20 H.P.
No. 10592	34" S.S. +	Neoprene**	
No. 27591	27" S.S. +	303 S.S.+	

220V Model	Shaft Length	Impeller	Motor
No. 25290	34" S.S.+	303 S.S.+	1600 RPM, 220-240 VAC, 50 Hz., .75 AMP.175 WATTS 1/20 H.P. DIN Plug
No. 25292	34" S.S.+	Neoprene**	
No. 34504	27" S.S.+	303 S.S.+	



+ Epoxy chemical resistant coating.
*** Has bronze hub for noncorrosive abrasive slurries only.*



LIQUID LEVEL SWITCH
MODEL NO. 26731

- Corrosion resistant housing of glass - fiber, reinforced polypropylene.
- Chemical resistant polypropylene float.
- Receptacles for connection to metering pump and low level signal device (alarm).
- Convenient mounting on an LMI 50 gallon tank with cover assembly.
- Electrical: Voltage 115 VAC, 50/60 Hz. Max Load: 3 Amps. Also available in 230 VAC, (Model No. 26732).

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Printed in USA
Specifications subject to change without notice.

APPENDIX M

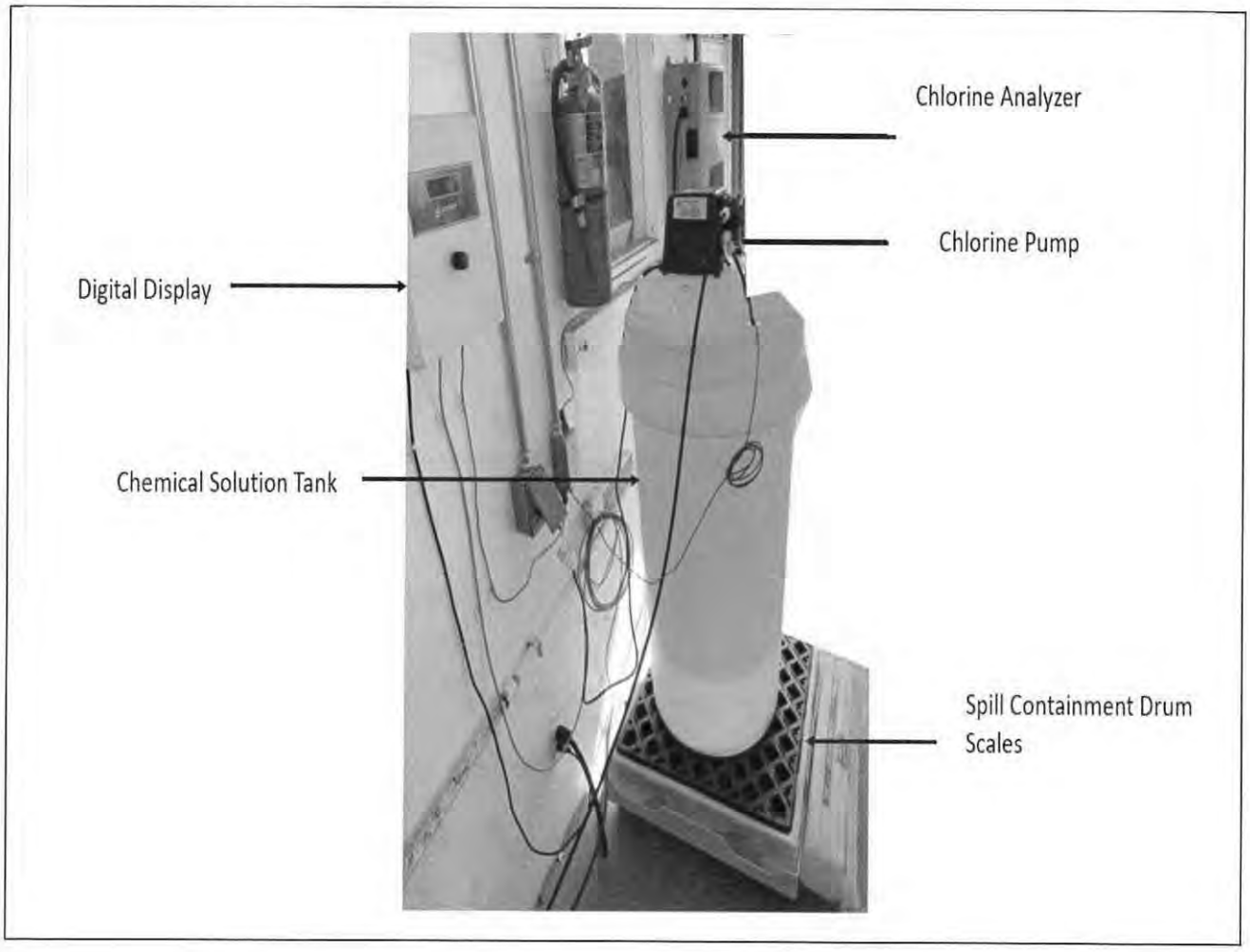
CONFIGURATIONS OF DISINFECTION FACILITIES AT WELLS 3 AND 5, AND CHLORINE DISINFECTION DATA SHEETS

A. SYSTEM DESCRIPTION

The liquid chlorine feed-systems of both well 3 and well 5 consist of:

1. A yellow 50-gallons solution tank (drum) that holds the liquid sodium hypochlorite.
2. Spill containment scales with bladder. Which provides a containment of up to 66 gallons in the event of a chemical spill and weighs the amount of chemical leftover in the drum.
3. Digital display: connected to the spill containment drum. It transfers the measured weight to Supervisory Control and Data Acquisition System (SCADA)
4. Digital Peristaltic Pump that pumps the liquid chlorine from inside the drum to tank inlet.
5. Chlorine Analyzer (HACH CL17) that continuously measures chlorine level.

FIGURE 1: SYSTEM DESCRIPTION



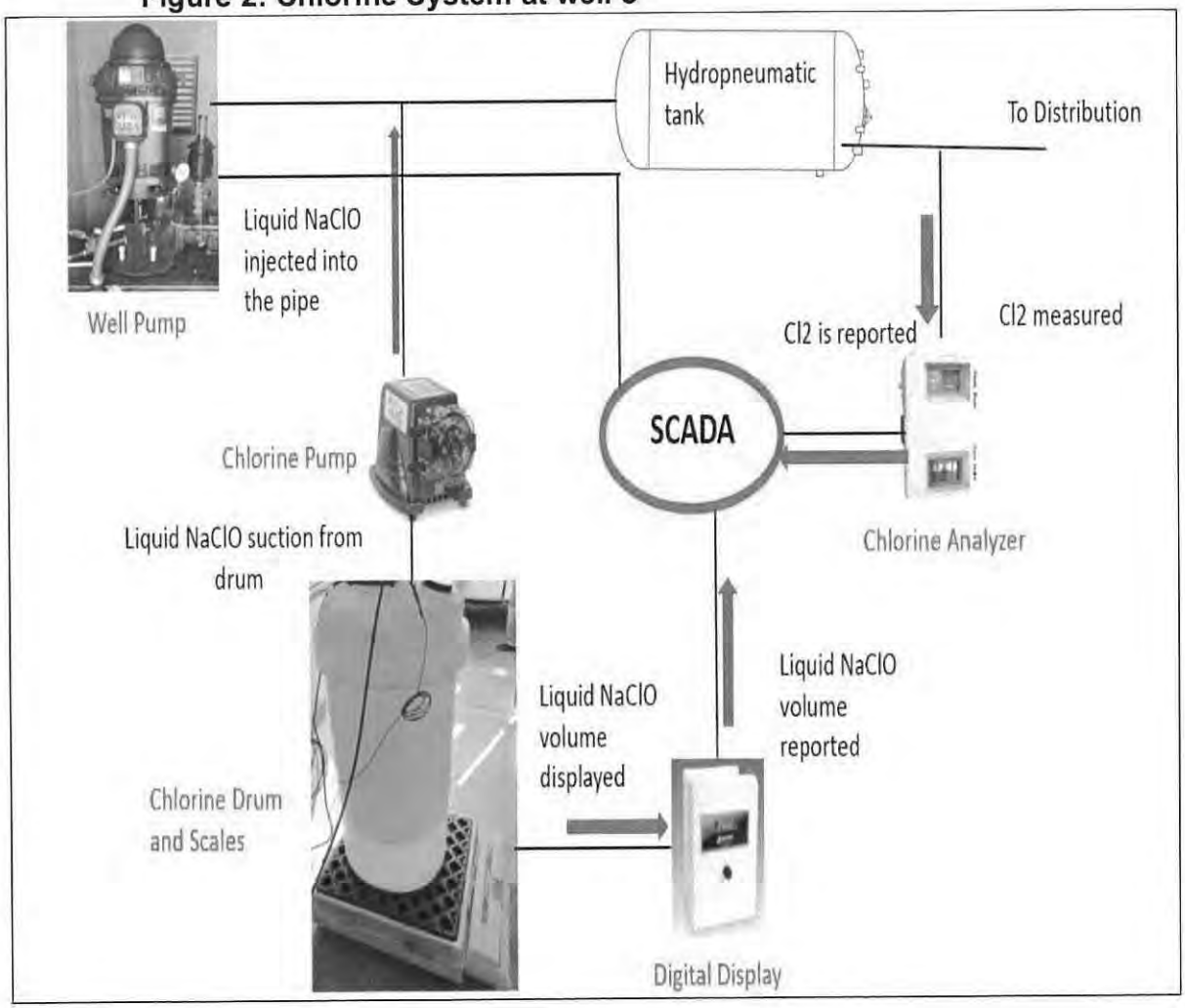
B. SYSTEM OPERATION:

Chlorine system at well 3 site:

When well 3 is online, the disinfectant pump draws the liquid sodium hypochlorite from the drum and pumps it to the injection point with a manually adjusted flow. The disinfectant and water are mixed inside of the 10,000 gallons Hydropneumatic tank. The chlorine concentration is measured continuously at the tank outlet with the chlorine analyzer. The residual level is then electronically reported to the SCADA system for real time monitoring.

Well 3 pump, Chlorine analyzer, and drum scale are connected to SCADA system.

Figure 2: Chlorine System at well 3

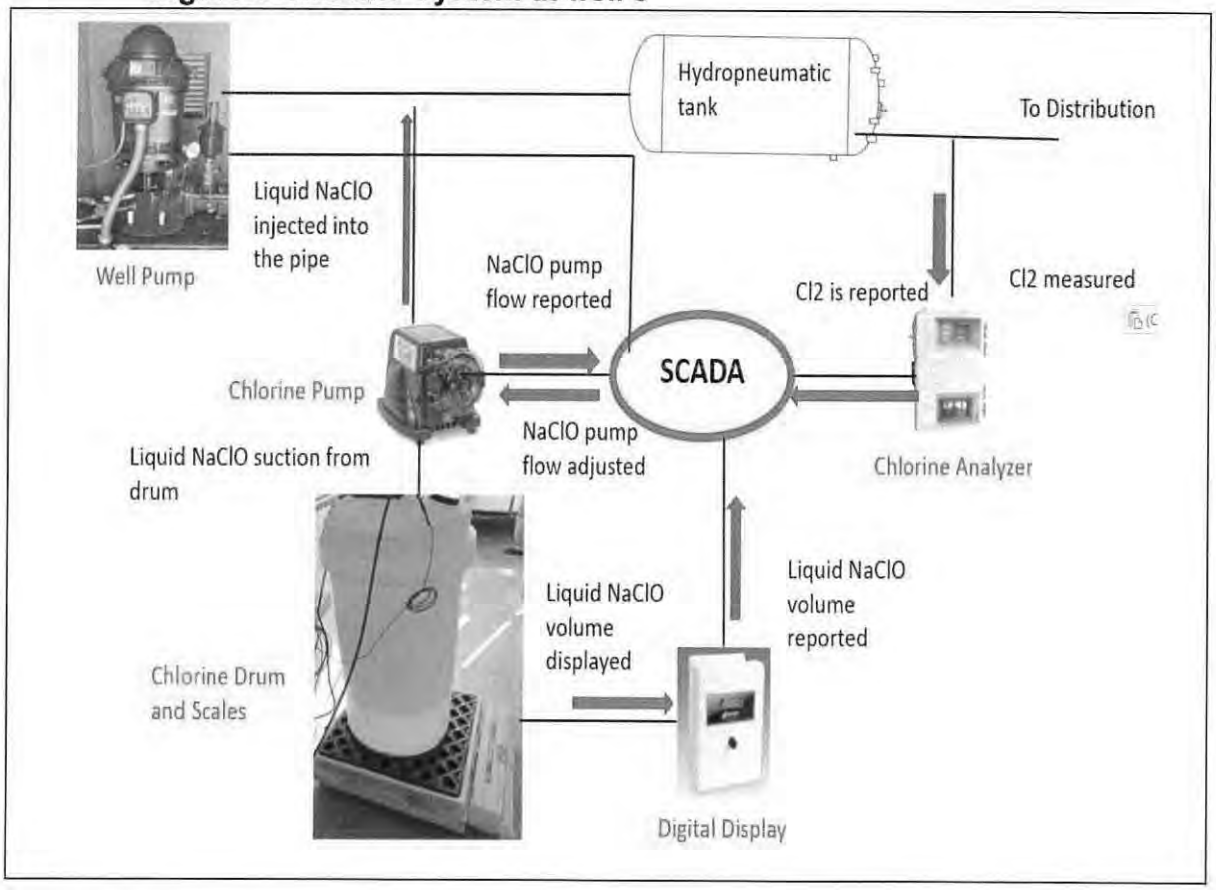


Chlorine system at well 5 site

The chlorine system at well 5 is operated in a similar manner as the chlorine system at well 3, with a difference that, the disinfectant pump flow is automatically adjusted through SCADA instead of the manual flow adjustment at well 3.

Since well 5 pump is equipped with a Variable Frequency Drive (VFD), the SCADA system is synchronizing the flow from well 5 with the flow of the disinfectant pump

Figure 3 Chlorine System at well 5



C. EQUIPMENTS OPERATION AND MANTENANCE

2.2 General product information

2.2.1 Instrument description

The Hach CL17 Chlorine Analyzer (Figure 1) is a microprocessor-controlled, process analyzer designed to monitor a sample stream continuously for chlorine content. Either free or total chlorine, in the range of 0 to 5 mg/L, can be monitored. The buffer and indicator solutions used determine the choice for free or total chlorine analysis.

CAUTION
This analyzer is intended to be used for aqueous samples only.

The CL17 Chlorine Analyzerenclosure is environmentally rated for IP62 per IEC 529. The enclosure is dust-tight, and drip-resistant but is not designed for outdoor use.

The instrument uses a DPD Colorimetric Method which includes a N,N-Diethyl-p-phenylenediamine (DPD) indicator and a buffer. The indicator and buffer are introduced into the sample, causing a red color to form with an intensity proportional to the chlorine concentration. Chlorine concentration, measured photometrically, is displayed on the front panel, three-digit, LCD readout in mg/L Cl_2.

A recorder output (4-20 mA) is available. Recorder span minimum and maximum values in mg/L Cl_2 are programmed by the operator at the analyzer keyboard.

Programmable alarm circuits provide relay closures, both normally open and normally closed, for two selectable chlorine level set points. Set points can be programmed by the operator anywhere within the overall range. System warning and system alarm features provide automatic, self-testing diagnostics that detect a number of possible malfunctions, and provide alarm relay closures indicating a need for operator attention.

The CL17 analyzer can be purchased with a Hach Network Interface Card which allows the CL17 to display its readings on an AquaTrend® display or allows data to be sent to a PC via a Serial Interface Module.

Indicator and buffer reagents (473 mL of each) are placed in the instrument case in the original factory-filled bottles. Reagents are replenished once a month.

The instrument is designed so electronic components are isolated from the hydraulic components. Windows allow the operator to observe the display indicators and reagent supply without opening the instrument enclosure.

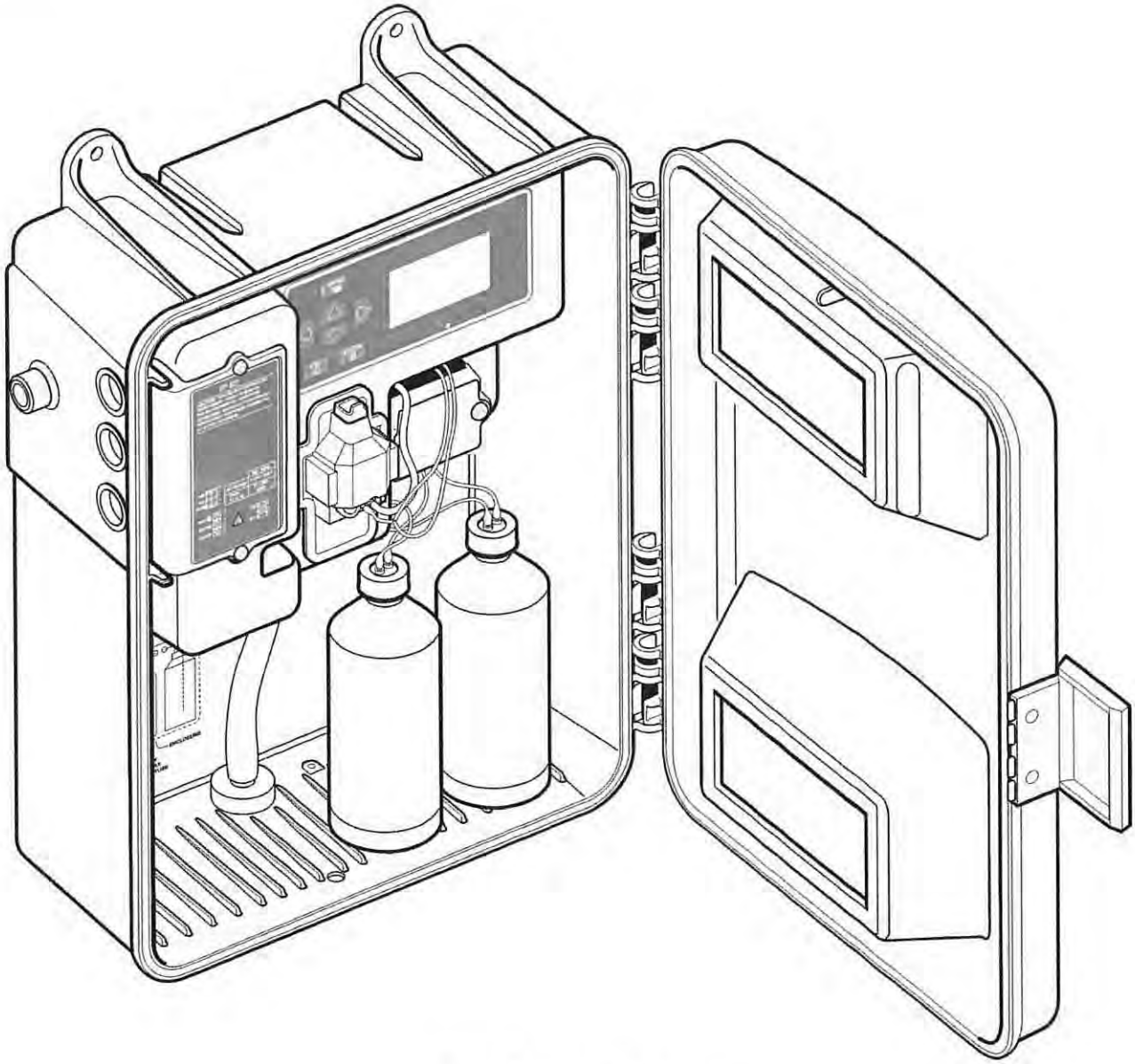


Figure 1 Chlorine analyzer

2.2.2 Method of analysis

Free available chlorine (hypochlorous acid and hypochlorite ions) oxidizes the DPD indicator reagent at a pH between 6.3 and 6.6 to form a magenta-colored compound. The depth or intensity of the resulting color is proportional to the concentration of chlorine in the sample. A buffer solution specifically for free chlorine maintains the proper pH.

Total available chlorine (free available chlorine plus combined chloramines) is determined by adding potassium iodide to the reaction. Chloramines in the sample oxidize iodide to iodine, which, along with any free available chlorine, oxidizes DPD indicator to form the magenta color at a pH of 5.1. A different buffer solution containing potassium iodide maintains reaction pH. After the chemical reaction is complete, the optical absorbance at 510 nm is compared to the absorbance measured through the sample before the reagents were added. Chlorine concentration is calculated from the difference in absorbance.

Section 1 Specifications

Specifications are subject to change without notice.

General	
Display	LCD, 3½-digit measurement readout and six-character alphanumeric scrolling text line.
Enclosure	IP62-rated with the gasketed door latched
Instrument description	34.3 cm (W) x 41.9 cm (H) x 19.1 (D) (13.5 x 16.5 x 7.5 in.)
Mounting	Wall mount
Instrument shipping weight	1.3 kg (25 lb)
Warranty	Hach Company warrants its products to the original purchaser against any defects that are due to faulty material or workmanship for a period of one year from the date of shipment unless otherwise noted in the product manual.
Sample Requirements	
Sample flow rate to sample conditioning	200 to 500 mL/min
Inlet pressure to instrument	**1 to 5 psig**; 1.5 psig is optimum. Exceeding 5 psig can cause sample tubing failure unless sample conditioning is used.
Inlet pressure to sampling conditioning	1.5 to 75 psig (with sample tube level with the bottom of the instrument—see Figure 7 on page 16.)
Sample temperature range	5 to 40 °C (41 to 104 °F)
Inlet fitting at instrument	¼-inch OD polyethylene tubing with quick-disconnect fitting
Drain fitting	½-inch hose barb
Sample conditioning	Use provided sample conditioning
Regent/Standard Requirements	
Maximum reagent usage	One-half liter per month (each of the two reagents)
Reagent containers	High-density polyethylene (2) ½-liter bottles
Reagent containment	Reagent bottles are contained inside the analyzer enclosure and are vented externally.
Electrical	
Power requirements	100–115/230 VAC (selection switch inside instrument); 95 VA, 50/60 Hz, 2.5 Amp fuse
Power connection	Connection made by three wire barrier terminal block through a ½-inch conduit hole in the case. Wire range: 12–18 AWG.
Installation category	II
Alarm relay outputs	Two unpowered SPDT relays each rated at 5 A resistive, 240 V ac maximum. Can function as sample set point alarms (high or low) or as a system warning indicator or a system alarm indicator. Use either high voltage (greater than 30 V RMS and 42.2 V PEAK or 60 V dc) or low voltage (less than 30 V RMS and 42.2 V PEAK or 60 V dc). Do not use a combination of high and low voltage.
Alarm connection	Connection made by a removable three wire plug through a ½-inch conduit hole in the case. Wire range: 12–18 AWG.
Recorder output	One isolated recorder output, 4–20 mA (can be adjusted to 0–20 mA). Recommended load impedance 3.6 to 500 ohms
Recorder output connections	Connection made by a removable three wire plug through a ½-inch conduit hole in the case. Wire range: 12–22 AWG.
Optical	
Light source	Class 1 LED (light emitting diode) with a peak wavelength of 520 nm; 50,000 hours estimated minimum life

6.2.4 Replace the sample conditioning filter 44
6.2.5 Reagent spill clean up 44
Section 7 Troubleshooting 45
7.1 Troubleshooting guide 45
7.2 System alarms 46
7.3 System warnings 47
Section 8 Parts and accessories 49
Section 9 Contact information 51
Section 10 Certification 53
10.1 Product Safety 53
10.2 Immunity 53
10.3 Canadian Interference-causing Equipment Regulation, IECS-003, Class A: 54
10.4 FCC PART 15, Class "A" Limits 54

Specifications

Performance	
Operating range	0–5 mg/L free or residual chlorine
Accuracy	±5% or ±0.035 ppm whichever is greater
Precision	±5% or ±0.01 ppm whichever is greater
Quantitation limit	0.035 ppm
Cycle time	2.5 minutes
Detection limit	0.02 ppm
Calibration	Uses default calibration curve
Power switch	User accessible power switch is required
Recorder	One 4-20 mA/0–20 mA
Alarm relay outputs	Two SPDT relays, 5A resistive load at 240 V ac. Can function as sample set point alarms (high or low) or as a system warning indicator or a system alarm indicator.
Optional external outputs	Hach AquaTrend® Network Interface
Environmental	
Storage temperature range	-40 to 60 °C (-40 to 140 °F)
Operating temperature range	5 to 40 °C (41 to 104 °F)
Humidity	90% at 40 °C (90% at 104 °F)
Air purge (optional)	0.1 CFM instrument quality air at 20 psig maximum, ¼-inch OD tubing

Section 2 General information

The information in this manual has been carefully checked and is believed to be accurate. However, the manufacturer assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will the manufacturer be liable for direct, indirect, special, incidental or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. In the interest of continued product development, the manufacturer reserves the right to make improvements in this manual and the products it describes at any time, without notice or obligation.

Revised editions are found on the manufacturer's website.

2.1 Safety information

Please read this entire manual before unpacking, setting up or operating this equipment. Pay attention to all danger, warning and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

Make sure that the protection provided by this equipment is not impaired, do not use or install this equipment in any manner other than that specified in this manual.

2.1.1 Use of hazard information

DANGER
Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
Indicates a potentially hazardous situation that may result in minor or moderate injury.

Notice: *Indicates a situation that is not related to personal injury.*

Important Note: *Indicates a situation which, if not avoided, may cause damage to the instrument. Information that requires special emphasis.*

Note: *Information that supplements points in the main text.*

2.1.2 Precautionary labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if not observed.

	Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of life equipment to the Producer for disposal at no charge to the user. ***Note:*** *For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment, producer-supplied electrical accessories, and all auxiliary items for proper disposal.*
	This is the safety alert symbol. Obey all safety messages that follow this symbol to avoid potential injury. If on the instrument, refer to the instruction manual for operation or safety information.
	This symbol indicates the need for protective eye wear.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

CHLORINE DISINFECTION DATA

System Name: Sativa Water System **No:** CA1910147
Source of Information: LACWD Field Staff
Collected By: Hatem Ben Miled **Date:** 09/29/2020

Location:	Well site 3 (1910147-002)
Type of Disinfectant Used:	Liquid 12.5% Sodium hypochlorite (NaOCl)
Application:	Raw
Water Treated: (raw, filtered, etc.)	
Oxidant Demand Character:	0.32mg/l
Point of Application:	Inlet main into Hydropneumatic tank
Mixing:	Yes, hydro tank
Contact Time: (minutes)	15 minutes
Minimum Contact Time Before Residual Test:	2 minutes
How was Contact Time Measured or Determined:	Tank size over well flow
Water Flow Variation:	248 GPM (Minimum)
Average Daily:	424 GPM
Maximum Daily:	424 GPM
Peak Hourly Flow:	25440 Gallons
Machine:	
Make:	Stenner
Type:	SVP Series Digital Peristaltic Pump
Capacity:	17GPD
Condition:	New
Housing: (type)	N/A
Insulation:	N/A
Heating:	N/A
Chemical Added:	Liquid 12.5% Sodium hypochlorite (NaOCl)
% Available Disinfectant, Form	
Cylinder or Crock Capacity: (Drum/Tank)	50 gallons
Stock on Hand:	50 gallons
Safety Features: (Locks, Lighting, Ventilation, Alarms, Etc)	Secondary containment up to 66 gallons
Operation and Maintenance:	
Spare Parts on Hand:	Spare chlorine pump and injectors
Ability to Make Repairs:	Yes
Equipment Inspection Frequency:	Weekly
Residual Tests:	
Test Made: (DPD, etc.)	DPD
Type of Instrumentation:	Hach Chlorine Analyzer CL17
Continuous/Grab:	Continues
Where Test Made:	Hydropneumatic tank outlet
Type: (Total, Free, Combined, Other)	Free
Records:	SCADA
Frequency of Equipment Calibration:	Weekly
Reliability Features:	
Auxiliary Power:	None
Automatic Switch-over:	N/A
Condition of Scales: (if any)	New
Alarms: (if any)	SCADA and digital display
Defects or Remarks:	None

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

CHLORINE DISINFECTION DATA

System Name: Sativa Water System **No:** CA1910147
Source of Information: LACWD Field Staff
Collected By: Hatem Ben Miled **Date:** 09/29/2020

Location:	Well Site 5 (1910147-005)
Type of Disinfectant Used:	Liquid 12.5% Sodium hypochlorite (NaOCl)
Application:	
Water Treated: (raw, filtered, etc.)	Raw
Oxidant Demand Character:	0.32mg/l
Point of Application:	Inlet main into Hydropneumatic tank
Mixing:	Yes, hydro tank
Contact Time: (minutes)	15 minutes
Minimum Contact Time Before Residual Test:	2 minutes
How was Contact Time Measured or Determined:	Tank size over well flow
Water Flow Variation:	
Average Daily:	650 GPM
Maximum Daily:	650 GPM
Peak Hourly Flow:	41,930 Gallons
Machine:	
Make:	Stenner
Type:	SVP Series Digital Peristaltic Pump
Capacity:	17GPD
Condition:	New
Housing: (type)	N/A
Insulation:	N/A
Heating:	N/A
Chemical Added: **% Available Disinfectant, Form**	Liquid 12.5% Sodium hypochlorite (NaOCl)
Cylinder or Crock Capacity: (Drum/Tank)	50 gallons
Stock on Hand:	50 gallons
Safety Features: (Locks, Lighting, Ventilation, Alarms, Etc)	Secondary containment up to 66 gallons
Operation and Maintenance: **Spare Parts on Hand:**	Spare chlorine pump and injectors
Ability to Make Repairs:	Yes
Equipment Inspection Frequency:	Weekly
Residual Tests:	
Test Made: (DPD, etc.)	DPD
Type of Instrumentation:	Hach Chlorine Analyzer CL17
Continuous/Grab:	Continues
Where Test Made:	Hydropneumatic tank outlet
Type: (Total, Free, Combined, Other)	Free
Records:	SCADA
Frequency of Equipment Calibration:	Weekly
Reliability Features:	
Auxiliary Power:	None
Automatic Switch-over:	N/A
Condition of Scales: (if any)	New
Alarms: (if any)	SCADA and digital display
Defects or Remarks:	None

APPENDIX N

HASA, INC. NSF/ANSI STANDARD 60 CERTIFICATION FOR S 12.5 PERCENT SODIUM HYPOCHLORITE SOLUTION

12.5% Sodium Hypochlorite Solutions

Corporate Headquarters: Hasa Inc.
23119 Drayton Street
Saugus, California 91350
Telephone • 661.259.5848
Fax • 661.259.1538

PRODUCT SPECIFICATION	
Common Chemical Name	Bleach, Bleach Solution, Sodium Hypochlorite, Liquid Chlorinator
Hasa Brand Names	Sani-Clor, Hasa-Chlor, Multi-Chlor, 12.5% NaOCl
Empirical Chemical Formula	NaOCl
CAS Registry Number:	7681-52-9
Chemical Family	Inorganic Halogen Compound

Chemical Composition (percent by weight):	**Minimum**	**Maximum**
Sodium Hypochlorite	12.50	15.60
Sodium Chloride	9.84	12.30
Sodium Hydroxide	0.1	1.0
Sodium Carbonate	0.00	0.05
Inorganic Salts of Iron	0.02	0.03
Inorganic Salts of Copper	0.00	0.01
Other Inorganic Salts	0.00	0.01
Water	77.54	71.40

PHYSICAL AND CHEMICAL PROPERTIES			
Vapor Pressure:	12.1 mm Hg at 20°C (68°F)	**Flash Point:**	Not Applicable
Weight per Gallon	10.0 +/- 0.1 pounds	**pH:**	11.2 +/- 0.2
Density (liquid)	1.20 @ 20°C(68°F)	**Odor:**	Slight bleach
Density (solid)	Not Applicable	**Boiling Point:**	Decomposes
Melting Point	Not Applicable	**Freezing Point:**	-6.7°C (-20°F)
Physical State:	Liquid Solution	**Color:**	Straw Yellow
Solubility in Water:	Complete	**Stability:**	Stable

Certified to ANSI/NSF 60, *Drinking Water Treatment Additives Standard.* Maximum use level 84mg/L
UL No. MH25204 (Eloy, AZ) NSF Certificate Nos. OA681-01 (Pittsburg, CA), OA682-01 (Saugus, California), OA683-01 (Longview, WA)

(Rev. A 02/15/2005)
(Rev. B 04/24/2007)

The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Thursday, December 17, 2020** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=0A680&Standard=060&

NSF/ANSI/CAN 60
Drinking Water Treatment Chemicals - Health Effects

Hasa Inc.

23119 Drayton Street
Saugus, CA 91350
United States
925-432-3866
Visit this company's website (http://www.hasapool.com)

Facility : Eloy, AZ

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
Multi-Chlor	Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

Facility : Pittsburg, CA

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
12.5% Sodium Hypochlorite Solution	Disinfection & Oxidation	84mg/L
FRESHCHLOR	Disinfection & Oxidation	84 mg/L
HASACHLOR	Disinfection & Oxidation	84 mg/L
Hasa Bleach 5.25%	Disinfection & Oxidation	200mg/L
Hasa Sani-clor	Disinfection & Oxidation	84mg/L

MULTI-CHLOR	Disinfection & Oxidation	84 mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Pomona, CA

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
Classic Bleach	Bactericide Disinfection & Oxidation	175mg/L
HASA BLEACH 5.25%	Bactericide Disinfection & Oxidation	200mg/L
Multi-Chlor	Bactericide Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

Facility : Saugus, CA

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
12.5% Sodium Hypochlorite Solution	Disinfection & Oxidation	84mg/L
FRESHCHLOR	Disinfection & Oxidation	84mg/L
HASACHLOR	Disinfection & Oxidation	84mg/L
Hasa Bleach 5.25%	Disinfection & Oxidation	200mg/L
MULTI-CHLOR	Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Spring Valley, CA

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
Multi-chlor	Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

Facility : Bryan, TX

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
HASACHLOR	Disinfection & Oxidation	84mg/L
MULTI-CHLOR	Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Longview, WA

Sodium Hypochlorite[CL]

Trade Designation	*Product Function*	*Max Use*
12.5% Sodium Hypochlorite Solution	Disinfection & Oxidation	84mg/L
FRESHCHLOR	Disinfection & Oxidation	84mg/L
HASACHLOR	Disinfection & Oxidation	84mg/L
Hasa Bleach 5.25%	Disinfection & Oxidation	200mg/L
MULTI-CHLOR	Disinfection & Oxidation	84mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Number of matching Manufacturers is 1

Number of matching Products is 23

Processing time was 0 seconds

APPENDIX O

TANK DATA SHEET

State of California

State Water Resources Control Board
Division of Drinking Water

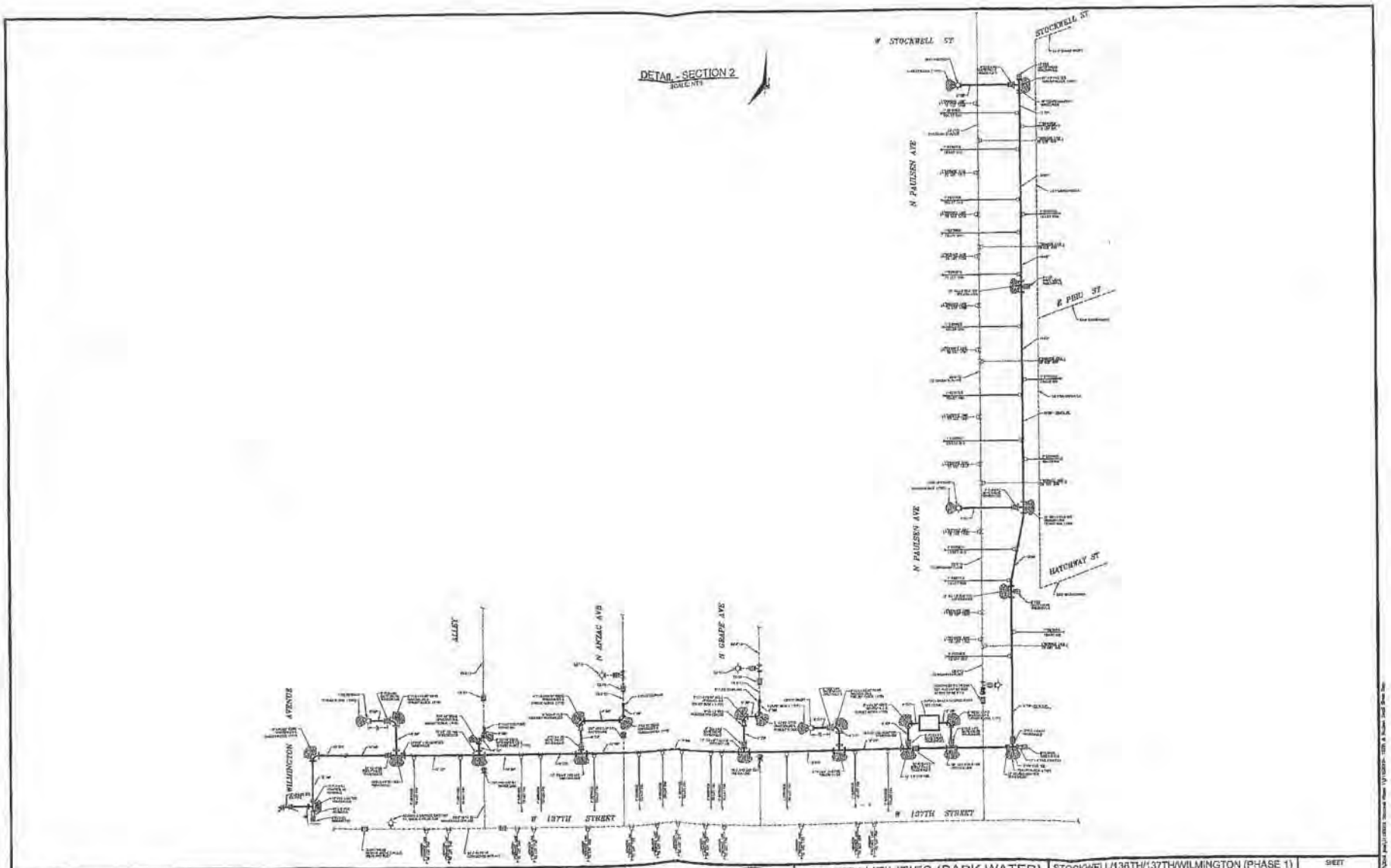
Hydropneumatic Tank

(Use For All Distribution Storage, Chlorine Contact Tanks, Etc)

System Name:	Sativa Water System	
System Number:	1910147	
Source of Information:	DDW Files, Field Inspection and Los Angeles County DPW Staff	
Collected By:	Ofelia Oracion	Date: December 3, 2019
Reservoir Number Or Name:		
Location	Wells 3 and 5	
Cross Streets:	Various locations	
Neighborhood:	Residential	
Size Of Lot:	Various sizes	
Fencing:	Wrought iron fences	
Construction		
Date Constructed/Refurbished:	1952	
Purpose (Storage, Chlorine Contact, Etc.):	Chlorine Contact and Pressure	
Design Capacity (MG):	Not Applicable	
Operating Capacity (MG):	Not Applicable	
Construction Type:	Pressure Tank	
Shape:	Cylindrical	
Construction Materials:	Steel	
Sides:	Steel	
Floor:	Steel	
Cover Or Roof:	Steel Roof	
Interior Coating Type:	Unknown	
Dimensions		
Dimensions (H x L x W) Or (H & Diameter)(feet):	88 inches diamater	
Tank Bottom Elevation (feet):	Not Applicable	
Height Of Tank (feet):	Not Applicable	
Surface Drainage To Reservoir Possible?	Not Applicable	
Ventilation		
Screened (Y/N):	Not Applicable	
Cathodic Protection:	Not Applicable	
Inlet Description		
Distance Above Bottom (feet):	Not Applicable	
Receives Water From:	Wells	
Outlet Description		
Distance From Inlet (feet):	Not Applicable	
Distance Above Bottom (feet):	Not Applicable	
Delivers Water To:	Distribution System	
Pressure Zone Served:	Single Pressure Zone	
Drain Location		
Distance Above Floor (feet):	At Bottom	
Discharge Location:	Ground Surface	
Overflow Location		
Overflow Elevation (feet):	Not Applicable	
Distance Above Bottom (feet):	Not Applicable	
Discharge Location:	Not Applicable	
If Hydropneumatic Tank		
Capacity (gal):	10000 gallons	
Site Glass:	Yes	
Air Vent:	Yes	
Pressure Gage:	Yes	
Comments		
Date of last inspection:	May 2011	
Date of last cleaning	May 2011	
Date Re-lined or Coated	July 2011	Site 3 only

APPENDIX P

LIBERTY UTILITIES' 12-INCH TRANSMISSION MAINS ALONG NORTH PAULSEN AVENUE



REV	DATE	BY	DESCRIPTION

WARNING
0 1/2
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED
DRAWN
CHECKED
SCALE NO SCALE

Liberty Utilities

JAMES P. ELLIOTT DATE
SENIOR MANAGER, ENGINEERING

LIBERTY UTILITIES (PARK WATER)
9750 WASHBURN RD, DOWNEY, CA 90241

APPROVED:
SENIOR MANAGER, ENGINEERING DATE

APPROVED:
DIRECTOR, ENGINEERING DATE

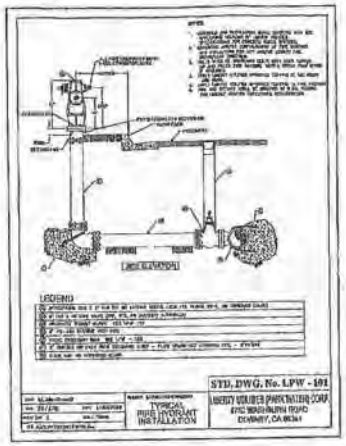
STOCKWELL/136TH/137TH/WILMINGTON (PHASE 1)
12" WATER MAIN INSTALLATION
CITY OF COMPTON

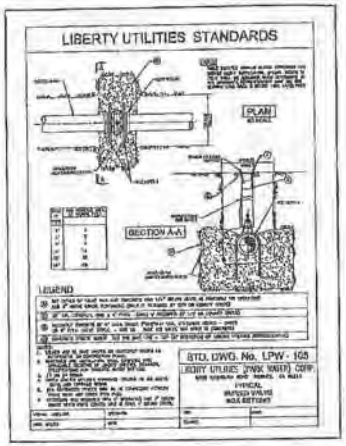
DETAIL - PAULSEN AVE

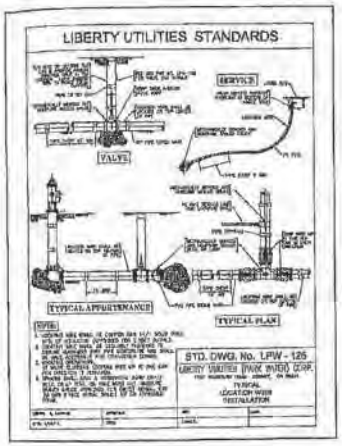
SHEET
W-6
SHEET 8 OF 9
PROJECT 11183310

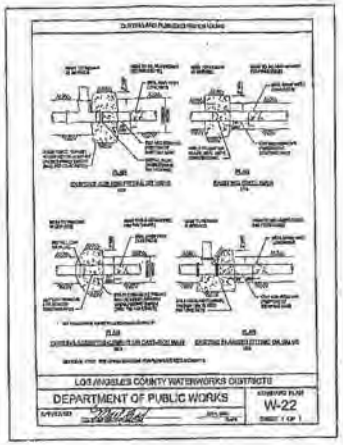
SATIVA WATER MAIN EXTENSION - SECTION 3

STANDARD DRAWINGS DETAIL:









ESTIMATE OF QUANTITIES:
SECTION 3

NO.	QUANTITY	DESCRIPTION
1	65 LF	12" PC350 Ductile Iron Pipe w/ polyethylene wrap and Locating Wire Per Std Dwg No. LPW-123
2	945 LF	8" PC350 Ductile Iron Pipe w/ polyethylene wrap and Locating Wire Per Std Dwg No. LPW-123
3	15 LF	4" PC350 Ductile Iron Pipe w/ polyethylene wrap and Locating Wire Per Std Dwg No. LPW-123
4	9 EA	8" Gate Valve Per Std Dwg No. LPW-105
5	4 EA	6" Fire Hydrant Assembly Per Std Dwg No. LPW-101
6	1 EA	Tie Into Existing Sativa Pipeline
7	6 EA	Cut and Plug Existing Sativa Pipeline to be Abandoned
8	1 EA	Remove ex. Sativa Fire Hydrant
9	1015 CF	Export Native and Import Suitable Fill

REV	DATE	BY	DESCRIPTION

WARNING
0 1/2"
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED
Drawn JDR
CHECKED
SCALE 30' SCALE

Liberty Utilities

JAMES P. ELLIOT DATE
SENIOR ENGINEER, PE#29510

LIBERTY UTILITIES (PARK WATER)
9750 WASHBURN RD, DOWNEY, CA 90241

APPROVED | DATE
ROMOR BANADEA, ENGINEERING MGR | PRESIDENT, CALIFORNIA

SATIVA MAIN EXTENSION, SECTION 3
CITY OF COMPTON

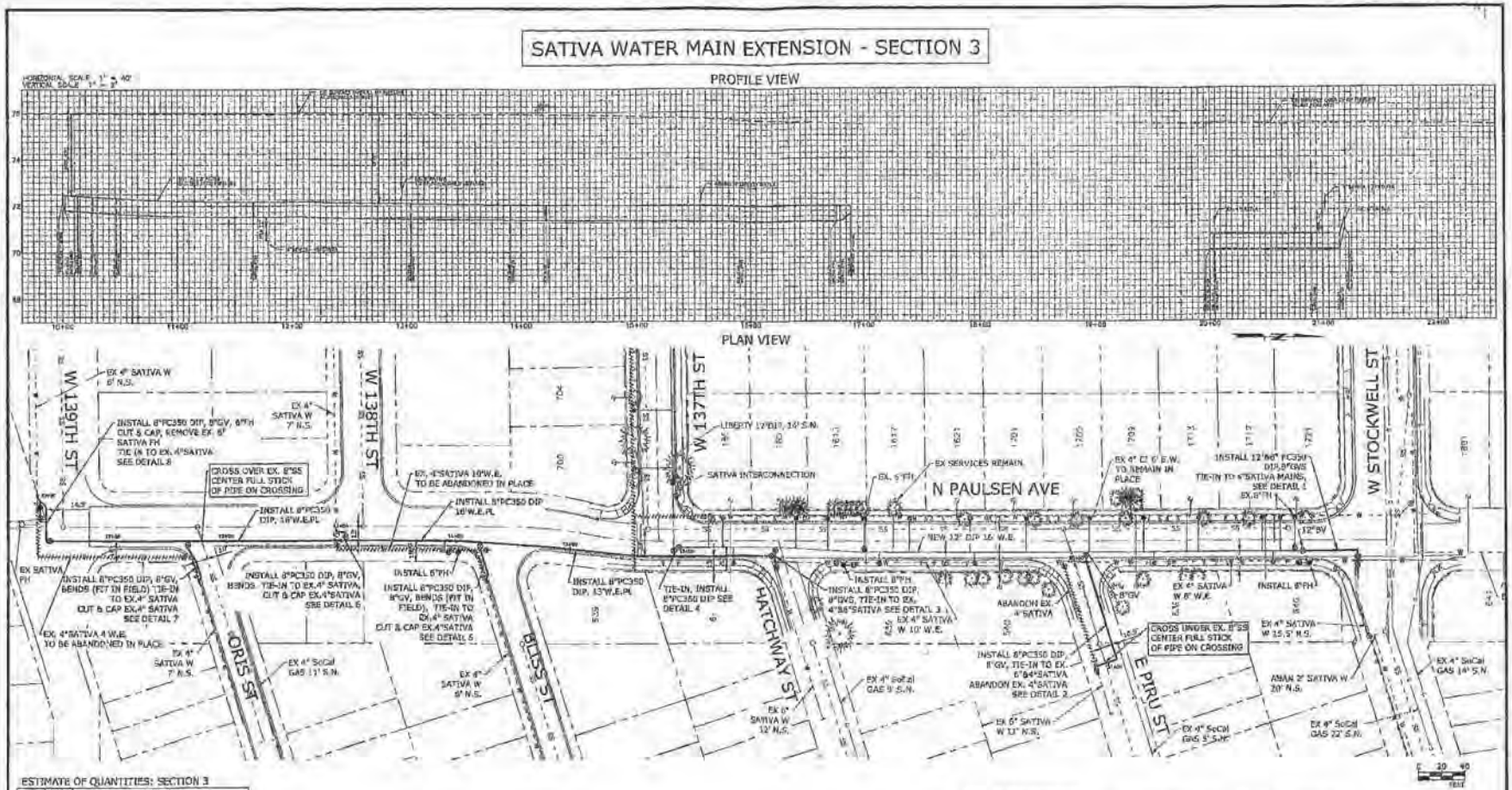
DETAIL - PAULSEN AVE

SHEET
W-2
SHEET 2 OF 3
PROJECT # 1130CP01

APPENDIX Q

SATIVA WATER SYSTEM'S 8-INCH WATER MAINS ALONG NORTH PAULSEN AVENUE

SATIVA WATER MAIN EXTENSION - SECTION 3



ESTIMATE OF QUANTITIES: SECTION 3

NO.	QUANTITY	DESCRIPTION
1	48 LF	12" PC350 DUCTILE IRON PIPE W/ POLYETHYLENE ENCASEMENT AND RESTRAINED JOINTS
2	870 LF	8" PC350 DUCTILE IRON PIPE W/ POLYETHYLENE ENCASEMENT AND RESTRAINED JOINTS
3	1210	4" PC350 DUCTILE IRON PIPE W/ POLYETHYLENE ENCASEMENT AND RESTRAINED JOINTS
4	3 EA	8" GATE VALVE AND VAULT PER STD. DWG. W-100
5	4 EA	6" GATE VALVE AND VAULT PER STD. DWG. W-100
6	11 EA	TIE-IN TO EXISTING 8" DIP
7	1 EA	CUT AND CAP EXISTING 8" DIP
8	2 EA	REMOVE AND SALVAGE FIRE HYDRANT
9	1 LS	REMOVE AND SALVAGE FIRE HYDRANT

REV	DATE	BY	DESCRIPTION

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED: ____
DRAWN: JDR
CHECKED: ____
SCALE: NO SCALE

Liberty Utilities

JAMES P. ELLIOTT, DATE: ____
GENERAL MANAGER, LIBERTY-CLWA

LIBERTY UTILITIES (PARK WATER)
9750 WASHBURN RD, DOWNEY, CA 90241

APPROVED: ____ DATE: ____
ROGER MANCER, ENGINEERING MANAGER

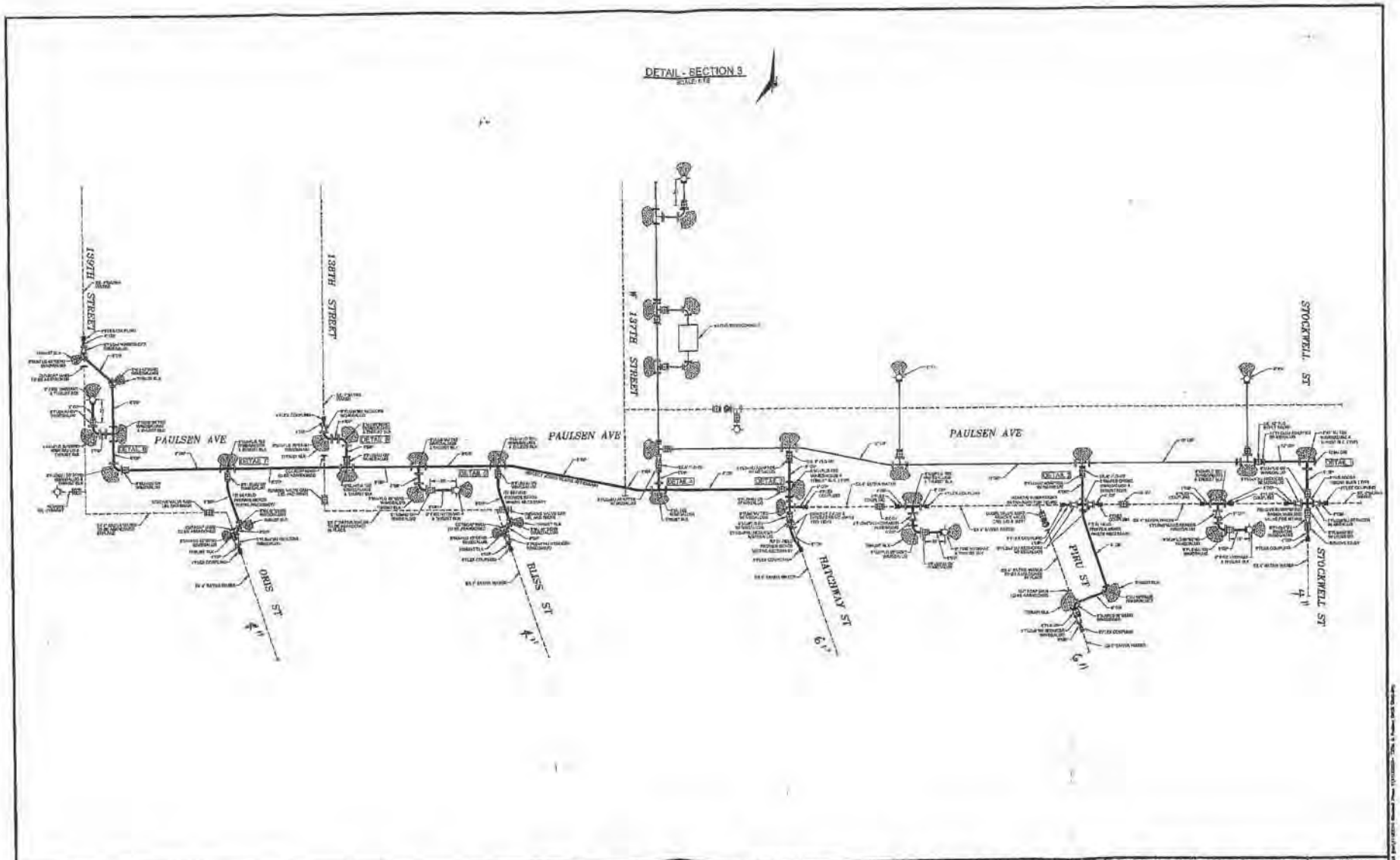
APPROVED: ____ DATE: ____
PRESIDENT, CALIFORNIA

SATIVA MAIN EXTENSION, SECTION 3
CITY OF COMPTON

PLAN & PROFILE - PAULSEN AVE

SHEET W-1
SHEET 1 OF 3
PROJECT # 1318(P01)

Ex. B - 176



REV	DATE	BY	DESCRIPTION

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED
DRAWN JOB
CHECKED
SCALE NO SCALE

Liberty Utilities

JAMES P. ELLIOTT DATE
SENIOR MANAGER, ENGINEERING

LIBERTY UTILITIES (PARK WATER)
9750 WASHBURN RD, DOWNEY, CA 90241

APPROVED: APPROVED:
SENIOR MANAGER, ENGINEERING DATE PRESIDENT, CALIFORNIA DATE

STOCKWELL/136TH/137TH/WILMINGTON (PHASE 1)
12" WATER MAIN INSTALLATION
CITY OF COMPTON

DETAIL (SATIVA) - PAULSEN AVE

SHEET
W-7
SHEET 10 OF 10
PROJECT # 11183010

APPENDIX R

SATIVA WATER SYSTEM'S
8-INCH WATER MAINS ALONG LUCIEN STREET

SATIVA LOS ANGELES COUNTY WATER DISTRICT

SATIVA - LUCIEN WATERLINE

PROJECT ID NO. DES0003233



LOCATION MAP
NOT TO SCALE

STATISTICS	
LENGTH OF 8" PVC WATERMAIN	1,011 ft
LENGTH OF 8" STEEL WATERMAIN	170 ft
WORKING WATER PRESSURE	70 PSI

REFERENCES
WATERMAIN SPECIFICATIONS
SATIVA LA COUNTY WATER DISTRICT SYSTEM MAP, 1968
SATIVA LA COUNTY WATER DISTRICT WATER LINE IMPROVEMENTS, 1972

SHEET INDEX	
SHT NO.	DESCRIPTION
1	TITLE SHEET, LEGEND, VICINITY AND KEY MAPS
2	GENERAL NOTES, MATERIAL LIST, AND UTILITY CROSSING DETAILS
3	PLAN, STA. 10+00 TO STA. 21+61
4	RR CROSSING EXHIBIT PLAN AND PROFILE
5	WATER SERVICE CONNECTION TABLE, UTILITY CROSSING TABLE, AND DETAILS
6	LOG OF BORINGS
7	CONE PENETRATION TESTS
8	TREE PROTECTION PLAN
TC	TRAFFIC CONTROL PLAN



KEY MAP
NOT TO SCALE

LEGEND	
PROPOSED WATER MAIN	
EXISTING WATER MAIN	
EXISTING SEWER	
EXISTING GAS LINE	
EXISTING TELEPHONE LINE	
EXISTING ELECTRICAL UNDERGROUND	
STREET CENTER LINE	
RIGHT OF WAY LINE	
PROPERTY LINE	
EDGE OF PAVEMENT	
EXISTING CHAIN LINK FENCE	
GATE VALVE	
TEE, FLANGED	
SERVICE CONNECTION	
FIRE HYDRANT 6" x 4" x 2 1/2"	
FLUSH OUT ASSEMBLY	

DESIGNED BY: C. CHEN
DRAWN BY: R. ORTIZ
CHECKED BY: R. ORDS
DES0003233_Sativa_Lucien_Waterline.dgn

811 Know what's below. Call before you dig.

APPROVED BY MARK PESTRELLA, DIRECTOR OF PUBLIC WORKS
COUNTY DIRECTOR — DATE 11/13/2019

ASSISTANT DEPUTY DIRECTOR — DATE 11/13/2019

SUBMITTED BY
DESIGN TEAM — DATE 11/19/2019

DATE	BY	DESCRIPTION
7/14/20	■	AS-BUILT REVISIONS

REVISIONS

PROJECT ENGINEER — DATE 7/29/2020

SATIVA LOS ANGELES COUNTY WATER DISTRICT

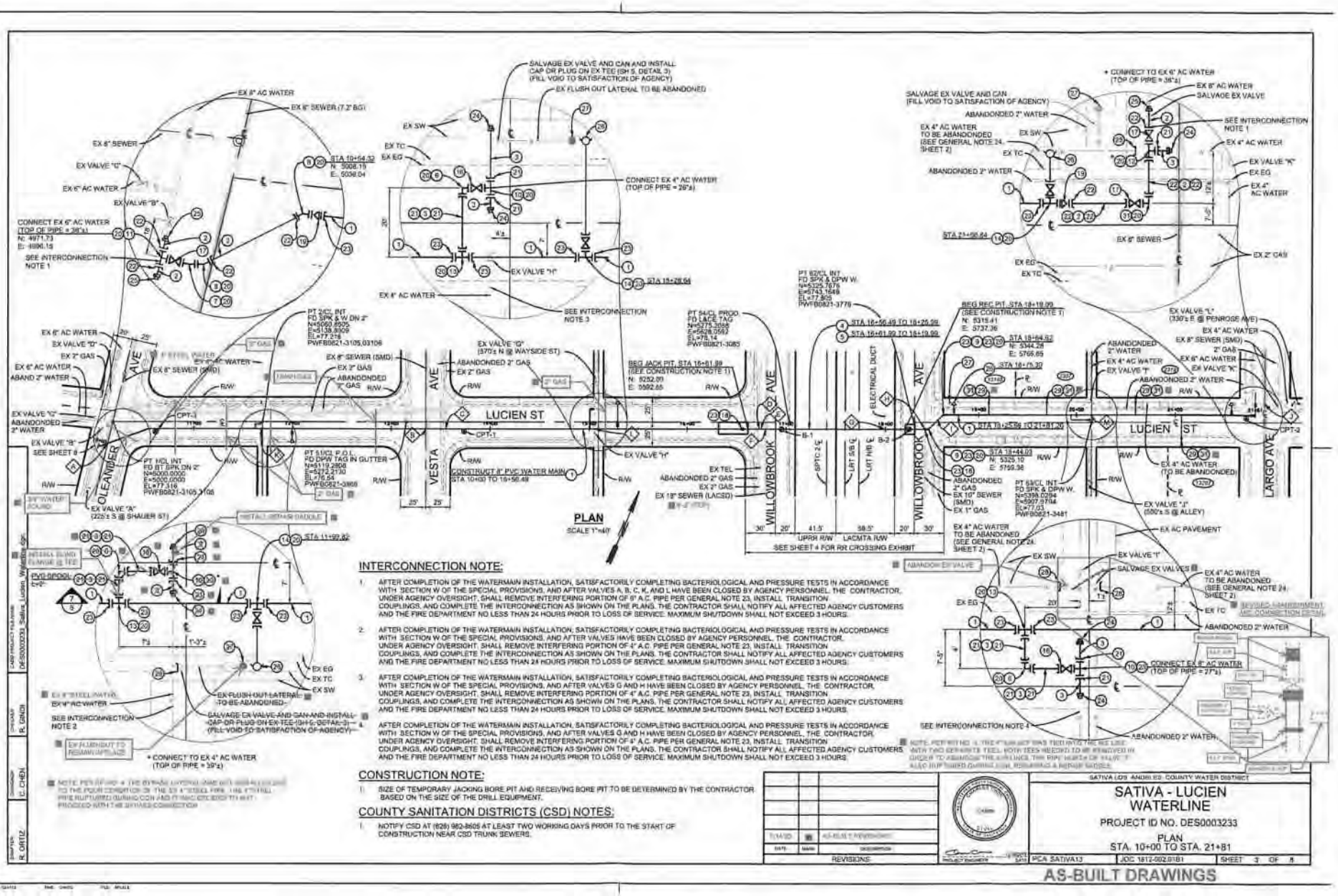
SATIVA - LUCIEN WATERLINE

PROJECT ID NO. DES0003233

TITLE SHEET, LEGEND, VICINITY AND KEY MAPS

PCA SATIVA13 | JOC 1812-002.01B1 | SHEET 1 OF 8

■ AS-BUILT DRAWINGS



INTERCONNECTION NOTE:

1. AFTER COMPLETION OF THE WATERMAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER VALVES A, B, C, K, AND L HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY OVERSIGHT, SHALL REMOVE INTERFERING PORTION OF 6" A.C. PIPE PER GENERAL NOTE 23, INSTALL TRANSITION COUPLINGS, AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 24 HOURS PRIOR TO LOSS OF SERVICE. MAXIMUM SHUTDOWN SHALL NOT EXCEED 3 HOURS.
2. AFTER COMPLETION OF THE WATERMAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER VALVES HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY OVERSIGHT, SHALL REMOVE INTERFERING PORTION OF 4" A.C. PIPE PER GENERAL NOTE 23, INSTALL TRANSITION COUPLINGS, AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 24 HOURS PRIOR TO LOSS OF SERVICE. MAXIMUM SHUTDOWN SHALL NOT EXCEED 3 HOURS.
3. AFTER COMPLETION OF THE WATERMAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER VALVES G AND H HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY OVERSIGHT, SHALL REMOVE INTERFERING PORTION OF 4" A.C. PIPE PER GENERAL NOTE 23, INSTALL TRANSITION COUPLINGS, AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 24 HOURS PRIOR TO LOSS OF SERVICE. MAXIMUM SHUTDOWN SHALL NOT EXCEED 3 HOURS.
4. AFTER COMPLETION OF THE WATERMAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER VALVES G AND H HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY OVERSIGHT, SHALL REMOVE INTERFERING PORTION OF 4" A.C. PIPE PER GENERAL NOTE 23, INSTALL TRANSITION COUPLINGS, AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 24 HOURS PRIOR TO LOSS OF SERVICE. MAXIMUM SHUTDOWN SHALL NOT EXCEED 3 HOURS.

CONSTRUCTION NOTE:

1. SIZE OF TEMPORARY JACKING BORE PIT AND RECEIVING BORE PIT TO BE DETERMINED BY THE CONTRACTOR BASED ON THE SIZE OF THE DRILL EQUIPMENT.

COUNTY SANITATION DISTRICTS (CSD) NOTES:

1. NOTIFY CSD AT (626) 962-8605 AT LEAST TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION NEAR CSD TRUNK SEWERS.

NOTE: PER NOTE 4, THE EXISTING 4" AC WATER LINE AND TEE WITH TWO SEPARATE TEES, WITH TEES NEEDED TO BE REMOVED IN ORDER TO ABANDON THE EXISTING 4" PIPE. REMOVE EXISTING 4" VALVE AND INSTALL NEW 6" VALVE. ALSO INSTALL CAP ON EXISTING 6" TEE. REMOVE EXISTING 4" PIPE AND REPLACE WITH 6" PIPE.

NOTE: PER NOTE 4, THE EXISTING 4" AC WATER LINE AND TEE WITH TWO SEPARATE TEES, WITH TEES NEEDED TO BE REMOVED IN ORDER TO ABANDON THE EXISTING 4" PIPE. REMOVE EXISTING 4" VALVE AND INSTALL NEW 6" VALVE. ALSO INSTALL CAP ON EXISTING 6" TEE. REMOVE EXISTING 4" PIPE AND REPLACE WITH 6" PIPE.

DESIGNED	R. ORTIZ	
DRAWN	E. CHEN	
CHECKED	R. GANOI	
CADD PROJECT FILE NAME	DES0003233_Sativa_Lucien_Waterline.dgn	

REVISIONS

SATIVA LOS ANGELES COUNTY WATER DISTRICT

SATIVA - LUCIEN WATERLINE

PROJECT ID NO. DES0003233

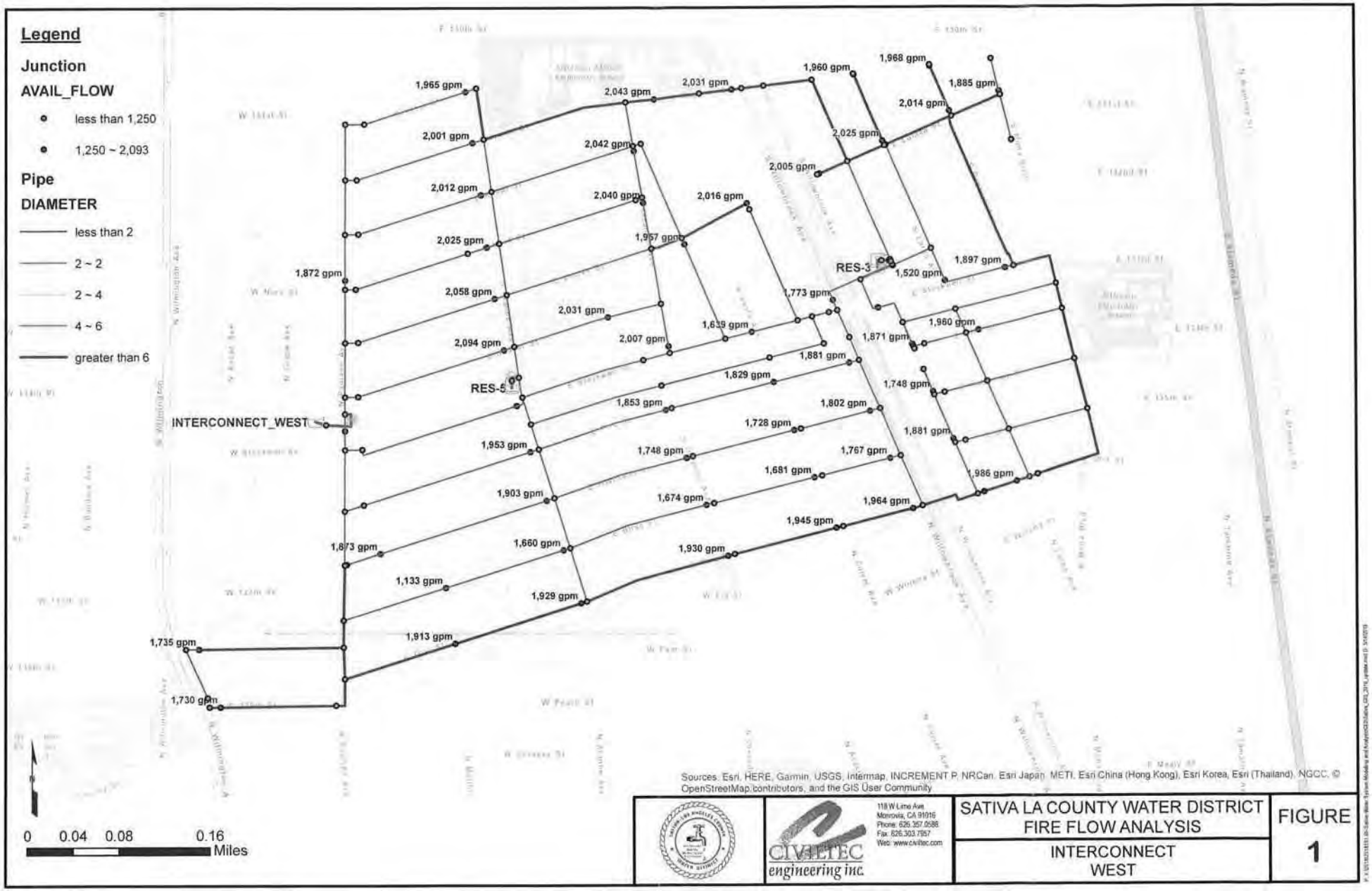
PLAN
STA. 10+00 TO STA. 21+81

PCA SATIVA13 | JOC 1812-982.8181 | SHEET 3 OF 8

AS-BUILT DRAWINGS

APPENDIX S

WEST SIDE INTERCONNECT SCENARIO (LIBERTY UTILITIES)


Legend
Junction
AVAIL_FLOW
less than 1,250
1,250 ~ 2,093
Pipe
DIAMETER
less than 2
2 ~ 2
2 ~ 4
4 ~ 6
greater than 6
INTERCONNECT_WEST
RES-5
RES-3
1,965 gpm
2,043 gpm
2,031 gpm
1,960 gpm
1,968 gpm
1,885 gpm
2,014 gpm
2,001 gpm
2,042 gpm
2,025 gpm
2,005 gpm
2,012 gpm
2,040 gpm
2,016 gpm
2,025 gpm
1,957 gpm
1,872 gpm
1,897 gpm
1,520 gpm
2,058 gpm
1,773 gpm
2,031 gpm
1,960 gpm
1,639 gpm
1,871 gpm
2,094 gpm
2,007 gpm
1,881 gpm
1,829 gpm
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1,853 gpm
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1,903 gpm
1,674 gpm
1,964 gpm
1,945 gpm
1,873 gpm
1,660 gpm
1,930 gpm
1,133 gpm
1,929 gpm
1,913 gpm
1,735 gpm
1,730 gpm
0 0.04 0.08 0.16
Miles
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community
CIVILTEC engineering inc.
118 W Lime Ave
Monrovia, CA 91016
Phone: 626.357.0588
Fax: 626.303.7957
Web: www.civiltec.com
SATIVA LA COUNTY WATER DISTRICT
FIRE FLOW ANALYSIS
INTERCONNECT WEST
FIGURE 1

APPENDIX T

GROUNDWATER WELLS MONITORING MATRIX: 2020-2022 VULNERABILITY ASSESSMENT AND MONITORING FREQUENCY GUIDELINES FOR WELLS 3 AND 5

State Water Resources Control Board
Division of Drinking Water

December 30, 2019

Russ Bryden
Sativa-L.A. CWD
2015 East Hatchway Street
Compton, CA 90222

Dear Russ Bryden:

SYSTEM NO. 1910147: FIRST PERIOD VULNERABILITY ASSESSMENTS (January 1, 2020 through December 31, 2022)

The 1st three-year compliance period (from January 1, 2020 to December 31, 2022) of the fourth nine-year compliance cycle (from January 1, 2020 to December 31, 2028) is around the corner.

Fourth Compliance Cycle									Fifth Compliance Cycle								
1st Period			2nd Period			3rd Period			1st Period			2nd Period			3rd Period		
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037

In August 2019, the State Water Resources Control Board, Division of Drinking Water (Division) sent a letter to all community and non-transient non-community water systems requesting that each water system return a completed application in order to receive contaminant monitoring waivers for the 1st Period of the Fourth Compliance Cycle. 1,2,3-Trichloropropane was not included in this waiver application process as we had informed you in July 2019 of the next monitoring frequency based on the review of the initial monitoring data.

Based on the applications we received, an evaluation was conducted, and monitoring frequencies were adjusted for the contaminants that the waiver request was granted. We have assigned the following classification(s) for your existing source(s) of supply:

LGLJ

The list of your source(s) and the designated source class code(s) is provided in Enclosure 1.

The monitoring frequencies for the 1st Period of the Fourth Compliance Cycle are outlined in the attached Vulnerability Assessment and Monitoring Frequency Guidelines (VAMFG) (Enclosure 2). You may receive multiple VAMFGs, if you have sources assigned to different source classes. Each VAMFG provides a summary and outlines the general Title 22 monitoring requirements for your quick reference. The VAMFG(s) does not thoroughly address the specific Title 22 monitoring requirements pertaining to initial monitoring, follow-up sampling after detection, reduced monitoring, etc. For clarification on these issues, please consult the applicable regulations or contact our office. In addition, the monitoring frequencies indicated in the VAMFG(s) do not apply to sources that exceed an MCL, or those sources subject to additional monitoring as required by the Division due to treatment operations or detections of constituents at levels of concern.

The following are some highlights of the monitoring requirements for the 1st Period of the Fourth Compliance Cycle:

- **ASBESTOS**

  Distribution System – If your water system has asbestos-cement pipes and has applied for an asbestos waiver for the 1st Period of the Fourth Compliance Cycle, you will be informed of the Division's decision in a separate letter shortly.

  If your water system has asbestos cement pipes and did not apply for an asbestos waiver for 1st Period of the Fourth Compliance Cycle, you will need to collect an asbestos sample by December 31, 2022.

- **SYNTHETIC ORGANIC CHEMICALS (SOCs)**

  Groundwater – For those SOCs that were granted a waiver, monitoring is not required during the 1st Period of the Fourth Compliance Cycle. *For any SOCs that were not granted a waiver, monitoring will be required by collecting **two quarterly samples in one year during 2020-2022** for large water systems (serving > 3,300 people) or **one sample during the same period** for small water systems (serving ≤ 3,300 people).*

  Standby Sources – For those SOCs that were granted a waiver, monitoring is not required during the 1st Period of the Fourth Compliance Cycle. For any SOCs that were not granted a waiver, monitoring will be required by sampling once during this nine-year cycle (January 2020 to December 2028).

- **THIOBENCARB**

Groundwater – The letter the Division sent in August 2019 also included information to allow water systems to apply for a Thiobencarb waiver for the 1st Period of the Fourth Compliance Cycle. The Division has completed the review of all Thiobencarb waiver requests. Please see the Thiobencarb Table attached to the VAMFG(s) to see which source(s) received a monitoring waiver. If your waiver request was approved, you do not need to conduct Thiobencarb monitoring for that particular source during 2020-2022. Otherwise, please refer to the VAMFG(s) for the monitoring frequency.

- **PERCHLORATE**

Groundwater – After completion of the initial monitoring and if not detected, the minimum monitoring frequency for perchlorate is one sample every three years. However, based on an extensive history of perchlorate monitoring showing widespread detections in Los Angeles County, the monitoring frequency for some areas was/will be increased to one sample every year. The Perchlorate Table attached to the VAMFG(s) indicates which source(s) needs annual perchlorate monitoring. You are not required to conduct annual monitoring if a Perchlorate Table is not attached to the VAMFG(s).

- **RADIONUCLIDE RULE**

Compliance determinations with the radionuclide maximum contaminant levels (MCLs) and monitoring requirements should be conducted in accordance with Section 64442, Title 22, California Code of Regulations. Each applicable regulated radionuclide must be monitored in accordance with the minimum monitoring frequencies of the standardized monitoring framework (i.e., 9-year cycle consisting of three 3-year periods). Therefore, uranium, radium-226 (Ra-226), radium-228 (Ra-228), and combined radium 226 and 228 must be monitored **at least once per 9-year cycle**. You are required to monitor for radionuclides in accordance with the enclosed VAMFG(s) for your sources.

General Notes 1 and 2 apply to Community Water Systems only

General Note 1: The MCL of 5 pCi/L applies to combined radium 226 and 228. It is recommended that if radium-226 and radium-228 are on different monitoring frequencies, the specific radium isotope that requires monitoring the soonest should dictate that the other isotope be monitored at the same time.

General Note 2: When using a gross alpha particle activity measurement in lieu of a radium-226 and/or uranium measurement, the gross alpha particle activity analytical result should be used to determine the future monitoring frequency for radium-226 and/or uranium. If the gross alpha particle activity result is less than

detection, use ½ the detection limit (DLR) to determine compliance and the future monitoring frequency for radium-226 and/or uranium.

General Note 3 applies to NTNC water systems only

General Note 3: Section 64442(b)(3) states that NTNCs "shall monitor for compliance with the combined radium MCL" using EPA method 903.0, the method used to determine Total Alpha Radium (A-080). Further, Section 64442(h)(3)(c) discusses the compliance determinations with the radionuclide MCLs. It states that when gross alpha is being used in lieu of combined radium and/or uranium, ½ the DLR shall be used to calculate the annual average. The same method of using ½ the DLR is to be used in determining subsequent monitoring requirements for combined radium and/or uranium.

Regulations for new chemicals are frequently being adopted. As this occurs, we will notify you. If you have any questions, please contact Ofelia Oracion at 818-551-2020 or me at 818-551-2045. You may also obtain additional information from the Division's website http://www.waterboards.ca.gov/drinking_water/programs.

Sincerely,

Shu-Fang Orr

Shu-Fang Orr, P.E.
District Engineer
Angeles District

Enclosures (2): Source Class Code List
Vulnerability Assessment & Monitoring Frequency Guidelines

CC: Russ Bryden
General Manager

Jose Molina
Chief Operator

Pedro Campos
Field Supervisor

California State Water Resources Control Board - Division of Drinking Water
Enclosure 1 - **Source Class List**
First Period of the Fourth Compliance Cycle (2020-2022)

Water System Number	Water System Name	PS CODE	Source Name	Source Class Code
1910147	SATIVA-L.A. CWD	1910147-002	WELL 03	LGLJ
1910147	SATIVA-L.A. CWD	1910147-005	WELL 05	LGLJ

STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING WATER (DDW)
Vulnerability Assessment and Monitoring Frequency Guidelines
Source Class Code: LGLJ, Community Water System, Groundwater, Population > 3300
Monitoring Period: January 1, 2020 to December 31, 2022

INORGANIC CHEMICALS Table 64431-A	MCL (mg/L)	Vulnerability	Monitoring Frequency
Aluminum (See Also Secondary Standards)	1.	N/A	Every Three Years
Antimony	0.006	N/A	Every Three Years
Arsenic	0.010	N/A	Every Three Years
Asbestos	7 MFL*	Non-Vulnerable Vulnerable	Waived Once during this period if your source(s) is listed in the Asbestos Table[1]
Barium	1.	N/A	Every Three Years
Beryllium	0.004	N/A	Every Three Years
Cadmium	0.005	N/A	Every Three Years
Chromium	0.05	N/A	Every Three Years
Cyanide	0.15	Vulnerable	Every Three Years
Fluoride	2.0	N/A	Every Three Years
Mercury	0.002	N/A	Every Three Years
Nickel	0.1	N/A	Every Three Years
Nitrate (as Nitrogen)	10.	N/A	Annually if < 1/2 MCL Quarterly if ≥ 1/2 MCL but ≤ MCL
Nitrite (as Nitrogen)	1.0	N/A	Every Three Years if < 1/2 MCL Quarterly if ≥ 1/2 MCL but ≤ MCL
Perchlorate	0.006	N/A	Every Three Years Annually if your source(s) is listed in the Perchlorate Table[2] Quarterly if ≥ DLR but ≤ MCL
Selenium	0.05	N/A	Every Three Years
Thallium	0.002	N/A	Every Three Years

*MFL - Million fibers per liter; MCL for fibers exceeding 10 um in length

[1]DDW has determined certain sources to be vulnerable to asbestos contamination due to a review of USGS information. The enclosed Asbestos Table indicates which source is vulnerable to asbestos. You do not need to conduct monitoring if an Asbestos Table is not enclosed.

[2]DDW requires some sources to have annual perchlorate monitoring due to known contamination. The enclosed Perchlorate Table indicates which source needs annual perchlorate monitoring. You do not need to conduct annual monitoring if a Perchlorate Table is not enclosed.

[3]If you submitted a waiver request for Thiobencarb, please refer to the enclosed Thiobencarb Table for monitoring requirements.

GENERAL MINERAL Section 64449 (b)(2)	MCL (mg/L)	Vulnerability	Monitoring Frequency
Bicarbonate Alkalinity	---	N/A	Every Three Years
Calcium	---	N/A	Every Three Years
Carbonate Alkalinity	---	N/A	Every Three Years
Hydroxide Alkalinity	---	N/A	Every Three Years
Magnesium	---	N/A	Every Three Years
Sodium	---	N/A	Every Three Years
Total Hardness	---	N/A	Every Three Years
pH	---	N/A	Every Three Years
SECONDARY STANDARDS Tables 64449-A	**MCL (mg/L)**	**Vulnerability**	**Monitoring Frequency**
Aluminum	0.2 mg/L	N/A	Every Three Years
Color	15 Units	N/A	Every Three Years
Copper	1.0 mg/L	N/A	Every Three Years
Foaming Agents (MBAS)	0.5 mg/L	N/A	Every Three Years
Iron	0.3 mg/L	N/A	Every Three Years
Manganese	0.05 mg/L	N/A	Every Three Years
Odor - Threshold	3 Units	N/A	Every Three Years
Silver	0.1 mg/L	N/A	Every Three Years
Thiobencarb	0.001 mg/L	N/A	Follow monitoring requirement in Table 64444-A Part (b)
Turbidity	5 NTU	N/A	Every Three Years
Zinc	5.0 mg/L	N/A	Every Three Years
Methyl-*tert*-butyl ether (MTBE)	0.005 mg/L	N/A	Follow monitoring requirement in Table 64444-A Part (a)
SECONDARY STANDARDS Tables 64449-B	**MCL (mg/L)**	**Vulnerability**	**Monitoring Frequency**
Total Dissolved Solids (TDS)	500-1000 mg/L	N/A	Every Three Years
Specific Conductance	900 - 1600 umhos	N/A	Every Three Years
Chloride	250-500 mg/L	N/A	Every Three Years
Sulfate	250-500 mg/L	N/A	Every Three Years
RADIONUCLIDES Sections 64442 and 64443	**MCL (pCi/L)**	**Vulnerability**	**Monitoring Frequency**
Gross Alpha Particle Activity	15	**At a minimum all regulated isotopes must be monitored at least once per 9-year cycle.** Based on your last round of monitoring results • < DLR, collect 1 sample in 9 years • ≥ DLR but ≤ 1/2 MCL, collect 1 sample in 6 years • > 1/2 MCL but ≤ MCL, collect 1 sample in 3 years	
Combined Radium-226 and Radium-228	5		
Uranium	20		
Tritium	20,000	Non-Vulnerable, unless notified by DDW	Waived, unless notified by DDW
Strontium	8		
Beta/photon emitters	4 millirem/year		

Ex. B - 190

VOLATILE ORGANIC CHEMICALS (VOCs) Table 64444-A Part (a)	MCL (mg/L)	Vulnerability	Monitoring Frequency
Benzene	0.001	Vulnerable	**Annually** **Quarterly if ≥ DLR but ≤ MCL** **Monthly if > MCL**
Carbon Tetrachloride	0.0005	Vulnerable	As Above
1,2-Dichlorobenzene	0.6	Vulnerable	As Above
1,4-Dichlorobenzene	0.005	Vulnerable	As Above
1,1-Dichloroethane	0.005	Vulnerable	As Above
1,2-Dichloroethane	0.0005	Vulnerable	As Above
1,1-Dichloroethylene	0.006	Vulnerable	As Above
cis-1,2-Dichloroethylene	0.006	Vulnerable	As Above
trans-1,2-Dichloroethylene	0.01	Vulnerable	As Above
Dichloromethane	0.005	Vulnerable	As Above
1,2-Dichloropropane	0.005	Vulnerable	As Above
1,3-Dichloropropene	0.0005	Vulnerable	As Above
Ethylbenzene	0.3	Vulnerable	As Above
Methyl-*tert*-butyl ether (MTBE)	0.013	Vulnerable	As Above
Monochlorobenzene	0.07	Vulnerable	As Above
Styrene	0.1	Vulnerable	As Above
1,1,2,2-Tetrachloroethane	0.001	Vulnerable	As Above
Tetrachloroethylene	0.005	Vulnerable	As Above
Toluene	0.15	Vulnerable	As Above
1,2,4-Trichlorobenzene	0.005	Vulnerable	As Above
1,1,1-Trichloroethane	0.200	Vulnerable	As Above
1,1,2-Trichloroethane	0.005	Vulnerable	As Above
Trichlorofluoromethane	0.15	Vulnerable	As Above
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2	Vulnerable	As Above
Trichloroethylene	0.005	Vulnerable	As Above
Vinyl Chloride	0.0005	Vulnerable	As Above
Xylenes	1.750	Vulnerable	As Above

SYNTHETIC ORGANIC CHEMICALS (SOCs) Table 64444-A Part (b)	MCL (mg/L)	Vulnerability	Monitoring Frequency
Alachlor	0.002	Non-Vulnerable	Waived
Atrazine	0.001	Non-Vulnerable	Waived
Bentazon	0.018	Non-Vulnerable	Waived
Benzo (a) pyrene	0.0002	Non-Vulnerable	Waived
Carbofuran	0.018	Non-Vulnerable	Waived
Chlordane	0.0001	Non-Vulnerable	Waived
2,4-D	0.07	Non-Vulnerable	Waived
Dalapon	0.2	Non-Vulnerable	Waived
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	Non-Vulnerable	Waived
Di (2-ethylhexyl) adipate	0.4	Non-Vulnerable	Waived
Di (2-ethylhexyl) phthalate (DEHP)	0.004	Vulnerable	Two quarterly samples in one year during this period
Dinoseb	0.007	Non-Vulnerable	Waived
Diquat	0.02	Non-Vulnerable	Waived
Endothall	0.1	Non-Vulnerable	Waived
Endrin	0.002	Non-Vulnerable	Waived
Ethylene Dibromide (EDB)	0.00005	Non-Vulnerable	Waived
Glyphosate	0.7	Non-Vulnerable	Waived
Heptachlor	0.00001	Non-Vulnerable	Waived
Heptachlor Epoxide	0.00001	Non-Vulnerable	Waived
Hexachlorobenzene	0.001	Non-Vulnerable	Waived
Hexachlorocyclopentadiene	0.05	Non-Vulnerable	Waived
Lindane	0.0002	Non-Vulnerable	Waived
Methoxychlor	0.03	Non-Vulnerable	Waived
Molinate	0.02	Non-Vulnerable	Waived
Oxamyl (Vydate)	0.05	Non-Vulnerable	Waived
Pentachlorophenol	0.001	Non-Vulnerable	Waived
Picloram	0.5	Non-Vulnerable	Waived
Polychlorinated Biphenyls (PCBs)	0.0005	Non-Vulnerable	Waived
Simazine	0.004	Non-Vulnerable	Waived
Thiobencarb	0.07	Refer to "Thiobencarb Table"[3]	Vulnerable-Two quarterly samples in one year during this period Waived-No Samples required in this period
Toxaphene	0.003	Non-Vulnerable	Waived
2,3,7,8-TCDD (Dioxin)	$3x10^{-8}$	Non-Vulnerable	Waived
2,4,5-TP (Silvex)	0.05	Non-Vulnerable	Waived
1,2,3-Trichloropropane (1,2,3-TCP)	0.000005	Vulnerable	Refer to the July 2019 1,2,3-TCP Letter or contact your assigned engineer

California State Water Resources Control Board - Division of Drinking Water

Thiobencarb Monitoring

First Period of Fourth Compliance Cycle (2020-2022)

If the source is eligible for a Thiobencarb waiver (as noted with a **"YES"** in the table below), then no samples are required for this period (2020-2022).
If the source is not eligible a Thiobencarb waiver (as noted with a **"NO"** in the table below), please refer to your VAMFG.

Water System Number	Water System Name	PS Code	Source Name	Source Class Code	Source Waived for Thiobencarb Monitoring
1910147	SATIVA-L.A. CWD	1910147-002	WELL 03	LGLJ	YES
1910147	SATIVA-L.A. CWD	1910147-005	WELL 05	LGLJ	YES

California State Water Resources Control Board - Division of Drinking Water

Perchlorate Monitoring

First Period of the Fourth Compliance Cycle (2020-2022)

- The source(s) listed on this table must be sampled at least once annually.
- Quarterly sampling is required if a sample result is ≥ DLR but ≤ MCL.
- More frequent monitoring may be required per your permit condition, or if instructed to do so by the Division.

System Number	System Name	PS Code	Source Name	Source Class Code	Minimum Perchlorate Monitoring Sampling
1910147	SATIVA-L.A. CWD F	1910147-002	WELL 03	LGLJ	ANNUAL
1910147	SATIVA-L.A. CWD F	1910147-005	WELL 05	LGLJ	ANNUAL

APPENDIX U

SUMMARY OF MONITORING DATA FROM THE DIVISION'S WATER QUALITY DATABASE FROM JANUARY 1, 1994 TO NOVEMBER 30, 2020 FOR WELLS 3 AND 5

TITLE 22 WATER QUALITY MONITORING REVIEW

SYSTEM NAME:	**Sativa Water System**	SYSTEM NUMBER:	**1910147**
SOURCE NAME:	**Well 3**	PS CODE:	**1910147-002**
SOURCE CLASS:	**LGLJ**	STATUS:	**Active**
PERIOD FROM:	**January 1, 1994**	PERIOD TO:	**November 30, 2020**
PREPARED BY:	**Ofelia Oracion**	DATE:	**December 11, 2020**

1. INORGANIC CHEMICALS (Table 64431-A)

Constituents	MCL[1] (mg/L)	DLR[2] (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aluminum	1	.05	NDs[3] - .067	10/2019	ND	3	10/2022	1 data >DLR (9/1996)
Antimony	0.006	0.006	NDs	10/2019	ND	3	10/2022	
Arsenic	0.01	0.002	ND – 0.0026	10/2019	0.0023	3	10/2022	1st >DLR (9/1996)
Asbestos	7 MFL	0.2 MFL	ND	10/2016	ND	-	TBD[4]	Waived.[5]
Barium	1	0.1	0.11 – 0.12	10/2019	0.11	3	10/2022	
Beryllium	0.004	0.001	NDs	10/2019	ND	3	10/2022	
Cadmium	0.005	0.001	NDs	10/2019	ND	3	10/2022	
Chromium, Total	0.05	0.01	NDs – 0.0107	10/2019	ND	3	10/2022	I data >DLR (7/1999)
Chromium VI	-	0.001	NDs	10/2014	ND	-	-	
Cyanide	0.15	0.1	NDs	10/2019	ND	3	10/2022	
Fluoride	2	0.1	0.31 – 0.44	10/2019	0.34	3	10/2022	
Lead	-	0.005	NDs	10/2019	ND	-	-	
Mercury	0.002	0.001	ND - <1.0	10/2019	ND	3	10/2022	
Nickel	0.1	0.01	NDs	10/2019	ND	3	10/2022	
Nitrate (as NO_3)	45	2	ND – 5.1	10/2015	3.2	-	-	
Nitrate (as N)	1	0.4	NDs – 0.73	7/2020	0.45	1[6]	7/2021	
Nitrite (as N)	1	0.4	NDs	10/2019	ND	3[6]	10/2022	
Nitrate + Nitrite (as N)	10	-	0.78 – 0.91	10/2013	0.91	-	-	
Perchlorate	0.006	0.004	NDs	7/2020	ND	1[7]	7/2021	
Selenium	0.05	0.005	NDs	10/2019	ND	3	10/2022	
Thallium	0.002	0.002	NDs	10/2019	ND	3	10/2022	

1 MCL – maximum contaminant level
2 DLR – detection limit for purposes of reporting
3 ND - non-detect
4 To be determined
5 Monitoring for asbestos is waived during the first period (2020-2022) of the fourth compliance cycle (2020-2028).
6 Increase to quarterly monitoring if ≥ ½ MCL.
7 Increase to quarterly monitoring if ≥ DLR.

2. GENERAL MINERAL (Section 64449 (c)(2))

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aggressive Index	-	-	12 – 13	10/2019	12.4	-	-	
Alkalinity as $CaCO_3$	-	-	160 - 200	10/2019	190	-	-	
Bicarbonate Alkalinity	-	-	160 –240	10/2019	230	3	10/2022	
Calcium	-	-	69 – 85.9	10/2019	77	3	10/2022	
Carbonate Alkalinity	-	-	NDs - <2.4	10/2019	ND	3	10/2022	
Hydroxide Alkalinity	-	-	NDs - <1.4	10/2019	ND	3	10/2022	
Magnesium	-	-	14 – 18.7	10/2019	17	3	10/2022	
Sodium	-	-	38 – 43.1	10/2019	39	3	10/2022	
Total Hardness	-	-	230 – 291	10/2019	260	3	10/2022	
pH, Laboratory	-	-	7.52 – 8.08	10/2019	7.84	3	10/2022	

3. SECONDARY STANDARDS (Tables 64449-A and B)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aluminum[1]	0.2	0.05	ND - .067	-	-	-	-	See Table 64431-A
Color	15 Units	-	NDs	10/2019	ND	3	10/2022	
Copper	1	0.05	NDs	10/2019	ND	3	10/2022	
Foaming Agents (MBAS)	0.5	-	NDs	10/2019	ND	3	10/2022	
Iron	0.3	0.1	ND – 0.17	10/2019	ND	3	10/2022	
Manganese	0.05	0.02	NDs	10/2020	ND	3	10/2023	
Odor-Threshold	3 Units	1	ND - 1	10/2019	1	3	10/2022	>DLR (1996, 1999 & 2002)
Silver	0.1	0.01	NDs	10/2019	ND	3	10/2022	
Thiobencarb[2]	0.001	-	NDs	-	-	-	-	See Table 64444-A part b
Turbidity	5 NTU	-	ND – 0.57	10/2019	ND	3	10/2022	
Zinc	5	0.05	NDs	10/2019	ND	3	10/2022	
MTBE[3]	0.005	0.003	NDs	-	-	-	-	See Table 64444-A part a
Total Dissolved Solids	500-1000	-	310 – 450	10/2019	360	3	10/2022	
Specific Conductance	900-1600 µS/cm	-	630 – 690	10/2019	680	3	10/2022	
Chloride	250-500	-	36 - 43	10/2019	49	3	10/2022	
Sulfate	250-500	-	86 - 100	10/2019	99	3	10/2022	

1 Monitoring frequency for aluminum follows the monitoring requirement for primary MCL
2 Monitoring frequency for thiobencarb follows the monitoring requirement for primary MCL.
3 Methyl-*tert*-butyl ether. Monitoring frequency for MTBE follows the monitoring requirement for primary MCL.

4. RADIONUCLIDES (Sections 64441 and 64443)

Constituents	MCL (pCi/L)	DLR (pCi/L)	Concentration Ranges (pCi/L)	Monitoring				REMARKS
				Last	Result (pCi/L)	Frequency (Years)	Next Due by	
Gross Alpha	15	3	3.7 – 10.1	1/2015	5.94	6	1/2021	
Radium-226	5[1]	1	NDs	1/2015	ND	9	1/2024	Monitor when triggered.[2]
Radium-228	5[1]	1	NDs	1/2015	ND	9	1/2024	Monitor when triggered.[3]
Uranium	20	2	3.04 – 6.9	1/2015	5.5	6	1/2021	
Tritium	20000	1000	-	-	-	-	-	Waived
Strontium	8	2	-	-	-	-	-	Waived

1 Combined radium-226 & -228
2 Sample the well if gross alpha particle activity (GA + 0.84 x counting error) minus uranium exceeds 5-pCi/L. Otherwise, follow monitoring frequency.
3 When the source calls to sample for Rad-226, sample for Rad-228 should be collected at the same time.

5. VOLATILE ORGANIC CHEMICALS (Table 64444-A part a)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Benzene	0.001	0.0005	NDs	7/2020	ND	1	7/2021	
Carbon Tetrachloride	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
1,2-Dichlorobenzene	0.6	0.0005	NDs	7/2020	ND	1	7/2021	
1,4-Dichlorobenzene	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1-Dichloroethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,2-Dichloroethane	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1-Dichloroethylene	0.006	0.0005	NDs	7/2020	ND	1	7/2021	
cis-1,2-Dichloroethylene	0.006	0.0005	NDs	7/2020	ND	1	7/2021	
trans-1,2-Dichloroethylene	0.01	0.0005	NDs	7/2020	ND	1	7/2021	
Dichloromethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
1,2-Dichloropropane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,3-Dichloropropene	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
Ethylbenzene	0.3	0.0005	NDs	7/2020	ND	1	7/2021	
MTBE	0.013	0.003	NDs	7/2020	ND	1	7/2021	
Monochlorobenzene	0.07	0.0005	NDs	7/2020	ND	1	7/2021	
Styrene	0.1	0.0005	NDs	7/2020	ND	1	7/2021	
1,1,2,2-Tetrachloroethane	0.001	0.0005	NDs	7/2020	ND	1	7/2021	
Tetrachloroethylene (PCE)	0.005	0.0005	NDs – 0.0014	10/2020	0.0008	Quarterly	1st Quarter 2021	Quarterly monitoring was initiated in 8/2009. PCE has been >DLR.
Toluene	0.15	0.0005	NDs	7/2020	ND	1	7/2021	
1,2,4-Trichlorobenzene	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1,1-Trichloroethane	0.2	0.0005	NDs	7/2020	ND	1	7/2021	
1,1,2-Trichloroethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
Trichlorofluoromethane	0.15	0.005	NDs	7/2020	ND	1	7/2021	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2	0.01	NDs	7/2020	ND	1	7/2021	
Trichloroethylene	0.005	0.0005	NDs	10/2020	ND	Quarterly	1st Quarter 2021	
Vinyl Chloride	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
Xylenes	1.75	0.0005	NDs	7/2020	ND	1	7/2021	

6. SYNTHETIC ORGANIC CHEMICALS (Table 64444-A part b)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Alachor	0.002	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Atrazine	0.001	0.0005	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Bentazon	0.018	0.002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Benzo (a)pyrene	0.0002	0.0001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Carbofuran	0.018	0.005	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Chlordane	0.0001	0.0001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
2,4-D	0.07	0.01	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Dalapon	0.2	0.1	NDs	7/2011	ND		TBD[1]	Waived[2]
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Di (2-ethylhexyl) adipate	0.4	0.005	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Di (2-ethylhexyl) phthalate (DEHP)	0.004	0.003	NDs	7/2018 10/2018	ND ND	2 quarters in one year every 3 years	2021	
Dinoseb	0.007	0.002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Diquat	0.02	0.004	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Endothall	0.1	0.045	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Endrin	0.002	0.0001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Ethylene Dibromide (EDB)	0.00005	0.00002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Glyphosate	0.7	0.025	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Heptachlor	0.00001	0.00001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Heptachlor Epoxide	0.00001	0.00001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Hexachlorobenzene	0.001	0.0005	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Hexachlorocyclopentadiene	0.05	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Lindane	0.0002	0.0002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Methoxychlor	0.03	0.01	NDs	7/2011	ND	-	TBD[1]	Waived[2]

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Molinate	0.02	0.002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Oxamyl (Vydate)	0.05	0.02	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Pentachlorophenol	0.001	0.0002	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Picloram	0.5	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Polychlorinated Biphenyls (PCBs) (as decachlorobiphenyl)	0.0005	0.0005	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Simazine	0.004	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Thiobencarb	0.07	0.001	NDs	7/2018 10/2018	ND ND	-	TBD[1]	Waived[3]
Toxaphene	0.003	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]
1,2,3-Trichloropropane	0.000005	0.000005	NDs	7/2019	ND	2 quarters in one year every 3 years	2021	Initial monitoring completed in 10/2018.
2,3,7,8-TCDD (Dioxin)	$3x10^{-8}$	$5x10^{-9}$	NDs	7/2011	ND	-	TBD[1]	Waived[2]
2,4,5-TP (Silvex)	0.05	0.001	NDs	7/2011	ND	-	TBD[1]	Waived[2]

1 To be determined

2 Monitoring is waived during the first period (2020-2022) of the fourth compliance cycle (2020-2028).

7. TRIHALOMETHANES

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Total Trihalomethanes	0.08	-	ND – 0.0049	7/2020	ND	-	-	

8. UNREGULATED CHEMICALS WITH MONITORING REQUIREMENTS (Table 64450)

Monitoring for unregulated chemicals listed in the table below had been phased out in December 2003. However, if monitoring requirements were not met, the water systems were given the chance to complete the monitoring in December 2007. Monitoring consists of two consecutive samples five to seven months apart in a single year.

Constituents	NL[1] (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Boron[2]	1	0.10	0.10 -0.11	12/2001	0.11	-	-	
Vanadium[2]	0.05	0.003	0.003 - 0.0032	12/2001	0.003	-		
Dichlorodifluoromethane (Freon 12)[2]	1	0.0005	NDs	7/2020	ND	-	-	
Ethlyl-*Tert*-Butly Ether (ETBE)[3]	N/A	0.003	NDs	7/2020	ND	-	-	Waived.
Tert-Amyl Methyl Ether (TAME)[3]	N/A	0.003	NDs	7/2020	ND	-	-	Waived.
Tert-Butyl Alcohol (TBA)[3]	0.012	0.002	NDs	2/2008	ND	-	-	Waived.

1 NL – notification level

2 Monitoring requirement was completed

3 Monitoring was walved If MTBE was non-detected.

9. OTHER UNREGULATED CHEMICALS WITH NOTIFICATION LEVELS

The following table provides for list of contaminants with notification levels. When concentrations are found greater than these levels, certain requirement and recommendations apply.

Constituents	NL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
N-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
Sec-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
Tert-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	

Constituents	NL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Carbon disulfide	0.16	0.0005	ND	8/2006	ND	-	-	
Chlorate	0.8	-	-	-	-	-	-	No record.
2-Chlorotoluene	0.14	0.0005	NDs	7/2020	ND	-	-	
4-Chlorotoluene	0.014	0.0005	NDs	7/2020	ND	-	-	
Diazinon	0.0012	0.0012	ND	12/1995	ND	-	-	
1,4-Dioxane	0.001	0.001	ND - **0.0074**[1]	10/2020	ND	Quarterly	1st Quarter 2021	
Ethylene glycol	14	-	-	-		-	-	No record.
Formaldehyde	0.1	-	-	-	-	-	-	No record.
HMX	0.35	-	-	-	-	-	-	No record.
Isopropylbenzene	0.77	0.0005	NDs	7/2020	ND	-	-	
Methyl isobutyl ketone (MIBK)	0.12	0.005	NDs	7/2020	ND	-	-	
Naphthalene	0.017	0.0005	NDs	7/2020	ND	-	-	
N-Nitrosodiethyamine (NDEA)	0.00001	-	-	-	-	-	-	No record.
N-Nitosodimethlamine (NDMA)	0.00001	-	-	-	-	-	-	No record.
N-Nitrosodi-n-propylamine (NDPA)	0.00001	-	-	-	-	-	-	No record.
Propachlor	0.09	-	-	-	-	-	-	No record.
N-Propylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
RDX	0.0003	-	-	-	-	-	-	No record.
1,2,4-Trimethylbenzene	0.33	0.0005	NDs	7/2020	ND	-	-	
1,3,5-Trimethlybenzene	0.33	0.0005	NDs	7/2020	ND	-	-	
2,4,6-Trinitrotoluene (TNT)	0.001	-	-	-	-	-	-	No record.

[1] Public notification is required.

10. OTHER PHASED-OUT UNREGULATED CHEMICALS

Table 64450 A Unregulated VOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromobenzene	-	0.0005	NDs	7/2020	ND	-	-	
Bromodichlormethane (THM)	0.08	0.001	NDs	7/2020	ND	-	-	
Bromoform (THM)	0.08	0.001	NDs – 0.0021	7/2020	ND	-	-	
Bromomethane	-	0.0005	NDs	7/2020	ND	-	-	
Chlorodibromomethane (THM)	0.08	0.001	NDs – 0.0014	7/2020	ND	-	-	
Chloroethane	-	0.0005	NDs	7/2020	ND	-	-	
Chloroform (THM)	0.08	0.001	NDs – 0.0032	7/2020	ND	-	-	
Chloromethane	-	0.0005	NDs	7/2020	ND	-	-	
Dibromomethane	-	0.0005	NDs	7/2020	ND	-	-	
1,3-Dichlorobenzene	-	0.0005	NDs	7/2020	ND	-	-	
1,3-Dichloropropane	-	0.0005	NDs	7/2020	ND	-	-	
2,2-Dichloropropane	-	0.0005	NDs	7/2020	ND	-	-	
1,1-Dichloropropene	-	0.0005	NDs	7/2020	ND	-	-	
1,1,1,2-Tetrachloroethane	-	0.0005	NDs	7/2020	ND	-	-	

Table 64450 B Unregulated VOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromochloromethane	-	0.0005	NDs	7/2020	ND	-	-	
Hexachlorobutadiene	-	0.0005	NDs	7/2020	ND	-	-	
P-Isopropyltoluene	-	0.0005	NDs	7/2020	ND	-	-	
1,2,3-Trichlorobenzene	-	0.0005	NDs	7/2020	ND	-	-	

Table 64450 B Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromacil	-	0.0005	-	-	-	-	-	No record.
Chlorothalonil	-	0.0005	-		-	-	-	No record.
Dimethoate	-	0.0005	-	-	-	-	-	No record.
Diuron	-	0.001	-	-	-	-	-	No record.
Phthalates	-	-	-	-	-	-	-	No record.
Plycyclic Acrylic Hydrocarbons (PAHs)	-	0.0005	-	-	-	-	-	No record.
Prometryn	-	0.0005	-	-	-	-	-	No record.
2,4,5-T	-	-	-	-	-	-	-	No record.

Table 64450 C Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Aldrin	-	0.0005	-	-	-	-	-	No record.
Aldicarb	-	0.003	NDs	7/2011	ND	-	-	
Aldicarb Sulfone	-	0.004	NDs	7/2011	ND	-	-	
Aldicarb Sulfoxide	-	0.003	NDs	7/2011	ND	-	-	
Bromacyl	-	0.01	-	-	-	-	-	No record.
Butachlor	-	0.0005	-	-	-	-	-	No record.
Carbaryl	-	0.005	NDs	7/2011	ND	-	-	One record.
Dicamba	-	0.0015	NDs	7/2011	ND	-	-	
Dieldrin	--	-	-	-	-	-	-	No record.
3-Hydroxycarbofuran	-	0.003	NDs	7/2011	ND	-	-	
Methomyl	-	0.002	NDs	7/2011	ND	-	-	
Metribuzin	-	0.003	-	-	-	-	-	No record.

11. OTHER CHEMICALS WITH MONITORING RECORDS

Chemicals	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Langalier Index@60C	-	-	0.60	9/1996	0.60	-	-	
Langelier Index@source	-	-	0.269	11/1998	0.269	-	-	
Source Temp C	-	-	17.8 - 22	10/2013	19.7	-	-	
Nitrate, Nitrogen (NO_3-N)	10	0.40	0.79	11/2007	0.79	-	-	
Potassium	-	-	2.7 – 4.0	10/2016	3.40	-	-	
M,P-Xylene	1.7	0.0005	NDs	7/2020	ND	-	-	
M- Xylene	1.7	0.0005	NDs	7/2002	ND	-	-	
P-Xylene	1.7	0.0005	NDs	7/2002	ND	-	-	
O-Xylene	1.7	0.0005	NDs	7/2020	ND	-	-	
Methyl Ethyl Ketone	-	0.005	NDs	7/2020	ND	-	-	
Cis-1,3-Dichloropropene	-	0.0005	NDs	7/2020	ND	-	-	
Trans-1,3-Dichloropropene	0.0005	0.0005	NDs	7/2020	ND	-	-	
Diisoprophyl Ether	-	0.003	NDs	7/2020	ND	-	-	
2-Chloroethylvinyl Ether	-	0.001	NDs	7/2018	ND	-	-	
Bis (2-chloethyl) Ether	-	0.005	NDs	7/2001	ND	-	-	
Hexachloroethane	-	0.005	ND	8/2006	ND	-	-	
Paraquat	-	0.020	NDs	7/2011	ND	-	-	
PCB – 1016	-	0.0005	ND	7/2011	ND	-	-	
PCB – 1242	-	0.0005	NDs	7/2011	ND	-	-	
PCB – 1248	-	0.0005	NDs	7/2011	ND	-	-	
PCB – 1254	-	0.0005	NDs	7/2011	ND	-	-	
PCB - 1260	-	0.0005	NDs	7/2011	ND	-	-	
Dacthal	-	0.0001	ND	12/2007	ND	-	-	
4-Nitophenol	-	0.005	ND	12/2007	ND	-	-	
DCPA	-	0.001	0.002	7/2011	0.002	-	-	

TITLE 22 WATER QUALITY MONITORING REVIEW

SYSTEM NAME:	**Sativa Water System**	SYSTEM NUMBER:	**1910147**
SOURCE NAME:	**Well 5**	PS CODE:	**1910147-005**
SOURCE CLASS:	**LGLJ**	STATUS:	**Active**
PERIOD FROM:	**January 1, 1994**	PERIOD TO:	**November 30, 2020**
PREPARED BY:	**Ofelia Oracion**	DATE:	**December 11, 2020**

1. INORGANIC CHEMICALS (Table 64431-A)

Constituents	MCL[1] (mg/L)	DLR[2] (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aluminum	1	.05	NDs[3]	7/2020	ND	3	7/2023	
Antimony	0.006	0.006	NDs	7/2020	ND	3	7/2023	
Arsenic	0.01	0.002	ND – 0.002	7/2020	ND	3	7/2023	1st >DLR in 10/2010
Asbestos	7 MFL	0.2 MFL	ND	6/2020	ND	-	TBD[4]	Waived[5]
Barium	1	0.1	0.11 – 0.13	7/2020	0.11	3	7/2023	
Beryllium	0.004	0.001	NDs	7/2020	ND	3	7/2023	
Cadmium	0.005	0.001	NDs	7/2020	ND	3	7/2023	
Chromium, Total	0.05	0.01	NDs	7/2020	ND	3	7/2023	
Chromium VI	-	0.001	NDs	7/2020	ND	-	-	
Cyanide	0.15	0.1	NDs	7/2020	ND	3	7/2023	
Fluoride	2	0.1	0.33 – 0.39	7/2020	0.38	3	7/2023	
Lead	-	0.005	NDs	7/2020	ND	-	-	
Mercury	0.002	0.001	NDs	7/2020	ND	3	7/2023	
Nickel	0.1	0.01	NDs	7/2020	ND	3	7/2023	
Nitrate (as NO_3)	45	2	ND – <4	10/2015	ND	-	-	
Nitrate (as N)	1	0.4	NDs	7/2020	ND	1[6]	7/2021	
Nitrite (as N)	1	0.4	NDs	7/2020	ND	3[6]	7/2023	
Nitrate + Nitrite (as N)	10	-	ND – 0.66	10/2013	0.64	-	-	
Perchlorate	0.006	0.004	NDs	7/2020	ND	1[7]	7/2021	
Selenium	0.05	0.005	NDs	7/2020	ND	3	7/2023	
Thallium	0.002	0.002	NDs	7/2020	ND	3	7/2023	

1 MCL – maximum contaminant level
2 DLR – detection limit for purposes of reporting
3 ND - non-detect
4 To be determined.
5 Monitoring for asbestos is waived during the first period (2020-2022) of the fourth compliance cycle (2020-2028).
6 Increase to quarterly monitoring if ≥ ½ MCL.
7 Increase to quarterly monitoring if ≥ DLR.

2. GENERAL MINERAL (Section 64449 (c)(2))

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aggressive Index	-	-	11.8 – 13	7/2020	12.3	-	-	
Alkalinity as $CaCO_3$	-	-	170 - 200	7/2020	190	-	-	
Bicarbonate Alkalinity	-	-	170 –240	7/2020	230	3	7/2023	
Calcium	-	-	64 – 74	7/2020	67	3	7/2023	
Carbonate Alkalinity	-	-	NDs - <2.4	7/2020	ND	3	7/2023	
Hydroxide Alkalinity	-	-	NDs - <1.4	7/2020	ND	3	7/2023	
Magnesium	-	-	13 – 18.4	7/2020	14	3	7/2023	
Sodium	-	-	35 – 44.1	7/2020	35	3	7/2023	
Total Hardness	-	-	210 – 261	7/2020	230	3	7/2023	

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
pH, Laboratory	-	-	7.71 – 8.14	7/2020	7.8	3	7/2023	

3. SECONDARY STANDARDS (Tables 64449-A and B)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Aluminum[1]	0.2	0.05	NDs	-	-	-	-	See Table 64431-A
Color	15 Units	-	NDs – 3	7/2020	ND	3	7/2023	
Copper	1	0.05	NDs	7/2020	ND	3	7/2023	
Foaming Agents (MBAS)	0.5	-	NDs	7/2020	ND	3	7/2023	
Iron	0.3	0.1	NDs	7/2020	0.11	3	7/2023	
Manganese[2]	0.05	0.02	NDs – **0.13**[3]	11/2020	0.023	Quarterly[4]	1st Quarter 2021	RAA for the 4th quarter 2020 is 0.049 mg/L<MCL
Odor-Threshold	3 Units	1	ND – 1	7/2020	ND	3	7/2023	
Silver	0.1	0.01	NDs	7/2020	ND	3	7/2023	
Thiobencarb[5]	0.001	-	NDs	-	-	-	-	See Table 64444-A part b
Turbidity	5 NTU	-	ND – 0.78	7/2020	0.4	3	7/2023	
Zinc	5	0.05	NDs	7/2020	ND	3	7/2023	
MTBE[6]	0.005	0.003	NDs	-	-	-	-	See Table 64444-A part a
Total Dissolved Solids	500-1000	-	360 – 440	7/2020	360	3	7/2023	
Specific Conductance	900-1600 µS/cm	-	580 – 660	7/2020	610	3	7/2023	
Chloride	250-500	-	25 – 37.6	7/2020	35	3	7/2023	
Sulfate	250-500	-	82 - 95	7/2020	88	3	7/2023	

1 Monitoring frequency for aluminum follows the monitoring requirement for primary MCL.
2 Notification Level is 0.05 mg/L. Compliance is based on running annual average (RAA).
3 Above the secondary MCL. The highest level was from a sample collected in 5/2008.
4 Because manganese concentrations fluctuate, Sativa initiated monthly monitoring to track down the concentration trend. The well is proposed to equip with manganese treatment in the future.
5 Monitoring frequency for thiobencarb follows the monitoring requirement for primary MCL.
6 Methyl-*tert*-butyl ether. Monitoring frequency for MTBE follows the monitoring requirement for primary MCL.

4. RADIONUCLIDES (Sections 64441 and 64443)

Constituents	MCL (pCi/L)	DLR (pCi/L)	Concentration Ranges (pCi/L)	Monitoring				REMARKS
				Last	Result (pCi/L)	Frequency (Years)	Next Due	
Gross Alpha	15	3	2.02 – 5.1	6/2020	6.96	6	6/2026	
Radium-226	5[1]	1	NDs	6/2020	ND	9	6/2029	Monitor when triggered.[2]
Radium-228	5[1]	1	ND – 1.81	6/2020	ND	9	6/2029	Monitor when triggered.[3]
Uranium	20	1	3.04 – 6.9	6/2020	4.2	6	6/2026	
Tritium	20000	1000	-	-	-	-	-	Waived
Strontium	8	2	-	-	-	-	-	Waived

1 Combined radium-226 & -228
2 Sample the well for Rad-226 if gross alpha particle activity (GA + 0.84 x counting error) minus uranium exceeds 5-pCi/L. Otherwise, follow monitoring frequency.
3 When the source calls to sample for Rad-226, sample for Rad-228 should be collected at the same time.

5. VOLATILE ORGANIC CHEMICALS (Table 64444-A part a)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
Benzene	0.001	0.0005	NDs	7/2020	ND	1	7/2021	
Carbon Tetrachloride	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due by	
1,2-Dichlorobenzene	0.6	0.0005	NDs	7/2020	ND	1	7/2021	
1,4-Dichlorobenzene	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1-Dichloroethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,2-Dichloroethane	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1-Dichloroethylene	0.006	0.0005	NDs	7/2020	ND	1	7/2021	
cis-1,2-Dichloroethylene	0.006	0.0005	NDs	7/2020	ND	1	7/2021	
trans-1,2-Dichloroethylene	0.01	0.0005	NDs	7/2020	ND	1	7/2021	
Dichloromethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,2-Dichloropropane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,3-Dichloropropene	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
Ethylbenzene	0.3	0.0005	NDs	7/2020	ND	1	7/2021	
MTBE	0.013	0.003	NDs	7/2020	ND	1	7/2021	
Monochlorobenzene	0.07	0.0005	NDs	7/2020	ND	1	7/2021	
Styrene	0.1	0.0005	ND – 0.0006	7/2020	ND	1	7/2021	
1,1,2,2-Tetrachloroethane	0.001	0.0005	NDs	7/2020	ND	1	7/2021	
Tetrachloroethylene (PCE)	0.005	0.0005	ND – 0.00078	10/2020	ND	Quarterly	1st Quarter 2021	Four consecutive quarters from 10/2018 – 7/2019 have results of NDs.
Toluene	0.15	0.0005	NDs	7/2020	ND	1	7/2021	
1,2,4-Trichlorobenzene	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
1,1,1-Trichloroethane	0.2	0.0005	NDs	7/2020	ND	1	7/2021	
1,1,2-Trichloroethane	0.005	0.0005	NDs	7/2020	ND	1	7/2021	
Trichlorofluoromethane	0.15	0.005	NDs	7/2020	ND	1	7/2021	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2	0.01	NDs	7/2020	ND	1	7/2021	
Trichloroethylene	0.005	0.0005	NDs	10/2020	ND	Quarterly	1st Quarter 2021	
Vinyl Chloride	0.0005	0.0005	NDs	7/2020	ND	1	7/2021	
Xylenes	1.75	0.0005	NDs	7/2020	ND	1	7/2021	

6. SYNTHETIC ORGANIC CHEMICALS (Table 64444-A part b)

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Alachor	0.002	0.001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Atrazine	0.001	0.0005	NDs	6/2020	ND	-	TBD[1]	Waived[2]
Bentazon	0.018	0.002	ND	6/2020	ND	-	TBD[1]	Waived[2]
Benzo (a)pyrene	0.0002	0.0001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Carbofuran	0.018	0.005	ND	6/2020	ND	-	TBD[1]	Waived[2]
Chlordane	0.0001	0.0001	NDs	6/2020	ND	-	TBD[1]	Waived[2]
2,4-D	0.07	0.01	NDs	6/2020	ND	-	TBD[1]	Waived[2]
Dalapon	0.2	0.1	ND	6/2020	ND	-	TBD[1]	Waived[2]
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	NDs - <0.0005[3]	6/2020	ND	-	TBD[1]	Waived[2].
Di (2-ethylhexyl) adipate	0.4	0.005	ND	6/2020	ND	-	TBD[1]	Waived[2]
Di (2-ethylhexyl) phthalate (DEHP)	0.004	0.003	ND	4/2018 7/2018 6/2020	ND ND ND	2 quarters in one year every 3 years	4/2021 7/2021	
Dinoseb	0.007	0.002	ND	6/2020	ND	-	TBD[1]	Waived[2]
Diquat	0.02	0.004	NDs	7/2011	ND	-	TBD[1]	Waived[2]
Endothall	0.1	0.045	ND	6/2020	ND	-	TBD[1]	Waived[2]
Endrin	0.002	0.0001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Ethylene Dibromide (EDB)	0.00005	0.00002	NDs - <0.0005	6/2020	ND	-	TBD[1]	Waived[2].

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Glyphosate	0.7	0.025	NDs	6/2020	ND	-	TBD[1]	Waived[2]
Heptachlor	0.00001	0.00001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Heptachlor Epoxide	0.00001	0.00001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Hexachlorobenzene	0.001	0.0005	ND	6/2020	ND	-	TBD[1]	Waived[2]
Hexachlorocyclopentadiene	0.05	0.001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Lindane	0.0002	0.0002	ND	6/2020	ND	-	TBD[1]	Waived[2]
Methoxychlor	0.03	0.01	ND	6/2020	ND	-	TBD[1]	Waived[2]
Molinate	0.02	0.002	ND	6/2020	ND	-	TBD[1]	Waived[2]
Oxamyl (Vydate)	0.05	0.02	ND	6/2020	ND	-	TBD[1]	Waived[2]
Pentachlorophenol	0.001	0.0002	ND	6/2020	ND	-	TBD[1]	Waived[2]
Picloram	0.5	0.001	ND	6/2020	ND	-	TBD[1]	Waived[2]
Polychlorinated Biphenyls (PCBs) (as decachlorobiphenyl)	0.0005	0.0005	ND	6/2020	ND	-	TBD[1]	Waived[2]
Simazine	0.004	0.001	NDs	6/2020	ND	-	TBD[1]	Waived[2]
Thiobencarb	0.07	0.001	NDs	6/2020	ND ND	-	TBD[1]	Waived[4]
Toxaphene	0.003	0.001	ND	6/2020	ND	-	TBD[1]	Waived[2]
1,2,3-Trichloropropane	0.000005	0.000005	NDs	6/2020	ND	2 quarters in one year every 3 years	2021	Initial monitoring completed in 10/2018.
2,3,7,8-TCDD (Dioxin)	$3x10^{-8}$	$5x10^{-9}$	ND	6/2020	ND	-	TBD[1]	Waived[2]
2,4,5-TP (Silvex)	0.05	0.001	ND	6/2020	ND	-	TBD[1]	Waived[2]

1 To be determined

2 Monitoring is waived during the first period (2020-2022) of the fourth compliance cycle (2020-2028).

7. TRIHALOMETHANES

Constituents	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Total Trihalomethanes	0.08	-	ND – 0.001	7/2020	ND	-	-	

8. UNREGULATED CHEMICALS WITH MONITORING REQUIREMENTS (Table 64450)

Monitoring for unregulated chemicals listed in the table below had been phased out in December 2003. However, if monitoring requirements were not met, the water systems were given the chance to complete the monitoring in December 2007. Monitoring consists of two consecutive samples five to seven months apart in a single year.

Constituents	NL[1] (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Boron[2]	1	0.10	0.10 -0.12	12/2001	0.12	-	-	
Vanadium[2]	0.05	0.003	NDs	12/2001	ND	-	-	
Dichlorodifluoromethane (Freon 12)[2]	1	0.0005	NDs	7/2020	ND	-	-	
Ethlyl-*Tert*-Butly Ether (ETBE)[3]	N/A	0.003	NDs	7/2020	ND	-	-	Waived.
Tert-Amyl Methyl Ether (TAME)[3]	N/A	0.003	NDs	7/2020	ND	-	-	Waived.
Tert-Butyl Alcohol (TBA)[3]	0.012	0.002	NDs	2/2008	ND	-	-	Waived.

1 NL – notification level

2 Monitoring requirement was completed.

3 Monitoring was waived if MTBE was non-detected.

9. OTHER UNREGULATED CHEMICALS WITH NOTIFICATION LEVELS

The following table provides for list of contaminants with notification levels. When concentrations are found greater than these levels, certain requirement and recommendations apply.

Constituents	NL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
N-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
Sec-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
Tert-Butylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
Carbon disulfide	0.16	0.0005	NDs	8/2006	ND	-	-	
Chlorate	0.8	-	-	-	-	-	-	No record.
2-Chlorotoluene	0.14	0.0005	NDs	7/2020	ND	-	-	
4-Chlorotoluene	0.014	0.0005	NDs	7/2020	ND	-	-	
Diazinon	0.0012	0.0012	NDs	6/2020	ND	-	-	
1,4-Dioxane	0.001	0.001	NDs - **0.0019**[1]	7/2020	ND	Quarterly	4th Quarter 2020	The last 4 samples were NDs.
Ethylene glycol	14	-	-	-		-	-	No record.
Formaldehyde	0.1	-	-	-	-	-	-	No record.
HMX	0.35	-	-	-	-	-	-	No record.
Isopropylbenzene	0.77	0.0005	NDs	7/2020	ND	-	-	
Methyl isobutyl ketone (MIBK)	0.12	0.005	NDs	7/2020	ND	-	-	
Naphthalene	0.017	0.0005	NDs	7/2020	ND	-	-	
N-Nitrosodiethyamine (NDEA)	0.00001	-	-	-	-	-	-	No record.
N-Nitosodimethlamine (NDMA)	0.00001	-	-	-	-	-	-	No record.
N-Nitrosodi-n-propylamine (NDPA)	0.00001	-	-	-	-	-	-	No record.
Propachlor	0.09	-	ND	6/2020	ND	-	-	
N-Propylbenzene	0.26	0.0005	NDs	7/2020	ND	-	-	
RDX	0.0003	-	-	-	-	-	-	No record.
1,2,4-Trimethylbenzene	0.33	0.0005	NDs	7/2020	ND	-	-	
1,3,5-Trimethlybenzene	0.33	0.0005	NDs	7/2020	ND	-	-	
2,4,6-Trinitrotoluene (TNT)	0.001	-	-	-	-	-	-	No record.

[1] Public notification is required.

10. OTHER PHASED-OUT UNREGULATED CHEMICALS

Table 64450 A Unregulated VOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromobenzene	-	0.0005	NDs	7/2020	ND	-	-	
Bromodichlormethane (THM)	0.08	0.001	NDs	7/2020	ND	-	-	
Bromoform (THM)	0.08	0.001	NDs	7/2020	ND	-	-	
Bromomethane	-	0.0005	NDs	7/2020	ND	-	-	
Chlorodibromomethane (THM)	0.08	0.001	NDs	7/2020	ND	-	-	
Chloroethane	-	0.0005	NDs	7/2020	ND	-	-	
Chloroform (THM)	0.08	0.001	NDs	7/2020	ND	-	-	
Chloromethane	-	0.0005	NDs	7/2020	ND	-	-	
Dibromomethane	-	0.0005	NDs	7/2020	ND	-	-	
1,3-Dichlorobenzene	-	0.0005	NDs	7/2020	ND	-	-	
1,3-Dichloropropane	-	0.0005	NDs	7/2020	ND	-	-	
2,2-Dichloropropane	-	0.0005	NDs	7/2020	ND	-	-	
1,1-Dichloropropene	-	0.0005	NDs	7/2020	ND	-	-	
1,1,1,2-Tetrachloroethane	-	0.0005	NDs	7/2020	ND	-	-	

Table 64450 B	MCL	DLR	Concentration	Monitoring Information	REMARKS

Unregulated VOCs	(mg/L)	(mg/L)	Ranges (mg/L)	Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromochloromethane	-	0.0005	NDs	7/2020	ND	-	-	
Hexachlorobutadiene	-	0.0005	NDs	7/2020	ND	-	-	
P-Isopropyltoluene	-	0.0005	NDs	7/2020	ND	-	-	
1,2,3-Trichlorobenzene	-	0.0005	NDs	7/2020	ND	-	-	

Table 64450 B Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Bromacil	-	0.0005	ND	4/2018	ND	-	-	
Chlorothalonil	-	0.0005	ND	6/2020	-	-	-	
Dimethoate	-	0.0005	NDs	6/2020	ND	-	-	
Diuron	-	0.001	-	-	-	-	-	No record.
Phthalates	-	-	-	-	-	-	-	No record.
Plycyclic Acrylic Hydrocarbons (PAHs)	-	0.0005	-	-	-	-	-	No record.
Prometryn	-	0.0005	ND	6/2020	ND	-	-	
2,4,5-T	-	-	-	-	-	-	-	No record.

Table 64450 C Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Aldrin	-	0.0005	ND	6/2020	ND	-	-	
Aldicarb	-	0.003	NDs	6/2020	ND	-	-	
Aldicarb Sulfone	-	0.004	NDs	6/2020	ND	-	-	
Aldicarb Sulfoxide	-	0.003	NDs	6/2020	ND	-	-	
Bromacyl	-	0.01	NDs	6/2020	ND	-	-	
Butachlor	-	0.0005	NDs	6/2020	ND	-	-	
Carbaryl	-	0.005	NDs	6/2020	ND	-	-	
Dicamba	-	0.0015	NDs	6/2020	ND	-	-	
Dieldrin	--	0.00002	ND	6/2020	ND	-	-	
3-Hydroxycarbofuran	-	0.003	NDs	6/2020	ND	-	-	
Methomyl	-	0.002	NDs	6/2020	ND	-	-	
Metribuzin	-	0.003	NDs	6/2020	ND	-	-	

11. OTHER CHEMICALS WITH MONITORING RECORDS

Table 64450 C Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
Cis-1,3-dichloropropene	-	0.0005	NDs	6/2020	ND	-	-	
Trans-1,3-Dichloropropoene	0.0005	0.0005	NDs	6/2020	ND	-	-	
M,P-xylene	1.7	0.0005	NDs	6/2020	ND	-	-	
M- Xylene	1.7	0.0005	NDs	7/2002	ND	-	-	
P-Xylene	1.7	0.0005	NDs	7/2002	ND	-	-	
O-xylene	1.7	0.0005	NDs	7/2020	ND	-	-	
Potassium	-	-	2.9 – 3.9	7/2020	3.2	-	-	
Paraquat	-	0.02	ND	7/2011	ND	-	-	
PCB – 1016	-	0.0005	NDs	6/2020	ND	-	-	
PCB – 1221	-	0.0005	ND	6/2020	ND	-	-	
PCB – 1232	-	0.0005	ND	6/2020	ND	-	-	
PCB – 1242	-	0.0005	NDs	6/2020	ND	-	-	
PCB – 1248	-	0.0005	NDs	6/2020	ND	-	-	
PCB – 1254	-	0.0005	NDs	6/2020	ND	-	-	
PCB - 1260	-	0.0005	NDs	6/2020	ND	-	-	
Source Temp C	-	-	17.4 – 22.6	10/2013	19.3	-	-	
Paraquat	-	0.020	NDs	7/2011	ND	-	-	

Table 64450 C Unregulated SOCs	MCL (mg/L)	DLR (mg/L)	Concentration Ranges (mg/L)	Monitoring Information				REMARKS
				Last	Result (mg/L)	Frequency (Years)	Next Due	
DCPA	-	0.001	ND - 0.002	6/2020	ND	-	-	
Bis (2-chloethyl) Ether	-	0.005	NDs	7/2001	ND	-	-	
Cis-1,3-Dichloropropene	-	0.0005	NDs	3/2016	ND	-	-	
Trans-1,3-Dichloropropene	0.0005	0.0005	NDs	3/2016	ND	-	-	
Diisoprophyl Ether	-	-	NDs -0.0035	6/2020	ND	-	-	
Hexachloroethane	-	0.005	NDs	8/2006	ND	-	-	
Langelier Index@source	-	-	0.135	11/1998	0.135	-	-	
Methyl Ethyl Ketone	-	0.005	NDs	6/2020	ND	-	-	
Nitrate, Nitrogen (NO_3-N)	10	0.40	ND	11/2007	ND	-	-	
2-Chloroethylvinyl Ether	-	0.001	NDs	4/2018	ND	-	-	
Radium 228 MBAS	-	-	0.394	7/2010	0.394	-	-	
Terbacil	-	-	<2	6/2020	<2	-	-	
Metolachlor	-	-	<1	6/2020	<1	-	-	
4,4-DDE	-	0.00005	ND	6/2020	ND	-	-	
EPTC	-	-	<0.0001	6/2020	<0.0001	-	-	
Prometon	-	-	<0.0001	6/2020	<0.0001	-	-	
2,4-DB	-	-	<0.002	6/2020	<0.002	-	-	
4,4-DDD	-	0.00002	ND	6/2020	ND	-	-	
4,4-DDT	-	0.00002	ND	6/2020	ND	-	-	
Aciflurifen	-	-	<0.0004	6/2020	<0.0004	-	-	
Alpha-BHC	-	0.00001	ND	6/2020	ND	-	-	
Beta-BHC	-	0.00005	ND	6/2020	ND	-	-	
Captan	-	0.0001	ND	6/2020	ND	-	-	
Carbophenothion	-	-	<0.0001	6/2020	<0.0001	-	-	

APPENDIX V

SATIVA WATER SYSTEM'S DISTRIBUTION SYSTEM CLASSIFICATION SHEET

Water System: Sativa Water System
System No. 1910147
Classification: **D2**

Distribution Classification

Date: October 2, 2020

Section 64413.3. Distribution System Classification
Table 64413.3-A

Population	Class
1,000 or less	D1
1,001 through 10,000	**D2**
10,001 through 50,000	D3
50,001 through 5 million	D4
Greater than 5 million	D5

Section 64413.3 (b) The class determined above shall be upgraded by one level if the sum of all points (1) through (6) below exceeds 20.
INSTRUCTIONS - For "system characteristics" that apply to your system, place the proper Point Value in the calculation box. For system characteristics (1) through (4) select one calculation only (whichever is higher). Total your calculations and adjust your system's classification if required.

System Characteristics	Point Value	Calculation
(1) Pressure Zones = 1 to 3	0	**0**
Pressure Zones = 4 to 10	4	
Pressure Zones = greater than 10	6	
(2) Single Disinfectant Added	5	**5**
Multiple Disinfectants*	8	
(3) Pump Station(s) up to 50 HP	4	
Pump Station(s) greater than 50 HP	6	**6**
(4) Distribution Reservoirs = 1 to 5	4	0
Distribution Reservoirs greater than 5	6	
(5) One or More Uncovered Reservoirs	10	
(6) Customers Served Non-Potable Water	6	
System Characteristics Total =		**11**

APPENDIX W

SATIVA WATER SYSTEM'S SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM NARRATIVE SHEET

Sativa SCADA Narrative

Sativa water system is a Hydro Pneumatic System which is automatically controlled based on customer demand.

Well 5 system major components:

- Well pump
- Variable Frequency Drive (VFD).
- CL2 Injection Pump
- CL2 Analyzer
- Supervisory Control and Data Acquisition (SCADA)
- Local controls with failsafe SCADA Off commands for both the well pump and the CL2 injection pump.

The Local control sequence is as follow:

- A Hand/Off/Auto (HOA) switch which is set on Auto. The Auto command activates a pressure switch adjusted to turn on at 52 PSI and turn off at 65 PSI.
- When the system is activated, the water lubrication for the pump shaft turns on, after 90 seconds, the pump VFD is activated and the well pump starts running.
- When the SCADA receives a signal that the well pump is running, a second timer is activated, after 60 seconds, the CL2 injection pump (Liquid 12.5%), Or the Gas CL2 circulating pump is turned on.
- The liquid CL2 pump has an analog input which is tied into the Banner node analog output signal. This signal uses the Speed of the well pump motor as a reference to decrease or increase the CL2 dosage.
- The Banner node communicates with the Banner gateway at the main Sativa office. This in turn communicates with the Modicon M340 Master PLC unit.
- The speed reference analog value internally of the master unit, either increases or decreases the dosage of the CL2 injector pump which has been set by the operator on SCADA.
- The SCADA can shut down the CL2 injection analog signal to 0, if the CL2 analyzer shows a reading above a set value of 2.5 PPM or higher.
- The VFD runs the well pump motor, uses a 65 PSI downstream pressure as a reference to control the pump motor speed, which changes the flow of water to match the demand of the system, and the CL2 injection pump will match the dosage to the pump motor speed.

- The Banner units act as communication links to tie the Modicon M340 to each site.

- The Modicon M340 PLC unit does convert the speed signal into a CL2 injector pump driver signal.
- The CL2 analyzer is completely independent of the system. It samples at 1 per minute. Yes, the Banner does take the signal from the Analyzer and sends it to the Modicon. The Signal is used as a failsafe for the CL2 injection pump, it will shut it off.

Important Notes and Failsafe System:

- Due to the fluctuations of the flow meter, this reference is not being used to drive the CL2 injection pump. As Demand on the system decreases, the speed of the motor will drop to slow to move water, as a safeguard, when the speed of the well pump motor runs at 1450 RPM's for more than 60 seconds, The Well goes into sleep mode. At this time, the CL2 is turned off, the Hydro tank supplies the low demand, and the system pressure will slowly drop. When the pressure in the system reaches 55 PSI, the well start up timer is reactivated, and the process is started all over again.
- There are Safeguards on the local controls. The VFD unit does use the Ground water depth to limit the speed of the well. The CL2 injection pump will not run until there is confirmation that the welling is running.

Well 3 system major components:

- Well pump
- CL2 Injection Pump
- CL2 Analyzer
- Supervisory Control and Data Acquisition (SCADA)
- Local controls with failsafe SCADA Off commands for both the well pump and the CL2 injection pump.

The Local control sequence is as follow:

- A Hand/Off/Auto (HOA) switch which is set on Auto. The Auto command activates a pressure switch adjusted to turn on at 50 PSI and turn off at 60 PSI.
- When the system is activated after 60 seconds, the pump is activated, and the well pump starts running.
- When the well is running a report, back is generated then a second timer is activated, after 60 seconds, the CL2 injection pump (Liquid 12.5%), Or the Gas CL2 circulating pump is turned on.
- The liquid CL2 pump has been set with manual controls to Chlorinate the system.
- The Banner node communicates with the Banner gateway at the main Sativa office. This in turn communicates with the Modicon M340 Master PLC unit.

- The SCADA can shut down the CL2 injection pump or well with the override off command.
- The Banner node communicates with the Banner gateway at the main Sativa office. This in turn communicates with the Modicon M340 Master PLC unit.
- There are limited safeguards on this well. The well runs at full speed when turned on, only the Lock out commands for the well and CL2 pump are on the list.

APPENDIX X

NO-DES FLUSHING OPERATION AND MONITORING PLAN FOR SATIVA WATER SYSTEM

APPENDIX ~~Y~~ X

NO-DES FLUSHING OPERATION AND MONITORING PLAN FOR SATIVA

Sativa Water District

NO-DES Flushing Operations and Monitoring Plan

The Sativa Water District (SWD) distribution system is comprised of approximately 15 miles of water mains 12-inch and smaller. The SWD has allocated funding to begin a system-wide unidirectional flushing (UDF) program for fiscal year 2018-19. Prior to beginning the flushing program, the SWD researched and evaluated two methods of UDF. The two methods evaluated were the traditional UDF and the Neutral Output Discharge Elimination System (NO-DES) technology. This plan is specific to the implementation of the NO-DES technology for the purpose of monitoring and ensuring water quality in the distribution system. Although the NO-DES standard operating procedures include procedures for boosting chlorine residuals within the distribution system, the SWA does not intend to do so.

Pre-connection Criteria

NO-DES Equipment shall be disinfected and sampled prior to initial connection to Authority distribution system (Refer to Section 1 pages 7-10 of the NO-DES SOP).

- ✓ Equipment shall be disinfected per AWWA Standard C651-14
- ✓ Bacti sample results shall show the absence of coliform bacteria (Colilert P/A test)*
- ✓ Heterotrophic Plate Count results will measure <500 CFU/ml*

*Results will be reviewed before connection to the Authority's distribution system

Day of Flushing Requirements

- ✓ Ensure new filtration bags are used
- ✓ Filtration unit and hoses are clean via swab and slug method
- ✓ Certified Distribution Operator (D3-D5)

Flushing Sequence Protocols

- ✓ Traditional unidirectional flushing will be required if the residual becomes too low (<0.5 ppm)
- ✓ Turbidity will be monitored and recorded throughout each flushing sequence
- ✓ Total chlorine, turbidity, and color samples shall be taken on the inlet and outlet of the filter with results recorded at the beginning and end of each flushing sequence
- ✓ Total chlorine shall be monitored using a pocket colorimeter
- ✓ Turbidity shall be monitored using an online turbidity nephelometer on the influent and effluent of the NO-DES equipment
- ✓ Distribution system pressure to be monitored to ensure distribution system maintains pressure between forty (40) psi and one hundred twenty (120) psi. If at any time fire flow is required, flushing activities shall cease until conditions improve.
- ✓ Each flushing sequence will be terminated when the inlet water turbidity is less than 5.0 NTU and the chlorine residual is, at a minimum, not less than 0.5 ppm

Additional Distribution Sampling After Flushing Sequence

Samples will be collected from the effluent side of the NO-DES system upon completion of each flushing sequence and recorded upon receiving results.

- ✓ Bacti - Results will be available when complete (24 hour turnaround time)
- ✓ Turbidity (field measurement)

- Hach 1720E with SC200 controller; calibrated weekly per manufactures standards.
- Logged on a flash drive at intervals no less than 10 minutes.

✓ Total/Free Chlorine Residual (field measurement)

- **<u>If at any time, water quality parameters fall below operating standards, Authority field personnel will flush the system until the water quality is back to the initial numbers or better.</u>**

Minimum Water Quality Standards

Parameter	Sample Location	Action --------->					
Turbidity >5 NTU	NO-DES Effluent	Continue flushing	Check filter differential pressure	Check filter condition/replace filters	If NO-DES flushing activities are unable to achieve target turbidity levels, perform traditional UDF		
Color >15 units	NO-DES Effluent	Continue flushing	Check filter differential pressure	Check filter condition/replace filters	If NO-DES flushing activities are unable to achieve target color levels, perform traditional UDF		
Total Chlorine <0.5 ppm	NO-DES Effluent	Determine ambient system residual	If ambient residual is <0.5 ppm, continue flushing	Check filter condition/replace filters	If NO-DES flushing activities are unable to achieve target residual, perform traditional UDF		
Total Coliform (+)	NO-DES Effluent	Resample a service connection nearest to flushing activity and two additional samples downstream.	If the repeat sample is total coliform (+), perform a traditional UDF and resample as in the previous column.	Repeat the previous two steps until the testing result is total coliform (-)			
E. Coli (+)	NO-DES Effluent	Take the NO-DES system offline.	**Notify DDW and prepare a boil water advisory (BWA) for the impacted area.**	Resample a service connection nearest to flushing activity and two additional samples downstream. To be completed on the same day that the Authority becomes aware of the E.coli (+).	If any of the repeat samples are E. coli (+) OR total coliform (+), the water main will be isolated and disinfected.	The water main will not be returned to service and the BWA will not be lifted until two sets of test results indicate the absence of total coliform and E.coli.	Disinfect the No-DES system per the "initial connection to the distribution system" procedures in the NO-DES Standard Operating Procedures (SOP manual).

Sativa Water District

NO-DES Flushing Report

Project Name: Sativa Water District														Operators:												Week:				
Run #	Date	QS#	Start Time	End Time	Total Run Time (Min)	Inlet Hydrant ID#	Outlet Hydrant ID#	Target Main Size/Type	Target Main Length (FT)	Target Flow (GPM)	Actual Flow (GPM)	Pump PSI MAX	System Pressure	Max Inlet Turbidity	Initial Turbidity	Final Turbidity	Filter #1 Start PSI dif	Filter #1 Stop PSI dif	# Runs on Filter #1	Filter #2 Start PSI dif	Filter #2 Stop PSI dif	# Runs on Filter #2	Change Filter? (1, 2, or N/A)	Inlet Intitial Color	Outlet Final Color	Inlet Initial CL2	Outlet Final CL2	Sample ID	Bacti Results P/A	Comments
Ex:	12/22/19	147	7:32	7:56	24	FHC4509	FHC4589	8" AC	2501	1500	1358	70	75	2.1	1	0.4	7	11	2	4	8	2	1	10	2.5	1.3	1.6	1	P	
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APPENDIX Y

CALIFORNIA ENVIRONMENTAL QUALITY ACT DOCUMENTATION

NOTICE OF EXEMPTION

To:		From:
__ Office of Planning and Research PO Box 3044, Room 113 Sacramento, CA 95812 – 3044 state.clearinghouse@opr.ca.gov	X County Clerk County of Los Angeles 12400 Imperial Highway Norwalk, CA 90650	Los Angeles County Public Works 900 S. Fremont Avenue Alhambra, CA 91803

PROJECT TITLE: Liquid Sodium Hypochlorite Disinfectant Systems for Groundwater Wells

PROJECT APPLICANT: Los Angeles County Public Works

PROJECT LOCATION – Specific: Sativa Water System is a community public water system serving service connections in the Willowbrook and Compton communities. The wells involved in this project are located at 13320 S Willowbrook Ave (Well 3) and 2083 Stockwell St (Well 5), Compton, CA 90222.

PROJECT LOCATION – City: County unincorporated area (Willowbrook) | **PROJECT LOCATION – County:** Los Angeles

DESCRIPTION OF NATURE, PURPOSE, AND BENEFICIARIES OF PROJECT: This project includes replacing existing chlorine gas disinfectant systems with safer liquid chlorine disinfectant systems near two groundwater wells in the Sativa Water System.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Los Angeles County Public Works

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Los Angeles County Public Works

EXEMPT STATUS:

_____ Ministerial (Sec. 21080(b)(1); 15268).
_____ Declared Emergency (Sec 21080(b)(3); 15269(a))
_____ Emergency Project (Sec 21080(b)(4); 15269(b)(c))
__X__ Categorical Exemption: State type and section number: CEQA § 15302(c)
_____ Statutory Exemption. State code number: _____

1. **REASONS WHY PROJECT IS EXEMPT:**
The proposed project is exempt from CEQA per Section 15302(c). The exemptions provide for replacement of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including replacement of existing utility systems involving negligible or no expansion of capacity.

LEAD AGENCY CONTACT PERSON: Bing Hua **AREA CODE/TELEPHONE/EXTENSION:** (626) 300-3337

IF FILED BY APPLICANT:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project? __X__ Yes ___ No

Signature: _____ **Date:** 9/28/2020 **Title:** Associate Civil Engineer

__X__ **Signed by Lead Agency**
_____ **Signed by Applicant**

Authority cited: Section 15302, California Code of Regulations. Date Received for filing at OPR: _____

THIS NOTICE WAS POSTED
ON October 15 2020
UNTIL November 16 2020
REGISTRAR – RECORDER/COUNTY CLERK

2020 163623
FILED
Oct 15 2020
Dean S. Logan, Registrar – Recorder/County Clerk
Electronically signed by MAXINE CARRASCO

April 2019

This is a true and certified copy of the record
if it bears the seal, imprinted in purple ink,
of the Registrar-Recorder/County Clerk

OCT 26 2020

Dean C. Logan REGISTRAR-RECORDER/COUNTY CLERK
LOS ANGELES COUNTY, CALIFORNIA

Environmental Concurrence for CEQA Exempt Projects
Water Supply Permits
State Water Resource Control Board
Division of Drinking Water

Water System Number:	CA1910147	**Lead Agency:**	LOS ANGELES WATERWORKS DISTRICTS
Water System Name:	SATIVA-LACWD	**Date NOE Filed:**	08/24/2020
County:	LOS ANGELES	**State Clearinghouse #:**	

Project Title: OPERATION OF LIQUID CHLORINE SYSTEM AT SATIVA-LAC WATERWORKS DISTRICTS
Project Location (Address, City): 2015 EAST HATCHWAY STREET, COMPTON
Project Description: MODIFICATION OF DISINFECTANT SYSTEM AT SATIVA WELL 3 AND 5 FROM GAS TO LIQUID

CEQA Exemptions: Check all exemptions the project meets per California Code of Regulations Title 14, Division 6, Chapter 3:

☐ **Article 19, Section 15301: Class 1 Existing Facilities**	Operation, repair, maintenance and/or minor alteration of an existing structure
☒ **Article 19, Section 15302: Class 2 Replacement or Reconstruction**	Replacement or reconstruction of an existing structure where the new or replacement structure is located on the same site
☐ **Article 19, Section 15303: Class 3 New Construction or Conversion of Small Structures**	Construction or remodification of a limited number of new or existing small structures
☐ **Article 19, Section 15304: Class 4 Minor Alteration to Land**	Minor alteration to the condition of land, water and or vegetation with no negative impact to existing scenic trees
☐ **Article 19, Section 15306: Class 6 Information Collection**	Basic data collection and research with no disturbance to an environmental resource
☐ **Article 18, Section 15262: Feasibility and Planning Studies**	A project involving only feasibility or planning studies
☐ **Article 18, Section 15269: Emergency Projects**	A project that is deemed an emergency as described in Section 15269
☐ **Other**	Provide Section number and description:

Exceptions to NOE: Please mark box indicating whether statement applies.
If you mark "yes" then the NOE does not apply – call your District Office.

Yes	No	
☐	☒	Location – Is the project located in a particularly sensitive environment where location exception applies? (for class 3,4,6)
☐	☒	Cumulative Impact – Will there or have there been successive projects of the same type in the same place, and over time it is becoming environmentally significant?
☐	☒	Significant Effect – Is there a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances?
☐	☒	Scenic Highway – Could the project cause damage to the environment within a highway officially designated as a state scenic highway?
☐	☒	Hazardous Waste Site – Is the project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code?
☐	☒	Historical Resources – Could the project cause a substantial adverse change in the significance of a historical resource?

I certify to the best of my knowledge the information in this form is correct, the project is exempt from CEQA, and it will not result in any significant effect on the environment:

Water System Representative:

Print:	Signature:	Date:
SAM KABAR		11-2-2020

The State Water Board concurs with the water system's CEQA determination listed above:

Division of Drinking Water District Engineer:

Notice of Exemption

To:
Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

From:
State Water Resources Control Board
Division of Drinking Water
Angeles District, 500 North Central Avenue, #500
Glendale CA 91203
Shu-Fang Orr
Phone: (818) 551-2045

Lead Agency: Los Angeles County Public Works

Lead Agency Contact: Sami Kabar

Lead Agency Phone Number: (626) 300-3338

State Clearinghouse Number:

Project Title: Sativa Water System - New Sodium Hypochlorite Chlorination Systems for Wells 3 and 5 (Project)

Project Address: 13320 S. Willobrook Avenue (Well 3) and 2083 Stockwell Street (Well 5), Compton, CA 90222

Project Description:

The project involves replacement of existing gas chlorinations systems at Wells 3 and 5 of Sativa Water System (System No. 1910147) with 12.5 percent sodium hypochlorite chlorination systems.

Name of Public Agency Approving Project: State Water Resources Control Board (State Water Board)

This is to advise that the State Water Board has issued a domestic water supply permit for the described Project on 12/16/2020. A record of approval for the Project is available to the general public at the State Water Board, Division of Drinking Water District Office noted above.

Exempt Status:

Categorical Exemption(s)

California Code of Regulations, Title 14, Division 6, Chapter 3, Article 19, Section 15302: Class 2. Replacement or Reconstruction.

Reasons why project is exempt:

The proposed project is exempt from CEQA per Section 15302, Class 2. The exemption provides for replacement of existing structures (gas chlorinations systems) where the new structure (12.5 percent sodium hypochlorite chlorination systems) will be installed on the same sites (Well 3 and 5 sites).

Signature: Date: 12/16/20

Name: Shu-Fang Orr Title: District Engineer

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at Office of Planning and Research:

Revised 2020

EXHIBIT C – ASSUMED CONTRACTS

1. Interim Service Agreement (Interconnection) between Liberty Utilities (Park Water) Corporation and Sativa Los Angeles County Water District, as amended by that certain Amendment No. One and Amendment No. Two.

2. Agreement for Emergency Water Service (Interconnection) between the City of Compton and Sativa Los Angeles County Water District

EXHIBIT D – FORM OF BILL OF SALE

BILL OF SALE AND ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, adequacy, and sufficiency of which are hereby acknowledged, the County of Los Angeles ("Seller") hereby sells, grants, conveys, assigns, transfers and sets over to Suburban Water Systems ("Buyer"), its successors and assigns, all right, title and interest in and to all the Acquired Assets, as such term is defined in Buyer and Seller's Asset Purchase Agreement dated _____, 2021 and in Exhibit A thereto.

TO HAVE AND TO HOLD the Acquired Assets, together with all rights and appurtenances thereto in any way belonging, unto Buyer, its successors and assigns, forever, and Seller does hereby bind itself and its successors to WARRANT and FOREVER DEFEND title to the Acquired Assets unto Buyer, its successors and assigns, against the lawful claims of any and all persons lawfully claiming or to claim the same or any part hereof.

Seller warrants that there are no liens, encumbrances or security agreements affecting the Acquired Assets.

IN WITNESS WHEREOF, Seller has executed this Bill of Sale and Assignment as of this ____ day of _____, 20__.

COUNTY OF LOS ANGELES

_____

By: [Name]
Title: [Title]

Approved as to Form:

_____

By: [Name]
Title: [Title]

EXHIBIT E – FORM OF WATER RIGHTS ASSIGNMENT

DEED OF WATER RIGHTS
Permanent Transfers

(Central Basin)

For valuable consideration, _____ ("Grantor"), hereby sells and transfers to _____ ("Grantee"):

The Right to extract _____ acre-feet of Grantor's Allowed Pumping Allocation, (_____ acre-feet of Total Water Right), _____ acre-feet of Drought Carryover 77 (DCO-77), _____ acre-feet of Drought Carryover 91 (DCO-91), _____ acre-feet of Normal Carryover, and _____ acre-feet of stored water, allocated to Grantor (or predecessors in interest) under and pursuant to Judgment dated October 11, 1965 and Amendments, entered in Los Angeles Superior Court Case No. 786,656 entitled "Central and West Basin Water Replenishment District vs. Charles E. Adams, et al."

This deed may be signed by the parties by facsimile, electronic or digital signature, and such signature shall be deemed valid and binding on the party signing this deed in that manner.

Dated : _____	Dated : _____
Grantor's Name :	Grantee's Name :
_____	_____
_____	_____
Signed By :	Signed By :
_____	_____
Title :	Title :

EXHIBIT F – PRORATIONS

This Exhibit F sets forth certain assumptions, categories, classifications, judgments and allocation, valuation and estimation methodologies that the Parties agree will be used in connection with allocations and prorations under Section 3.C. of the Agreement. Capitalized terms used but not defined herein shall have the meaning given such terms in the Agreement.

1. Utility Expenses; Accounts Payable. To the extent not paid by County as of the Closing, County will retain the obligation for payment of all trade accounts that were incurred on or prior to the Closing Date for work performed or materials delivered for the benefit of the Sativa Water System on or prior to the Closing Date. Buyer shall be responsible for all trade payables that arise or accrue for the benefit of the Sativa Water System after the Closing Date. Any amounts payable that cover both periods before and after the Closing shall be prorated based upon number of days.

2. Unbilled Revenue. Revenue earned by the Sativa Water System during any period (or portion thereof) ending on the Closing Date shall be allocated to County and revenue earned by the Sativa Water System after the Closing Date shall be allocated to Buyer.

3. Prepayments. Vendor and customer prepayments shall be allocated between County and Buyer at Closing. County will identify and schedule such prepayments to Buyer prior to the Closing, so that vendor prepayments that benefit Buyer after Closing shall be allocated to County and customer prepayments that relate to periods after Closing shall be allocated to Buyer.

4. Accounts Receivable. Buyer shall purchase and pay for all the accounts receivable of the Sativa Water System accrued as of the Closing Date, whether or not billed, except that Buyer will not pay any amounts for accounts receivable that are 60 days or more past due. County shall provide Buyer with a schedule of such accounts receivable prior to the Closing. It will be Buyer's responsibility to collect such accounts receivable.

5. Inventory. Buyer shall purchase all inventories of the System owned as of the Closing Date. County shall provide Buyer, to the extent practical, with a schedule of all inventory at the Closing no later than five (5) Business Days prior to the Closing.

6. Other Expenses. If any of the items described in Section 3.C. of the Agreement or this Exhibit F that cannot be apportioned at the Closing because of the unavailability of information as to the amounts which are to be apportioned or otherwise, or are incorrectly apportioned at the Closing or subsequent thereto, such items will be estimated as of the Closing and then adjusted, as necessary, pursuant to Section 3.C. of the Agreement.

EXHIBIT G – POST-CLOSING COMPLIANCE MEASURES

Pursuant to Section 3.F.2. of the Agreement, the below lists the capital improvements Suburban intends to undertake as necessary to bring the Sativa Water System into compliance with the DDW Permit following the Closing. This list is for planning purposes only and the actual implementation of such capital improvements will be subject to DDW and CPUC approval.

Project Description	**Total**
Misc. System Replacements (Services, Valves, Hydrants, Pipes)	$522,800
SCADA Integration	$75,000
Steel Reservoir	$725,032
Site 4 Pump Station	$497,283
Well 3 Transfer Switch and Mobile Generator	$190,000
Stockwell Pipeline	$917,000
Vesta Pipeline	$534,000
Willowbrook Pipeline	$1,277,000
Jack and Bore	$535,000
Wilmington Pipeline	$107,000
Wayside Pipeline	$234,000
Vesta Pipeline	$310,000
Lucien Pipeline	$183,000
Meter purchase and installation	$851,932
Drill and Equip Well 6	$1,500,000
Total	**$8,459,047**

EXHIBIT H – ENCUMBRANCES

1. Municipal Finance Corporation Project Fund/Installment Sale Agreement ($1,500,000) – to be paid at closing
2. Los Angeles County Loan Agreement ($1,400,000) – to be paid at closing

EXHIBIT I – PERMITS

1. Annual Unified Program Facility Permit (issued by LACFD)
2. State Water Resource Control Board DDW Permit (see Exhibit B)

EXHIBIT J
SCHEDULE OF BILLING RATES AND
NUMBER OF CUSTOMERS PER RATE CATEGORY

Rates
1 unit = $67.84
1.5 units = $101.76
2 units = $135.68
2.5 units = $169.60
3 units = $203.52
3.5 units = $237.44
4 units = $271.36

# Dwelling Units	# of Accounts
1	1017
1.5	15
2	191
2.5	2
3	24
3.5	1
4	1
1 + Utility Tax	42
2 + Utility Tax	7
3 + Utility Tax	1
Total Accounts	**1301**



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Attachment 2

STMA Tariff

PRELIMINARY STATEMENT
(Continued)

Sativa Transaction Memorandum Account ("STMA") (N)

1. PURPOSE:
   The purpose of this account is to track all costs resulting from the purchase of Sativa water systems. Examples of such costs include, but are not limited to, outside legal expenses, engineering, surveying, the appraisal, and other professional activities necessary to complete the transaction, including costs associated with the noticing of customers.

2. APPLICABILITY:
   The STMA applies to Sativa water system.

3. ACCOUNTING PROCEDURE:
   Suburban Water Systems shall maintain the STMA by making entries at the end of each month as follows:

   a. A debit entry will be created to capture costs associated with the account.

   b. A debit or credit entry equal to interest on the balance in the account at the beginning of the month and half the balance after the above entries, at a rate equal to one-twelfth of the rate on 90-day non-financial Commercial Paper, as reported in the Federal Reserve Statistical Release, H.15 or its successor.

4. RATEMAKING PROCEDURE:
   There is currently no ratemaking component to the memorandum account. Requests for recovery of any balance are to be processed according to General Order 96-B and Standard Practices or otherwise determined in a Commission decision. Upon Commission review and approval.

(Continued)

(N)



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Attachment 3

EICIAMA Tariff

PRELIMINARY STATEMENT
(Continued)

Environmental Improvements and Compliance Issues for Acquisitions Memorandum Account ("EICIAMA") (N)

1. PURPOSE:
   The purpose of the account is to track costs associated with required improvements related to environmental and compliance issues in the Sativa water system service territories. Example of such costs include, but are not limited to, construction of a welded steel reservoir to provide operational, fire flow and emergency water storage; drilling a new well to increase groundwater production capacity to reliably meet demands and provide fire flow capacity; installing back-up power generators to maintain system pressure during power outages; increasing pipe diameter to increase transmission capacity to improve flushing velocities to clean debris from pipes and available fire flow; and installing meters to measure water delivered to customers.

2. APPLICABILITY:
   The EICIAMA applies to Sativa water system.

3. ACCOUNTING PROCEDURE:
   Suburban Water Systems shall maintain the EICIAMA by making entries at the end of each month as follows:

   a. A debit entry will be created to capture costs associated with the account.

   b. A debit or credit entry equal to interest on the balance in the account at the beginning of the month and half the balance after the above entries, at a rate equal to one-twelfth of the rate on 90-day non-financial Commercial Paper, as reported in the Federal Reserve Statistical Release, H.15 or its successor.

4. RATEMAKING PROCEDURE:
   There is currently no ratemaking component to the memorandum account. Requests for recovery of any balance are to be processed according to General Order 96-B and Standard Practices or otherwise determined in a Commission decision. Upon Commission review and approval.

(N)

(Continued)

Decision No. _____ Vice President Effective _____

Title

Resolution No. _____

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Attachment 4

SPCBA Tariff

PRELIMINARY STATEMENT
(Continued)

Sativa Production Cost Balancing Account ("SPCBA") (N)

1. PURPOSE:
   The purpose of this account is to record each month the difference between the recorded Water Replenishment District (WRD) Assessment rates and a requested adopted rate of $382.00 per acre foot, so that these differences can be trued-up through rates subsequent to CPUC review and approval.

2. APPLICABILITY:
   The SPCBA applies to Sativa water system.

3. ACCOUNTING PROCEDURE:
   a. The following entries will be recorded monthly:
      i. A debit entry for the recorded WRD Assessment expense.
      ii. A credit entry for the adopted cost of $382.00 per acre foot for WRD Assessment Rate multiplied by the recorded quantity.
      iii. Total net SPCBA balance = (i) minus (ii).

   b. The Company will record the accumulated SPCBA balance on a monthly basis, by adding its entry in section a.iii. to the prior accumulated monthly balance.

   a. A debit or credit entry equal to interest on the balance in the account at the beginning of the month and half the balance after the above entries, at a rate equal to one-twelfth of the rate on 90-day non-financial Commercial Paper, as reported in the Federal Reserve Statistical Release, H.15 or its successor.

   c. The recovery of under-collections or refunds of over-collection will be passed on to the ratepayers through volumetric surcharge or surcredit, respectively.

   d. Franchise Fees and Uncollectible Accounts Expense shall be calculated using the factors most recently authorized by the Commission.

   e. In Suburban's 2026 GRC any balances in the SPCBA would be consolidated with Suburban's WRD balances and the SPCBA would then be eliminated.

4. AMORTIZATIONS:
   Suburban Water Systems may request amortization of this account by Tier 1 advice letter when the balance reaches 2% of annual revenues or at any level through a general rate case application.

(N)

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Attachment 5

MRV Report

MR VALUATION CONSULTING, LLC

RCNLD ANALYSIS
SATIVA WATER SYSTEM
COMPTON, CALIFORNIA



Report Date: May 24, 2021
Effective Date: April 20, 2021

PRESENTED TO:
Tim Miller
General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

5 Professional Circle, Suite 208 • Colts Neck NJ 07722 • Tel: 732.780.6000 • Fax: 732.780.6001 • www.MRValuation.com

MR VALUATION CONSULTING, LLC

May 24, 2021

Tim Miller
General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

RE: RCNLD Analysis of the Sativa Water System

Dear Mr. Miller:

MR Valuation Consulting, LLC ("MRV Consulting") has completed a valuation of the assets that comprise the Sativa Water System (the "System") in the Willowbrook community of unincorporated Los Angeles County and a portion of the City of Compton. This analysis includes both personal property and real property, including fee-owned land as well as private easements.

The Sativa Water System has 1,643 service connections that include approximately 6,800 customers within a service area of 0.27 square miles. The system includes four well sites; 49,922 linear feet of water mains; 32,860 linear feet of service lines; and 58 fire hydrants. The well sites consist of wells, site improvements, buildings, pumping equipment, electrical equipment, water treatment equipment, and 10,000-gallon hydropneumatic tanks (collectively, referred to as the "Assets"). The four well sites are known as Well No. 2; Well No. 3; Well No. 4 (non-operational); and Well No. 5. Well No. 2 is currently inoperable due to a collapsed shaft segment and Well No. 4 was decommissioned in 2009.

The purpose of this engagement will be to provide a Reproduction Cost New Less Depreciation analysis to be utilized by Suburban Water Systems in connection with its acquisition of the Sativa Water System. At Suburban's request, MRV Consulting may prepare testimony for submission to the California Public Utilities Commission and make witness(es) available for evidentiary hearings.

The premise of value is a "going-concern" because the business will continue to operate in the foreseeable future, therefore, the premise of value for the assets is in "continued use." The standard of value is Reproduction Cost New Less Depreciation ("RCNLD"). This report has been written for this intended use only and it should not be used for any other purposes. The intended users of this report are Suburban Water Systems. This report is presented as an Appraisal Report under the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation and the standards and codes of ethics of the Appraisal Institute.

The scope of work included a valuation analysis via the Reproduction Cost New Less Depreciation method that is consistent with the California Public Utilities Commission Decision 99-10-064, Appendix D, Sections 2.05 through 2.07. Additionally, the analysis complies with the California Public Utilities Code Section 2720 and with the California Evidence Code Section 820. The valuation of water rights was excluded from MRV Consulting's scope of work. Stratecon, Inc. performed the valuation of the water rights and MRV incorporated their value into the RCNLD analysis without further verification.

Market Conditions – COVID-19 Effect on Economy

The full economic impact of the COVID-19 pandemic is unknown as it continues to impact many aspects of daily life and the global economy. Economists are swiftly upgrading their US growth forecasts as Covid vaccinations accelerate and after Washington enacted a $1.9 trillion relief package, known as the American Rescue Plan Act of 2021. The US Federal Reserve continues to closely monitor the post-stimulus effect on the economy with its goals of maximum employment and a 2 percent inflation.

Goldman Sachs is calling for 2021 US GDP growth of 6.9 percent, the fastest since 1984. For average Americans, this optimism signals a stronger jobs market and better prospects for prosperity after a dreadful 2020. Morgan Stanley expects the US unemployment rate will drop below 5 percent by the end of 2021 and below 4 percent by the end of 2022.

Beyond the government rescue measures, the economic outlook is getting a boost from serious progress in defeating the pandemic. The acceleration in the rollout of vaccines, along with plunging deaths and cases, is raising hope that health restrictions depressing the economy could be lifted earlier than expected.

The reader is cautioned and reminded that the conclusions presented in this report apply only as of the effective date indicated. MRV Consulting makes no representation as to the effect on the entity of this event, or any event, after the effective date. This report contains a hypothetical condition because it does not consider the impacts of the Coronavirus pandemic.

Conclusion of Value

Subject to the assumptions and limiting conditions stated throughout the attached report and based on our analysis, methodology, and prevailing market conditions, the RCNLD of the Sativa Water System is:

Reproduction Cost New Less Depreciation
Sativa Water System
$22,808,000
Twenty-Two Million Eight Hundred Eight Thousand Dollars
As of April 20, 2021

This value conclusion is comprised of $18,788,000 of non-grant funded and $4,020,000 of grant-funded assets (the grant-funded assets are net of depreciation).

A Replacement Cost New Less Depreciation method was completed in addition to the Reproduction Cost New Less Depreciation method. There is a 2.3 percent difference between the two methods as detailed in Section I of the attached report. The replacement method strongly supports the reproduction cost method.

The California Public Utilities Code Section 2720 states that if fair market value exceeds reproduction cost, the CPUC may include the difference in the rate base for ratesetting purposes if it finds that the additional amounts are fair and reasonable. Therefore, the Reproduction Cost New Less Depreciation analysis is assigned 100 percent weight.

The conclusions expressed herein are explained throughout the attached report and are subject to the statement of assumptions and limiting conditions and certification. These conclusions should not be used for any purpose other than the purpose specified above. Before the conclusions presented in this letter are relied upon, the attached report should be read and analyzed in its entirety.

Should you have any questions with regards to the matters discussed herein, or if we can be of any further assistance to you, please contact Mark Rodriguez at (732) 780-6010 or by email at MRodriguez@MRValuation.com.

Respectfully submitted,

MR Valuation Consulting, LLC

MR Valuation Consulting, LLC

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B. DEFINITIONS AND ABBREVIATIONS

ASA	Accredited Senior Appraiser
Assets	Personal and real property that comprise the Sativa Water System. The real property contains both fee-owned land as well as certain private easements within the Sativa Water System service area.
Client	Suburban Water Systems
Effective Date	April 20, 2021
IRWM	Integrated Regional Water Management
Intended Users	Suburban Water Systems
MRICS	Member of the Royal Institution of Chartered Surveyors
MRV Consulting	MR Valuation Consulting, LLC
MVS	*Marshall Valuation Service*
PVC	Polyvinyl Chloride
RCN	Reproduction Cost New
RCNLD	Reproduction Cost New Less Depreciation
RSMeans	Gordian with RSMeans Data
SWB	State Water Board
System	Sativa Water System
USPAP	Uniform Standards of Professional Appraisal Practice

C. STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS

This Appraisal Report is subject to the following Assumptions and Limiting Conditions. Other assumptions and limiting conditions may be included in this report at other locations in the report.

In this section, the term "report" can mean study, appraisal, valuation, research or analysis, and any report or work product or deliverable about the study, appraisal, valuation, research, or analysis. Further, the term "MRVC" stands for MR Valuation Consulting, LLC, and its employees, consultants, appraisers, staff members, subcontractors, and service providers.

Information and Data Sources

1. Information on the financial, legal, and physical condition of the subject property or assets, provided by the Client, or its representatives, directly to us or the public through various public disclosure methods is assumed to be reliable. Other materials and information obtained from various professionally appropriate public and private sources are assumed to be reliable.

2. The information contained within this report was obtained from sources deemed to be reliable. Reasonable efforts, given the intended use, purpose, and scope of the appraisal, have been made to verify such information; however, no warranty and responsibility is given as to its accuracy.

Property Specific Assumptions and Limiting Conditions

3. Competent and responsible management and ownership are assumed.

4. This report analyzes the fee simple interest of the subject property or assets, free and clear of any or all liens or encumbrances. This appraisal is subject to the restrictions imposed by this agreement.

5. MRVC does not provide legal, accounting, audit, title, engineering, architectural, or environmental sciences services and assumes no responsibility for matters of such services. It is assumed that any legal, engineering, architectural, audit, title, environment, accounting, and financial information as provided by the Client, representatives, and management or obtained from public records are correct and assumed to be reliable.

6. MRVC assumes that there are no hidden or unapparent conditions at the subject land and/or improvements, which would render the subject property or assets more or less valuable, except as noted herein. MRVC assumes no responsibility for such conditions, or for engineering, environmental, legal, or architectural counseling that might be required to discover such conditions. It is assumed that the subject property or assets are not adversely affected by contaminants or health risks and that no contamination or health risks exist on or near the property or assets. MRVC assumed that there were no ADA issues sufficient to significantly render the subject property or assets more or less valuable.

7. It is assumed that there are no zoning or building code issues concerning the subject assets that would significantly increase or decrease the value of the assets being appraised.

8. Since MRVC is not an engineering or architectural firm, it makes no representation as to quality, functionality, condition, limitations, and size of the subject property or assets, except that a) MRVC has relied upon what has been reported to MRVC as the best available data, where said data was provided by others to MRVC who MRVC assumes to be an appropriate source of said data given the specific purpose, intended use, and scope of work of this study, and b) if a visual inspection was conducted by MRVC then MRVC has relied upon the visual inspection. Given the inherent limitations of MRVC's visual inspection, if conducted, important issues at the property may not be uncovered. If conducted, MRVC's visual inspection of the property is not an engineering, architectural, or environmental inspection, and does not test building operations, and does not cover 100 percent of the building(s), machinery and equipment, or the site.

9. This study assumes that, unless specifically noted elsewhere in the report, the subject property or assets suffers no environmental or hazard issues, and that no contamination or health risks exist at or near the property or assets.

10. If substantive issues are later discovered in data relied upon, then the reported opinions in this study may need to be revised accordingly.

Study Analysis and Format Assumptions

11. This report has been prepared in conformity with the requirements of USPAP of the Appraisal Foundation, and the American Society of Appraisers. When necessary for compliance with local law and assessment procedures, we may employ the jurisdictional exception rule of the USPAP. Extraordinary assumptions or hypothetical conditions, as defined by USPAP, will be disclosed at various points in this report, if applicable. The use of extraordinary assumptions or hypothetical conditions may affect the assignment results.

12. MRVC has determined the scope of work, based on its discussions with the Client, and their reported needs, their reported purposes, and intended use of the appraisal. The appraisal scope is limited to the work necessary to provide for the Client's purpose and use of the report, and as such, this report is not recommended for any other use. The scope of this appraisal is not so confined as to result in misleading or unsupported opinions of value.

13. USPAP prescribes two types of appraisal reports, Restricted Appraisal Reports and Appraisal Reports. A Restricted Appraisal Report may be provided when the client is the only intended user, or when additional intended users are identified by name, and not by types or categories. MRVC intends that the use of its reports is limited to the Client and intended users. When reports are restricted, MRVC need not provide as extensive reporting that may be found in Appraisal Reports. The use of Restricted Appraisal Reports is limited to the client and the named intended user(s). Restricted Appraisal Reports may not contain the supporting rationale for the opinions and conclusions in their entirety outlined in the Restricted Appraisal Reports.

Publication, Distribution, Use of Report

14. The opinions proffered in this report are as of a specific date, for a specific client and intended user(s), for a specific purpose and intended use, under a specific, limiting the scope of work, and made under specific assumptions and limiting conditions. Using the opinions proffered herein for any other use or purpose is inappropriate and unwise and is prohibited unless authorized in writing by MRVC. The Client agrees that:

    a) the Client and intended user(s) are explicitly named herein. The Client and the intended user(s) are the only parties to whom the MRVC has a professional responsibility. MRVC offers and assumes no professional responsibility to any third parties that the Client and intended user(s) may choose to provide copies of our report.
    b) any advice or recommendations, written or oral, provided by MRVC in connection with this engagement is exclusively for the Client and intended user(s) specifically identified by MRVC.
    c) will not refer to MRVC by name or otherwise, or their services in any written materials relating to the subject property or assets, including without limitation, any publicly filed documents without the prior written consent of MRVC for each requested use or reference.
    d) neither all nor part of the contents of this report or copy thereof shall be conveyed to the public through advertising, public relations, news, sales, or any other media without the prior written consent of MRVC.
    e) neither all nor part of the contents of this report, or copy thereof, shall be conveyed to the public through such forms or methods such as, but not limited to, advertising, public relations, news, sales, or any other media without written consent and approval of MRVC.
    f) MRVC or any professional organization of which MRVC is a member or candidate, cannot be identified without the prior written consent of MRVC.
    g) this report may not be utilized in any present or proposed, public or private syndication or a public offering of any of the interests in the subject property or assets unless a prior written agreement has been obtained from MRVC.
    h) this report is intended to be utilized in its entirety and may not be used in parts.

15. Any party receiving a copy of this report to satisfy disclosure requirements does not become an intended user(s). Possession of this report, or a copy thereof, does not give the holder the right of publication, nor may this report or any part thereof be used by anyone other than the Client and intended user(s) for the intended use.

16. Disclosure of the contents of this report is governed by the by-laws and regulations of the USPAP of the Appraisal Foundation, the American Society of Appraisers, and the Royal Institution of Chartered Surveyors. MRVC is authorized by the Client to disclose all or any portion of this report, and the work files to appropriate representatives of the Appraisal Foundation, the American Society of Appraisers, and the Royal Institution of Chartered Surveyors, if such disclosure is required to enable the MRVC to comply with their respective by-laws and regulations now or hereafter in effect, or as may otherwise be required to be disclosed by Court Order or governing laws, rules and/or regulations.

Ownership of MRVC Properties

17. MRVC has created and has rights in, and may, in connection with the performance of its services, employed, provided, modified, created, acquired, or otherwise obtained rights in, various concepts, ideas, methods, methodologies, procedures, processes, know-how, and techniques, models, templates, user interfaces and screen designs, general-purpose consulting and software tools, methods of operation of systems and other intellectual property (collectively, referred to as "MRVC Knowhow and Copyrights").

18. Upon full and final payment to MRVC for its services, to the extent that any MRVC Knowhow and Copyrights are contained herein, MRVC grants the Client an authorization to use such MRVC Knowhow and Copyrights contained in the Deliverables in connection with the use of such Deliverables and only for the Client's intended purpose and use as stated herein.

19. MRVC owns all rights, title, and interest, including, without limitation, all rights under all copyright, patent, and other intellectual property laws, in and to the MRVC Knowhow and Copyrights. MRVC may employ, modify, disclose, and otherwise exploit the MRVC Knowhow and Copyrights (including, without limitation, providing services or creating programming or materials for other clients). MRVC does not agree to any terms that may be construed as precluding or limiting in any way its right to a) provide services of any kind or nature whatsoever to any person or entity as MRVC in its sole discretion deems appropriate or b) develop for itself, or for others, materials that are competitive with those produced as a result of the services provided hereunder, irrespective of their similarity to the Deliverables.

Limit of Liability

20. MRVC warrants that it has performed the services hereunder in good faith and a professional appraisal manner. MRVC disclaims all other warranties, either express or implied, including, without limitation, warranties of merchantability and fitness for a particular purpose.

21. Any forecast models of income and expenses in this report are not predictions of the future and are created for the specific use and purpose of the appraisal. No warranty or representation is made that the model will coincide with actual future events. Furthermore, there will usually be differences between the modeled results and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

22. It is understood and agreed that Client and MRVC are independent of the other and that neither is, nor shall be considered to be, an agent, distributor, or representative of the other. Neither party shall act or represent itself, directly or by implication, as an agent of the other or in any manner assume or create any obligation on behalf of, or in the name of, the other. The Client acknowledges that the full independence and authority of MRVC will be maintained throughout this engagement and that no assurances or guarantees of a value estimate or consulting recommendation have been made or are a condition of this engagement.

23. In providing this service, MRVC establishes, and the Client understands and agrees that (a) no relationship other than one of a service provider is created between MRV and its staff members and the Client; and (b) MRVC assumes no responsibility for or ownership of the risks and rewards of the client business decisions based on, or business results that are consequential to the use of this report.

24. The Client will indemnify and hold harmless MRVC from all claims, liabilities, losses, costs, demands, and reasonable expenses, such as reasonable legal fees, and management and administrative costs, relating to this engagement, except to the extent finally judicially determined to have resulted from the bad faith or intentional misconduct of MRVC.

25. The liability of MRVC is limited to the Client only and shall not exceed in the aggregate the amounts received by MRVC for its services.

26. Intentionally omitted.

Statements of Qualifications and Personal Histories

27. Any statements of qualifications, resumes, and personal and/or company histories are presented in summary for marketing purposes and to assist the intended user(s) of the report with understanding the professional competency and experience of MRVC. These statements of qualifications, resumes, and personal and/or company histories are a) not a complete listing of our professional experiences and qualifications and b) not full disclosure of our professional, corporate, and personal interactions and relationships.

D. CERTIFICATION

I certify for the water system assets (except for land interests) that, to the best of our knowledge and belief that:

1. the statements of fact in this report are true and correct. Certain efforts, as described herein, given the use, purpose, and scope of the appraisal, have been made to verify such statements of facts.

2. the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.

3. the undersigned has no present or prospective interest in the real estate or assets that are the subject of this report, and no personal interest concerning the parties involved.

4. the undersigned has not performed services, as an appraiser or in any other capacity, regarding the property and assets that are the subject of this report within the three years immediately preceding the agreement to perform this assignment.

5. the undersigned has no bias concerning the real estate and assets that are the subject of this report, or to the parties involved.

6. our engagement in this assignment was not contingent upon developing or reporting predetermined results.

7. our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this valuation.

8. the analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.

9. that a site tour of the Sativa Water System was not performed.

10. as of the date of this report, the undersigned has completed the requirements of the continuing education program established by the American Society of Appraisers (see Appendix 1 for Professional Qualifications).

Mark Rodriguez, ASA, MRICS

E. INTRODUCTION

The Sativa Water System has 1,643 service connections that include approximately 6,800 customers within a service area of 0.27 square miles. The system includes four well sites; 49,922 linear feet of water mains; 32,860 linear feet of service lines; and 58 fire hydrants. The well sites consist of wells, site improvements, buildings, pumping equipment, electrical equipment, water treatment equipment, and 10,000-gallon hydropneumatic tanks. The four well sites are known as Well No. 2; Well No. 3; Well No. 4 (non-operational); and Well No. 5. Well No. 2 is currently inoperable due to a collapsed shaft segment and Well No. 4 was decommissioned in 2009.

Purpose, Use, and Scope

The purpose of this engagement will be to provide a Reproduction Cost New Less Depreciation analysis to be utilized by Suburban Water Systems in connection with its acquisition of the Sativa Water System. At Suburban's request, MRV Consulting may prepare testimony for submission to the California Public Utilities Commission and make witness(es) available for evidentiary hearings.

The premise of value is a "going-concern" because the business will continue to operate in the foreseeable future, therefore, the premise of value for the assets is in "continued use." The standard of value was RCNLD.

The scope of work included a valuation analysis via the RCNLD method that is consistent with the California Public Utilities Commission Decision 99-10-064, Appendix D, Sections 2.05 through 2.07. Additionally, the analysis complies with the California Public Utilities Code Section 2720 and with the California Evidence Code Section 820. The valuation of water rights was specifically excluded from MRV Consulting's scope of work. Stratecon, Inc. performed the valuation of the water rights and MRV incorporated their value into the RCNLD analysis without further verification.

Hypothetical Conditions and Extraordinary Assumptions

A hypothetical condition is a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results but is used for the purpose of analysis. This report contains a hypothetical condition because it does not consider the impacts of the Coronavirus pandemic.

The use of these hypothetical conditions and extraordinary assumptions may have affected the appraisal conclusions. If any of the hypothetical conditions and extraordinary assumptions are found to be unsupported, then our appraisal conclusions may need to be revised.

Premise of Value

The premise of value is a "going-concern" because the business will continue to operate in the foreseeable future, therefore, the premise of value for the assets is in "continued use."

Standard of Value

The standard of value is ***Reproduction Cost New Less Depreciation***. The scope of work included a valuation analysis via the RCNLD method that is consistent with the California Public Utilities Commission Decision 99-10-064, Appendix D, Sections 2.05 through 2.07. Additionally, the analysis complies with the California Public Utilities Code Section 2720 and with the California Evidence Code Section 820.

Effective Date

The Effective Date of this report is April 20, 2021. The 2020-2021 USPAP defines Effective Date as "the date to which an appraiser's analyses, opinions, and conclusions apply; also referred to as date of value."

A valuation can have either a retrospective, current, or prospective effective date. The Effective Date of this analysis is current.

Marketing and Exposure Time

Marketing time is an estimate of the time it might take to sell a property interest in real estate at the estimated value level during the period immediately after the effective date of the appraisal. Marketing time differs from exposure time, which is always considered to precede the effective date of the appraisal. We expect the marketing time to be 6 to 12 months for the value conclusions made in this report.

Exposure time may be defined as the estimated length of time the property interest being appraised would have been offered on the market before the hypothetical consummation of a sale at fair market value on the effective date of the appraisal. The opinion of the time for reasonable exposure is not intended to be a prediction of the date of sale. Instead, it is an integral part of the analyses conducted during the appraisal assignment. We expect the exposure time to be 6 to 12 months for the value conclusions made in this report.

Deferred Maintenance and Detrimental Conditions

The eventual cost of deferred maintenance is an unpaid operation cost, which can be paid at any time by performing the deferred maintenance work. It is in no sense a depreciation cost. Depreciation, on the other hand, cannot be made good in any particular year, except insofar as there are actual replacements of physical items that are wisely retired in that year.

In making an engineering valuation of a water utility, the estimated cost at the date of valuation of making good, deferred maintenance must be deducted from the total value, for it is a liability that goes with the property. The deduction for deferred maintenance is stated separately in valuation reports; its amount is added to the value of the property when deferred maintenance is performed.

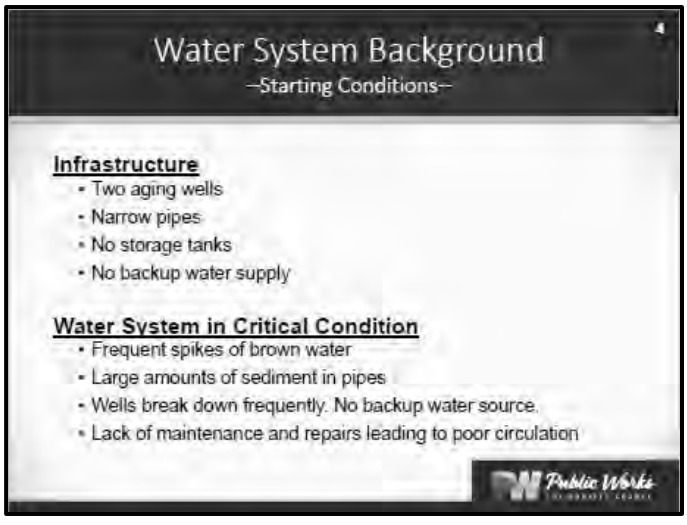
In the long-term, deferred maintenance is any maintenance or repair needed to bring the assets up to at least a minimum acceptable physical condition level, often referred to as unfunded or unaccomplished maintenance or backlog. Deferred maintenance should not cover work needed for growth, enhancements, post-construction regulatory standards, or increases in capacity.

The Sativa Water System suffered from deferred maintenance. On February 13, 2019, the Local Agency Formation Commission unanimously decided that the "Sativa Los Angeles County Water District" should cease operations due to mounting allegations of poor maintenance, financial malfeasance, and lack of transparency. The County of Los Angeles was appointed administrator by the Local Agency Formation Commission.

These deferred maintenance issues at the Sativa Work System were publicized in a New York Times article on July 24, 2019, titled "***The Crisis Lurking in Californians' Taps: How 1,000 Water Systems May Be at Risk***."

On September 14, 2019, the Los Angeles County Department of Public Works through a Community Update Meeting publicized the work that was performed by the county to reduce the deferred maintenance. The following slides are from the Community Update Meeting presentation.









The Los Angeles County Department of Public Works through the State Water Board Grant along with other funds has reduced the deferred maintenance or the past detrimental conditions suffered by the Sativa Water System. Therefore, any deferred maintenance or detrimental conditions that existed within the Sativa Water System have been remedied.

Environmental Conditions

It is assumed that there are no environmental issues associated with the Sativa Water System. Additionally, management has not raised any issues that would negatively affect the value of the System.

F. LOCATION MAPS

Figure F-1: Service Area Map – Sativa Water System
(From Department of Public Works, LA County)

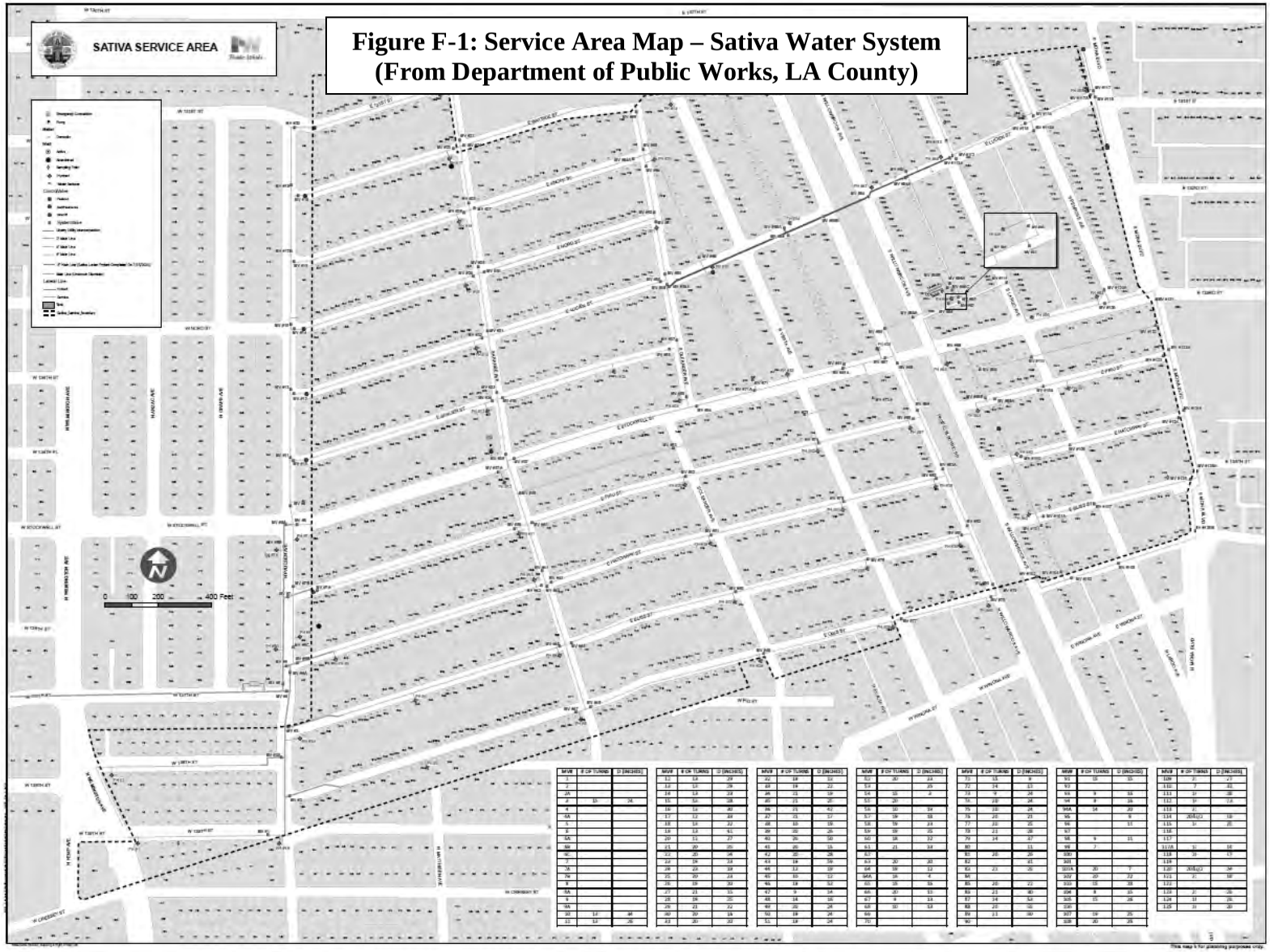


Figure F-2
Bidder's Notebook: Appendix A System Maps (Figure 1 of 9)
Water Service Area – Boundary Map

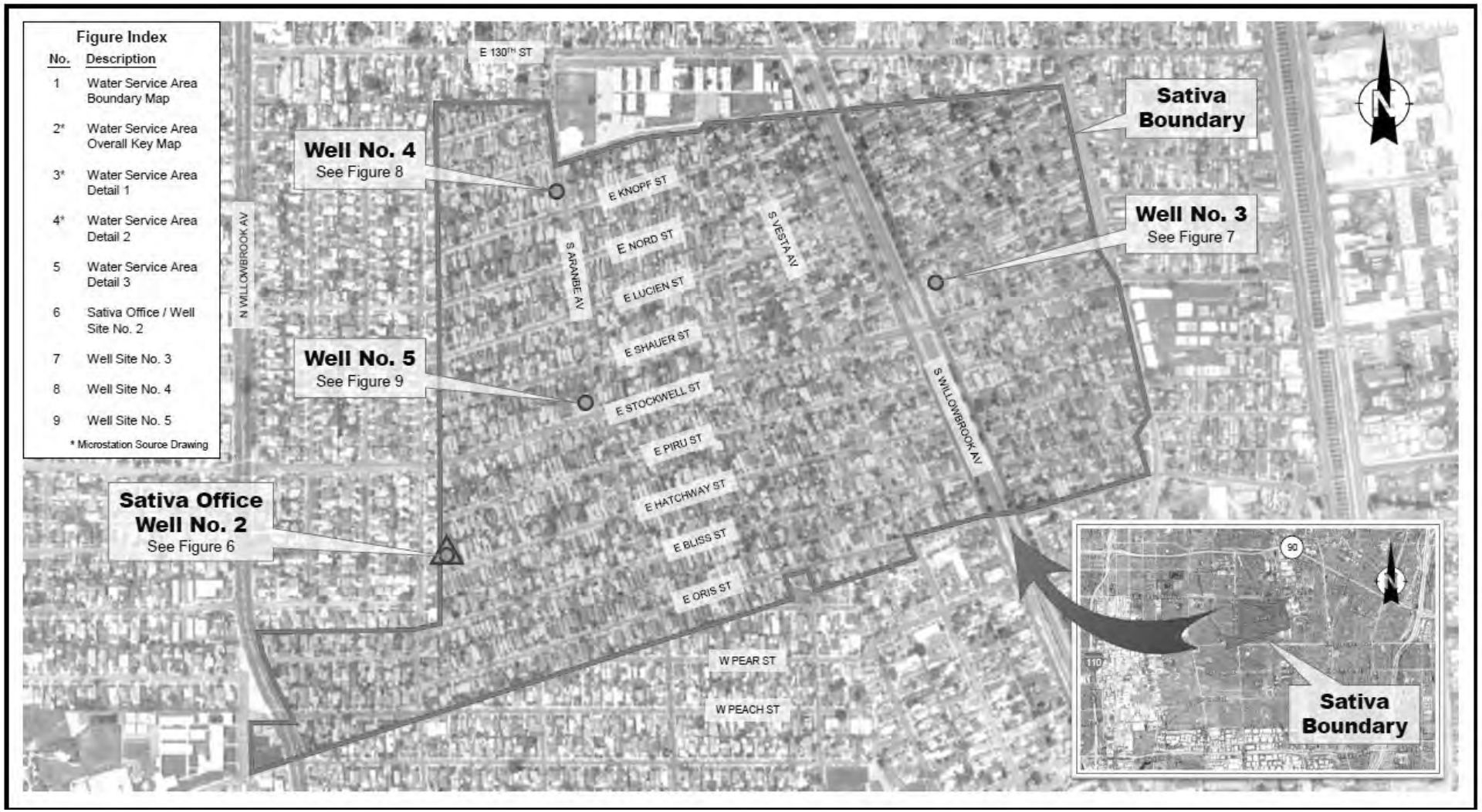


Figure F-3
Bidder's Notebook: Appendix A System Maps (Figure 6 of 9)
Sativa Office / Well Site No. 2 – 2015 East Hatchway Street

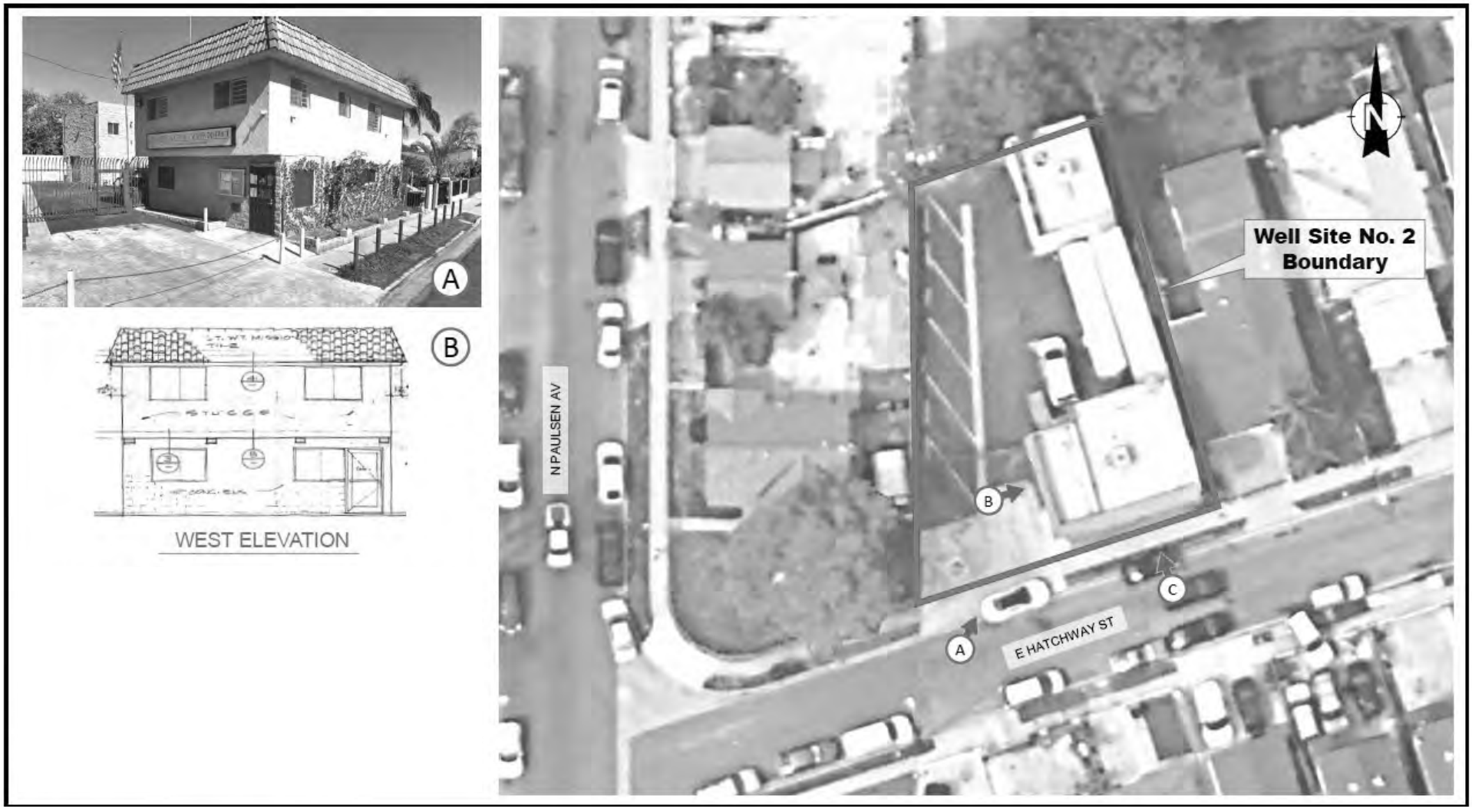


Figure F-4
Bidder's Notebook: Appendix A System Maps (Figure 7 of 9)
Well Site No. 3 – 13320 East Willowbrook Avenue

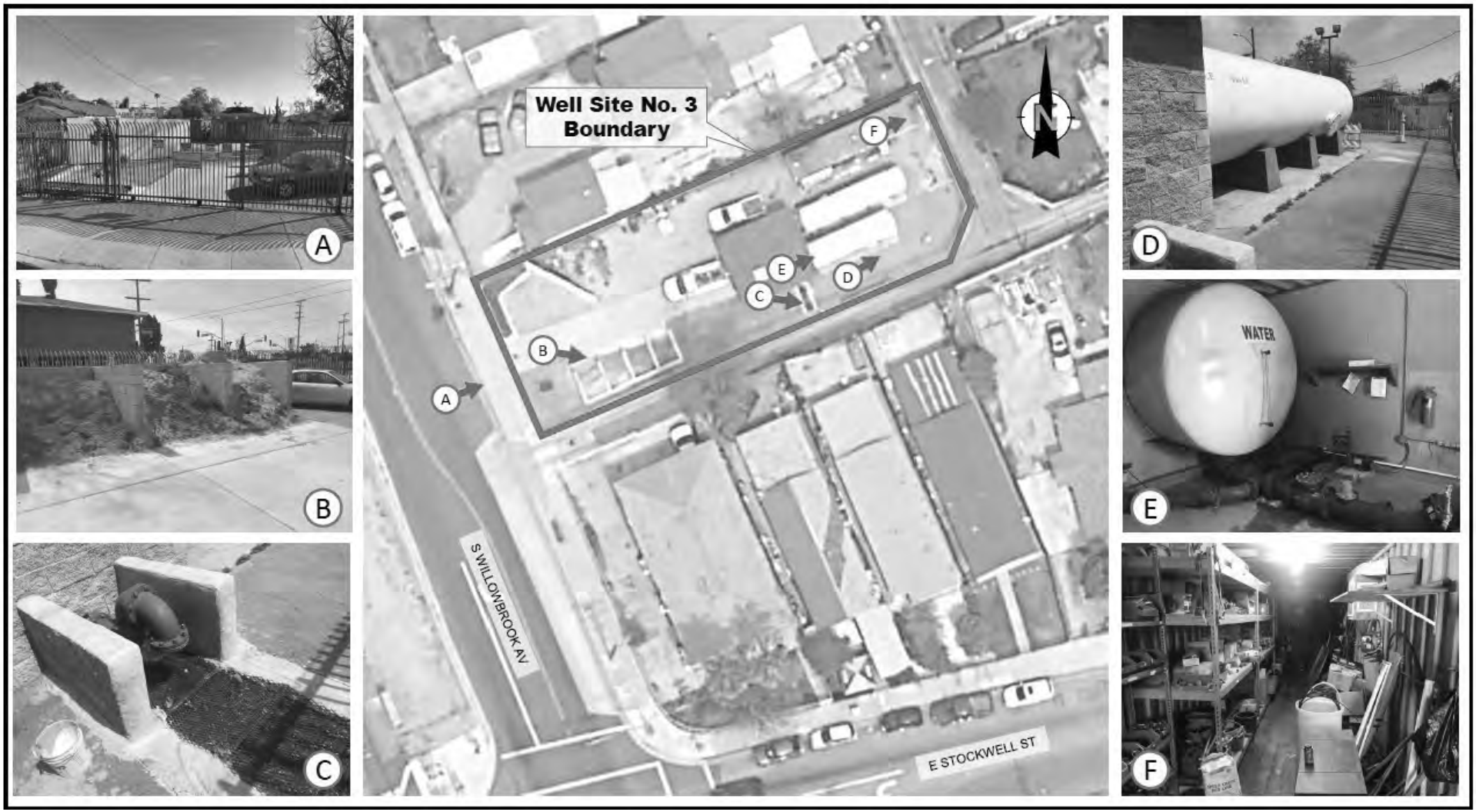


Figure F-5
Bidder's Notebook: Appendix A System Maps (Figure 8 of 9)
Well Site No. 4 – South Aranbe Avenue

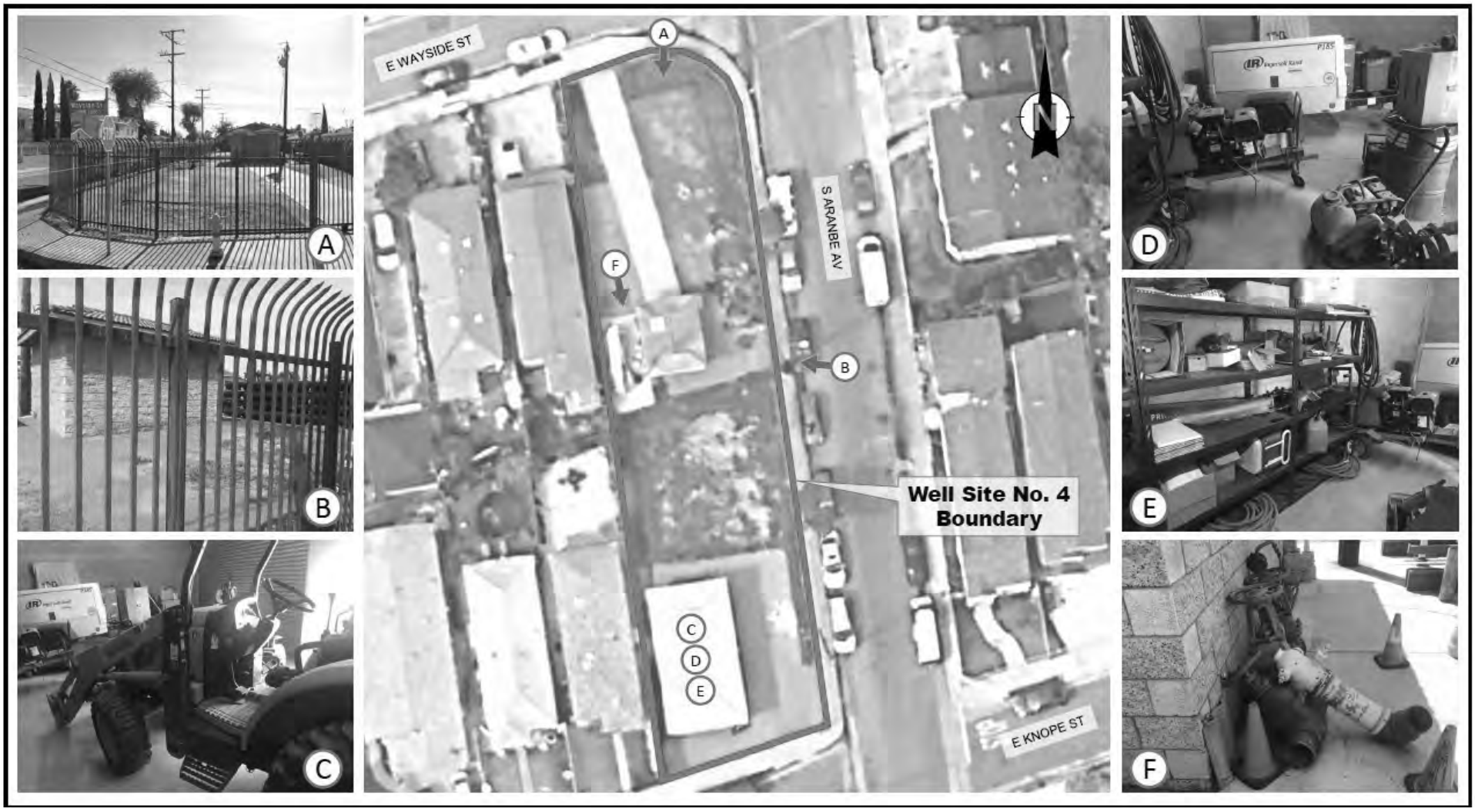


Figure F-6
Bidder's Notebook: Appendix A System Maps (Figure 9 of 9)
Well Site No. 5 – East Stockwell Street & South Aranbe Avenue



G. DESCRIPTION OF THE ASSETS

The Sativa Water System, originally Sativa Los Angeles County Water District, was formed in 1938 as a special district under the County Water District Act. The Sativa Water System has 1,643 service connections that include approximately 6,800 customers within a service area of 0.27 square miles in the Willowbrook community of unincorporated Los Angeles County and a portion of the City of Compton. The Sativa Water System service area consists of predominantly single-family residential land use. The service area is approaching its maximum developable area. As of September 2019, there are recorded 1,642 residential connections and one commercial service connection serving a population of approximately 6,800 people. Appendix 2 includes photographs of certain above-ground assets within the Sativa Water System.



Groundwater Wells

The System has four well sites that are commonly known as:

- Well No. 2 – This well has been in place for 80 years. It was constructed in 1940 to a depth of 445 feet below the ground surface. The highest perforations started at 203 feet below (the) ground surface. Well No. 2 is not in operation because a segment of the well shaft has collapsed.

- Well No. 3 – This well has been in service for over 75 years. It was constructed in 1944 to a depth of 316 feet below (the) ground surface, is perforated from 236 feet below (the) ground surface to 247 feet below (the) ground surface and 264 feet below (the) ground surface to 287 feet below (the) ground surface, and has a pumping capacity of 380 gallons per minute. Sativa Water System records indicate Well No. 3 may have manganese issues; however, manganese has not been detected over the past 35 years.

- Well No. 4 – decommissioned and capped in 2009. Certain structural components of the well are still in place.

- Well No. 5 – This well has been in service for over 25 years. It was constructed in 1993 to a depth of 910 feet below (the) ground surface, is perforated from 200 feet below (the) ground surface to 240 feet below (the) ground surface, 380 feet below (the) ground surface to 510 feet below (the) ground surface, 550 feet below (the) ground surface to 670 feet below (the) ground surface, and 750 feet below (the) ground surface to 890 feet below (the) ground surface and has a capacity of 640 gallons per minute. The level of manganese in Well No. 5 is high and requires treatment to reduce the amount of manganese precipitate in the system.

Hydropneumatic Tanks

The Sativa Water System has one 10,000-gallon hydropneumatic tank each at Well Site No. 2 and Well Site No. 5 and two 10,000-gallon hydropneumatic tanks at the Well Site No. 3. Based on the Division of Drinking Water data on the Sativa system, the tanks were installed when the wells were constructed, indicating the tanks at Well No. 2; Well No. 3; and Well No. 5 were installed in 1940, 1944, and 1993, respectively. One tank at both Well No. 3 and Well No. 5 are online. Current efforts are underway to bring the second tank at Well No. 3 online as well. The tank at Well No. 2 is offline and disconnected from the System.

Distribution Piping

The Sativa Water System includes 48,922 linear feet of water mains, ranging from 2 to 8 inches in diameter. Approximately 41 percent of the water mains are 4-inch to 6-inch asbestos cement; 8 percent are 4 to 8 inches PVC; 8 percent are 4 to 6 inches steel and cast iron; and the remaining 43 percent are 2 to 6 inches of unknown material.

Service Lines

The Sativa Water System has 1,643 service connections. The 1960 system map of Sativa Water System indicates that the service connections are ¾-inch diameter copper lines. The average length of service lines is 20 linear feet for a total of 32,860 linear feet of service lines.

Metering

The Sativa Water System does not currently have service meters.

Hydrants

The Sativa Water System includes (58) hydrants. There are (29) 4-inch diameter hydrants and (29) 6-inch diameter hydrants.

Other Equipment

Well Site No. 4 is used as a storage yard for a tractor loader, air compressor, and diesel generator, as well as miscellaneous tools and spare parts.

Land

The Sativa Water System includes four fee simple owned parcels and certain private easements. A separate appraisal of the land and private easements is included within Appendix 9.

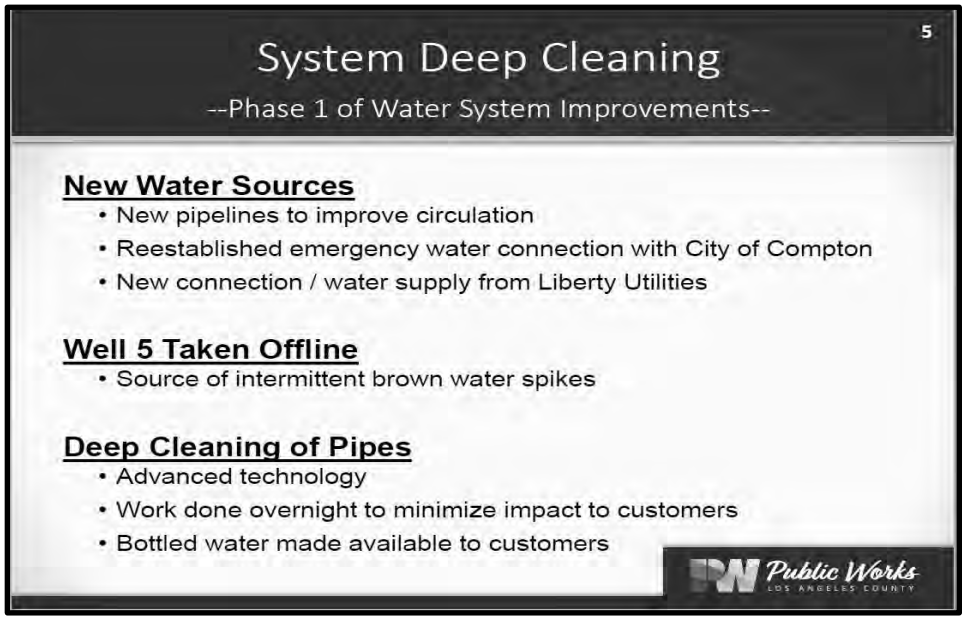
Water Rights

The Sativa Water System is a party to the adjudication governing the allocation of groundwater within the Central Basin. Groundwater extraction from the Basin has been limited to the amounts set by a Superior Court Judgment and monitored by a Court-appointed Watermaster consisting of three separate bodies that assist the Court in the administration and enforcement of the provisions of the Judgment. The valuation of these water rights was performed by others.

Grant – State Water Board Infrastructural Grant

Los Angeles County has pursued grant funding from the State Water Board for the most critical infrastructure challenges within the Sativa Water System. The State Water Board granted the County $1,770,000 to complete the following infrastructural projects:

- 8-inch pipeline under the light railroad tracks along Lucien Street
- Clean and repair well shaft at Well No. 5
- Replace the pump, motor, and electrical equipment at Well No. 5
- Upgrade gas chlorine system at Well No. 5
- Install SCADA equipment for remote monitoring and operation of Well No. 5



Grant – Proposition 1 Integrated Regional Water Management Grant

The Los Angeles County has partnered with the Water Replenishment District of Southern California to pursue grant funds for a manganese treatment system at Well No. 5. The County has been approved for $2,250,000 in Proposition 1 funding through the State Department of Water Resources' Integrated Regional Water Management Program. The manganese treatment system is expected to be installed in 2021.

H. HIGHEST AND BEST USE

To estimate the value of a system of assets, the appraiser must identify the highest and best use of the assets and must assume such highest and best use as the premise of value. Other types of value may assume other uses.

The 2020-2021 Edition of Uniform Standards of Professional Appraisal Practice unequivocally states the imperative of appraising market value only under the assumption of the highest and best use, in Standards Rule 1-3.

> When necessary, for credible assignment results in developing a market value opinion, an appraiser must:
>
> (a) identify and analyze the effect on use and value of existing land use regulations, reasonably probable modifications of such land use regulations, economic supply and demand, the physical adaptability of the real estate, and market area trends; and
>
> Comment: An appraiser must avoid making an unsupported assumption or premise about market area trends, effective age, and remaining life.
>
> (b) develop an opinion of the highest and best use of real estate.
>
> Comment: An appraiser must analyze the relevant legal, physical, and economic factors to the extent necessary to support the appraiser's highest and best use conclusion(s)."

Highest and Best Use

The reasonably probable use of the property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.[1]

Highest and Best Use of Land or a Site as Though Vacant

Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property is based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements.

[1] *The Dictionary of Real Estate Appraisal*. 6th edition. (Chicago: Appraisal Institute, 2015), Page 109.

The Four Criteria

There are four basic criteria that are considered and analyzed in determining the highest and best use of property:

1. Physically possible. What uses are physically possible given the constraints of the size and physical characteristics of the site?

2. Legally permissible. What uses are permitted by zoning or other restrictions (i.e., deed restrictions) on the property?

3. Financially feasible. Of the physically possible and legally permitted uses, which are financially feasible in that they will produce a net return to the property owner?

4. Maximum productivity. Of the financially feasible uses, which use will produce the highest net return, or result in the highest present value of the property?

Highest and Best Use Conclusions

As if Vacant Land

The highest and best use of the land, as if vacant, is discussed in Appendix 9.

As Improved

The highest and best use of the Sativa Water System, as currently improved, is for its continued use as a water utility system.

I. RCNLD ANALYSIS

The basis of an RCNLD analysis, as applied for these purposes, is reproduction. How much would it cost to build a new water utility system? The cost to develop/build or redevelop/rebuild a property is estimated and reconciled to value. The RCNLD analysis is based on the "principle of substitution." This principle supports the position that a prudent seller would not sell for less, nor would a prudent buyer pay more for a specific property than the cost of building an asset offering the same utility. The same utility means the same potential capacity, condition, life, and operational usefulness as the subject property over a similar remaining useful life.

The basic concern surrounding an RCNLD analysis is that cost may not equal value. When applicable, an RCNLD analysis reflects market thinking by recognizing that market participants sometimes relate value to cost. Buyers tend to judge the value of improved property by considering the cost to create the improvements. Generally, when making such an analysis, frequently referred to as a feasibility analysis, the owner or buyer compares such cost to the revenue that will be produced with an expected rate of return included on such an investment.

There is more than one method to estimate the cost to develop a water utility system; however, these methods tend to fall into either the general category of the reproduction cost approach or the replacement cost approach. Using the reproduction cost, the appraiser is concerned with issues surrounding an exact duplicate of the subject property, whereas, using the replacement cost, the appraiser is concerned with issues surrounding the replacement of functionality or utility.

When assets are new, the value of those assets is usually closely related to the cost expended to develop and construct those assets or groupings of assets. Buyers of older properties will often measure the price they are willing to pay for the subject assets against the cost of developing new assets (less adjustments for depreciation and/or the cost to bring the existing asset up to standard). Therefore, an RCNLD analysis is applicable in situations where sellers and buyers view "market value" to be closely related to "actual cost."

Continuing Property Record System

An RCNLD analysis is a reproduction cost method that has been and is widely used in many industries including public utilities. Reproduction cost is an accepted cost methodology within the water utility industry when the Continuing Property Records and historical cost data are readily available.

The Continuing Property Record System is a procedure by which the costs of the water system are segregated and maintained by units of property. A unit of property is an item that can be readily identified and accounted for by itself. The Continuing Property Records may also be known as Property Records, Plant Records, or Fixed Asset Registers.

There are two types of units of property. The identifiable units such as land, buildings, pumping equipment, wells, etc., for which a record showing location and the original cost of each item is maintained. The group units such as mains, services, meters, etc., are typically recorded in total quantities and at an average cost per unit.

The group unit property records are a control record and should be supplemented by subsidiary continuing property records subdivided by sizes and recorded in detail from the work orders completed during the year. The total quantities, total cost, and average cost per unit should be recorded within the continuing property records at the end of each year.

The continuing property records are important and useful because they provide a complete record by account number. These records include each type of property unit included in the plant as well as their unit cost or average cost. These records will also have cost information that will be useful when a utility plant asset is retired from service.

The continuing property records should be arranged in conformity with the plant accounts prescribed in the Uniform System of Accounts. They should be compiled using a basis of original cost or another book cost consistent with the provisions of the Uniform System of Accounts.

These records should contain a detailed description and classification of property-record units to permit their identification and verification. These records should be maintained in such a manner to meet the following basic objectives:

- To provide an inventory of property-record units which may be readily spot-checked for proof of physical existence.

- To record the costs associated with such property-record units to assure accurate accounting for retirements.

- To record the date of installation and removal of plant retired to provide data for use in connection with depreciation studies.

- To identify units such as parcels of land, wells, structures, equipment, etc., as well as all the information available on these units.

- To provide that groups such as distribution mains will be subdivided by diameter, material, and recorded in total quantities and the average cost per unit or average cost per unit for the year.

- To supply the details of costs of the properties, the annual depreciation amounts, as well as additions and improvements, retirements, and the amounts in the depreciation reserves and the net book values of the properties.

On February 13, 2019, the Local Agency Formation Commission unanimously decided that the "Sativa Los Angeles County Water District" should cease operations due to mounting allegations of poor maintenance, financial malfeasance, and lack of transparency. The County of Los Angeles was appointed administrator by the Local Agency Formation Commission.

The Continuing Property Records were not available for the Sativa Water System. Additionally, we interviewed the Assistant Deputy Director from the Department of Public Works for Los Angeles County and confirmed that they did not receive the Continuing Property Records from the now-defunct "Sativa Los Angeles County Water District."

Special-Purpose Property

A property with a unique physical design, special construction materials, or a layout that particularly adapts its utility to the use for which it was built; also called a special-design property is known as a "Special-Purpose Property."

An RCNLD analysis is useful for complex appraisal situations involving a large number of tangible assets when a distinction needs to be made between asset types or property types that are not frequently traded in the market, and when an asset is considered unique, such as a "special-purpose" or "specialty" assets. A water delivery system is a special-purpose property.

Special-purpose simply means that it can only be used for one purpose. Special-purpose has nothing to do with marketability, limited market, high market, lots of buyers, few buyers; there is no marketability related to a special-purpose property. It means you can do one thing with a water utility system: take water from a central source and deliver it to a customer. The RCNLD analysis was designed to value special-purpose property.

In a valuation of special-purpose purpose property, appraisers should primarily rely upon the RCNLD analysis.

RCNLD Procedure

After gathering the relevant information and analyzing data for the market area, site, and improvements, an appraiser follows a series of steps to derive a value indication via an RCNLD analysis. The appraiser will:

1. Estimate the value of the land (and private easements) as though vacant and available to be developed to its highest and best use.

2. Determine which cost basis is most applicable to the assignment: reproduction cost or replacement cost.

3. Estimate the direct (hard) and indirect (soft) costs of the special-purpose improvements as of the effective date.

4. Estimate an appropriate entrepreneurial incentive or profit from an analysis of the market.

5. Add the estimated direct costs, indirect costs, and entrepreneurial incentive or profit to arrive at the total cost of the special-purpose improvements, which is the RCN.

6. Estimate the amount of depreciation in the special-purpose improvements and, if necessary, allocate it between physical deterioration; functional obsolescence; and external obsolescence.

7. Deduct estimated depreciation from the total cost of the improvements to derive an estimate of their depreciated cost.

8. Estimate the contributory value of any site improvements that have not already been considered.

9. Adjust for personal property (e.g., furniture, fixtures, and equipment), moveable equipment, water rights, and any intangible assets that are to be included in the analysis.

10. Add the land value to the total depreciated cost of the special-purpose improvements to develop the RCNLD value of a water utility system.

Fixed Asset Register

Since we were not provided with the Continuing Property Records for the System, we did not have access to the historical cost information. Therefore, the Trending Method could not be performed. Alternatively, we completed a reproduction cost (new) analysis via a Detail Method. The first step in this analysis is to create a detailed Fixed Asset Register.

The fixed asset register was compiled from data extracted from the PDF file named "*Appendix B System Summary*" which was provided to the bidders by the Los Angeles County Department of Public Works. The fixed asset register included descriptions of the asset type; name; size and length specifications; and quantity. The bidder's files along with management interviews were the basis of the Fixed Asset Register.

While many consider the theoretical base of the RCN analysis to be the reproduction cost, as previously discussed, the replacement cost provides a supportable conclusion, particularly where there is a substantial technological difference between the subject assets and the substitute state-of-the-art assets used for comparison when determining value. The difference between the reproduction cost method and the replacement cost method is excess capital costs; one form of functional obsolescence.

RCN is a widely accepted and practiced method for estimating the value of a special-purpose property such as a water utility system. For new and existing water utility systems, the replacement cost method is gaining acceptance and it is anticipated to become a definitive method to consider for developing a primary value indicator.

Reproduction Cost (New)

The American Society of Appraisers, within the book "*Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets,"* 4th edition defines Reproduction Cost as "the cost of reproducing a new replica of a property (or asset) based on current prices with the same or closely similar materials, as of a specific date."

Construction Cost Data Sources

To determine the construction costs, the primary treatises considered were *Marshall Valuation Service*, *RSMeans* cost data, and actual construction costs.

Marshall Valuation Service

The *Marshall Valuation Service* is compiled and published by Marshall & Swift/Boeckh, LLC. The cost data presented is based on years of valuation experience, thousands of appraisals, and continual analysis of the costs of new buildings. This publication has been recognized as an authoritative treatise in the appraisal field since 1932.

MVS provides cost data for determining replacement costs of buildings and other improvements in the United States, Puerto Rico, Guam, and Canada. Current Cost Multipliers are furnished monthly to keep costs up-to-date in each of three districts, and Local Multipliers convert the costs to specific localities, including Los Angeles, California.

MVS is a complete, authoritative guide for developing replacement costs and depreciated values of buildings and other improvements. Also, it contains indexes for trending building and equipment costs. It provides costs for a wide range of construction classes and types of occupancies, from warehouses to industrial buildings to pump houses.

Gordian with RSMeans Data

For over 70 years, businesses in the construction industry have been relying on *RSMeans* data to assist with construction cost estimating. *RSMeans* data is compiled and provided by Gordian, a leading source of construction cost estimating data in California and the rest of the United States. RSMeans data provides both direct and indirect costs.

Direct costs include material, labor, and related expenditures normally and directly incurred in the purchase and installation of an asset, or group of assets, into functional use.

Indirect costs include expenditures that are necessary for the purchase and installation of assets, but not directly attributable to the purchase and installation.

Actual Construction Cost Data

Through interviews with the Los Angeles County Department of Public Works, MRV Consulting was informed of certain ongoing infrastructure projects at the Sativa Water System.

The Los Angeles Department of Public Works provided certain contracts and payment applications from such vendors as General Pump Company & Angeles Contractor, Inc.

Construction Cost Adjustments

The costs developed from *MVS*, *RSMeans*, and the Los Angeles County Department of Public Works do not include contingency; interest during construction; and general and administrative costs.

Contingency – In construction, contingency refers to a percentage of money reserved to cover unanticipated project costs. A contractor, an owner, engineer, or architect all likely feel that the proper use of contingency within a project stems from different, but justifiable causes. The Cost Estimate Classification Matrix within the AACE International Recommended Practice 56R-08, "*Cost Estimate Classification System – As Applied for the Building and General Construction Industries.*" The Sativa Water System is comprised of 20 percent of the value for the wells and 80 percent of the value for the balance of the system. The four wells are assumed to be Class 5 (more risk with uncertainty from its complexity) and the balance of the water system is assumed Class 2 (less risk, less complexity).

$$\boldsymbol{Contingency} = 20\%_{wells}\ x\ 0.40\ +\ \ 80\%_{BOP}\ x\ 0.12 = \mathbf{17.60}\ \boldsymbol{percent}$$

MRV Consulting added 17.60 percent for a contingency to the construction costs. This conclusion is consistent with Application 20-04-003 dated July 6, 2020. This application includes a "Report and Recommendations" by the California Public Utilities Commission on the proposed sale of East Pasadena Water Company System Assets to California-American Water Company.

Interest During Construction – MRV Consulting included five percent interest during construction for both the reproduction and replacement costs analyses for the Sativa Water System.

General & Administrative Costs – MRV Consulting added seven percent to both the reproduction and replacement costs analyses for General & Administrative costs. These types of expenses are incurred in the day-to-day operations of the company and may not be directly tied to a specific function or department. General expenses pertain to operational overhead expenses that impact the entire water system. Administrative expenses are expenses that are administrative and cannot be directly tied to a specific function. G&A expenses typically include rent, utilities, insurance, legal fees, and certain salaries.

REPRODUCTION COST NEW

Reproduction Cost

The Sativa Water System Assets were categorized according to the Uniform System of Accounts for Water Utilities, as prescribed by the Public Utilities Commission of the State of California.

Account 303: Land – The land interests associated with the Sativa Water System include four fee simple land parcels at each well site and certain private easements. The value of the land and private easement (from Appendix 9) is ***$1,012,000***, as of April 20, 2021.

Account 304: Structures & Improvements – The cost of the buildings and site improvements at the four well sites were estimated using unit cost data from *MVS*.

Based on construction cost data compiled by *MVS*, we estimated the RCN of the buildings using a unit price (price per square foot) cost method. This cost is based upon the class of the building and the quality of construction, as defined by *MVS*. The class of construction is based upon the type of framing, walls, floors, roof structure, and exterior features. The quality of construction is determined using the following multi-step process:

1. Determine the type and quality of construction materials and supplies used;

2. Determine if the workmanship level is normal to the type and grade of materials utilized

3. Take into account the quantity of the various components for the specific class of each building

4. Take into account the overall size (e.g. area, perimeter, etc.), as well as the complexity of the building structure and foundation.

The overall cost of the buildings was calculated after the construction class and quality were determined, using the following multi-step process:

1. Determine the average floor area of each building

2. Determine the average perimeter of each building

3. Estimate the effective age and condition of each building

4. Consider the region and climate where the building is located

5. Determine the base square foot cost of the construction class

6. Consider the heating and cooling systems

7. Consider the number of stories in each building and the height per story

8. Consider the floor area/perimeter multiplier, current cost multiplier, local multiplier, and congestion multiplier

9. Determine the RCN of each building

10. Estimate the depreciation of each building

11. Determine the depreciated cost of each building

To estimate the cost of the site improvements, we completed a detailed drawing "take-off" of the improvements located outside the buildings based upon land surveys, site plans, site utility plans, etc. A "take-off" is defined as a quantification of an asset or grouping of assets (i.e., total area asphalt or sidewalk, or length of curb). The google earth measuring tool was used for the "take-offs." We then determined the reproduction costs for the various asset "take-offs." These direct cost estimates included a contractor mark-up for overhead and profit. The final step in our analysis was to calculate the RCN with indirect costs. This was accomplished by using the MVS pricing manual, which provides unit costs by the various quantities, materials, and installation.

Account 307: Wells – We estimated the cost of the wells using unit price data from RSMeans. A hydrologist is required to locate groundwater using scientific methods. Through interviews with Suburban Water Systems as well as independent research, we established the procedures and activities associated with the development of groundwater wells.

Most modern wells are drilled, which requires a complicated and expensive drill rig. Drill rigs are often mounted on large trucks. They use rotary drill bits that chew away at the rock, percussion bits that smash the rock, or if the ground is soft, large auger bits. Drilled wells can be drilled more than 1,000 feet deep. Then a pump is placed in the well at a certain depth to push the water up to the surface. The costs of the wells were determined using the following multi-step process:

1. Estimate the manhours to develop the well

2. Estimate the cost of any observation wells

3. Estimate the cost to drill the groundwater well at the various perforations

4. Estimate the cost to install the inner well casing

5. Estimate the balance of structural components after drilling

6. Estimate the manhours to test the well

Account 311: Pumping / Electrical Equipment – The cost of the pumping and electrical equipment was obtained using actual contractor cost data provided by the Los Angeles County Department of Public Works.

Account 320: Water Treatment Equipment – The cost of the water treatment equipment was obtained using actual contractor cost data provided by the Los Angeles County Department of Public Works.

Account 330: Reservoirs, Tanks, & Standpipes – The costs of the hydropneumatic tanks were obtained from *MVS*.

Account 331: Water Mains & Valves – The cost of the water mains and valves were obtained from the 2020 Gordian Site Work & Landscape Costs with RSMeans Data: (Means Site Work and Landscape Cost Data).

The installation of the water mains follows the industry standard procedures. A minimum depth and trench width with a trench box were determined for each pipe diameter. The costs of the infrastructure assets were determined, using the following multi-step process:

1. Estimate the depth and width for excavation by pipe size

2. Estimate the quantities for stone and bedding material for pipe trench

3. Estimate volume of common earth backfill; structural backfill; asphalt paving; and landscaping, etc.

Account 333: Water Services – The unit cost for water services was obtained for the construction cost data compiled within *RSMeans*. The installation method follows the standard procedures for water utilities, which is like Account 331.

Account 335: Hydrants – The cost of the hydrants was obtained from construction cost data compiled within *RSMeans*.

Account 339: Other Equipment – The other equipment included a tractor, air compressor, and a diesel Generator. This equipment was valued using online market comparable data such from such sites as eBay, Fastline.com, and machinerytrader.com.

Proposition 1 Integrated Regional Water Management Grant – Through interviews with the Los Angeles County Department of Public Works, MRV Consulting was informed of the grant-funded infrastructure projects to install a manganese treatment system. The funding for this grant is $2,250,000. These assets are assumed to be new construction and with no depreciation.

State Water Board Infrastructure Grant – Through interviews with the Los Angeles County Department of Public Works, MRV Consulting was informed of the grant-funded infrastructure projects. The amount of the SWB Infrastructural Grant is $1,770,000. The funds were approved to complete the following projects/activities:

- Lucien Street Waterline (Account 331)
- Well No. 5 Rehabilitation (Account 307; Account 311; Account 320)

These assets are assumed to be new construction and with no depreciation.

Water Rights – Stratecon Inc. valued the water rights for the Sativa Water System to be $7,105,517. This value conclusion was included in our analysis without any further verification.

The supplemental data and detailed fixed asset registers for the Sativa Water System are included in Appendix 7.

$$\boldsymbol{REPRODUCTION\ Cost\ New = \$34,475,000}$$

The **REPRODUCTION** cost new of the Sativa Water System is summarized in Table I-1 and the supporting spreadsheet analysis is in Appendices 3 and 4.

REPLACEMENT COST NEW

Replacement Cost (New)

The American Society of Appraisers, within the book "*Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets,"* 4th edition defines Replacement Cost as "the current cost of a similar new property (or asset) having the nearest equivalent utility as the property being appraised, as of a specific date."

Replacement Cost

The Sativa Water System Assets were categorized according to the Uniform System of Accounts for Water Utilities, as prescribed by the Public Utilities Commission of the State of California. The replacement cost new procedure is similar to the RCN, discussed on pages 29 through 32.

While many consider the theoretical base to be the **REPRODUCTION** cost new, as previously discussed, **REPLACEMENT** cost new provides a supportable conclusion, particularly where there is a substantial technological difference between the subject assets and the substitute state-of-the-art assets used for comparison when determining value. The difference between the

REPRODUCTION cost new and the **REPLACEMENT** cost methods is excess capital costs, which is a form of functional obsolescence.

Excess Capital Cost

The American Society of Appraisers, within the book "*Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets,"* 4th edition defines Excess Capital Cost as "a type of functional obsolescence that typically results from changes in production or construction methods. Measured by the difference between reproduction and replacement cost when a property's replacement cost is less than its reproduction cost."

The Sativa Water System distribution system consists of both PVC and non-PVC mains. The non-PVC mains include asbestos concrete; ductile iron; steel; and copper. As confirmed by Suburban Water Systems, a water utility system would utilize PVC for distribution mains as a general practice for installation. Similarly, the services are copper, and an appropriate replacement is PVC.

For our analysis, the difference between RCN and replacement cost new is the difference between the PVC and non-PVC mains. This difference was also known as excess capital costs. In other words, the material cost to install PVC pipe is lower than the material cost to install the non-PVC pipe.

The excess capital costs for the Sativa Water System are ($1,309,000), as of April 20, 2021. Excess capital costs were identified within the distribution mains and services only.

Conversion Formula

$$\boldsymbol{REPLACEMENT_{Cost\ New} = REPRODUCTION_{Cost\ New} - Excess\ Capital\ Costs}$$

Replacement Cost New

$$\boldsymbol{REPLACEMENT\ Cost\ New} = \$34{,}475{,}000 - \$1{,}309{,}000 = \$\mathbf{33{,}166{,}000}$$

The **REPLACEMENT** cost new of the Sativa Water System is summarized in Table I-1 and the supporting spreadsheet analysis is in Appendices 6 and 7.

Table I-1
RCN & Replacement Cost New– Sativa Water System
As of April 20, 2021

CPUC Account	Funding	Account Category	REPRODUCTION Cost New		Excess Capital Costs		REPLACEMENT Cost New
303	Surburban Water Systems	Land	$ 1,011,000	MINUS	$ -	EQUALS	$ 1,011,000
304	Surburban Water Systems	Structures & Improvements	$ 1,026,026		$ -		$ 1,026,026
307	Surburban Water Systems	Wells	$ 6,697,698		$ -		$ 6,697,698
307	SWB Grant	Wells	$ 513,700		$ -		$ 513,700
311	Surburban Water Systems	Pumping / Electrical Equipment	$ 951,942		$ -		$ 951,942
311	SWB Grant	Pumping / Electrical Equipment	$ 202,819		$ -		$ 202,819
320	Surburban Water Systems	Water Treatment Equipment	$ 173,821		$ -		$ 173,821
320	SWB Grant	Water Treatment Equipment	$ 37,034		$ -		$ 37,034
320	IRWM Grant	Water Treatment Equipment	$ 2,250,000		$ -		$ 2,250,000
330	Surburban Water Systems	Reservoirs, Tanks, & Standpipes	$ 662,691		$ -		$ 662,691
331	SWB Grant	Water Mains & Valves	$ 760,385		$ -		$ 760,385
331	Surburban Water Systems	Water Mains & Valves (Non-PVC)	$ 4,218,942		$ (847,534)		$ 3,371,408
331	Surburban Water Systems	Water Mains & Valves (PVC)	$ 3,231,229		$ 211,774		$ 3,443,004
331	Surburban Water Systems	Water Mains & Valves (Water Valves)	$ 406,450		$ -		$ 406,450
333	Surburban Water Systems	Water Services & Meters	$ 3,136,065		$ (672,946)		$ 2,463,119
335	Surburban Water Systems	Hydrants	$ 1,634,718		$ -		$ 1,634,718
339	Surburban Water Systems	Kubota L39TL & Ingersoll Rand 185	$ 55,205		$ -		$ 55,205
339	Surburban Water Systems	Generator - Trailer Mounted	$ 143,591		$ -		$ 143,591
N/A	Surburban Water Systems	Water Rights	$ 7,105,517		$ -		$ 7,105,517
N/A	SWB Grant	Grant - State Water Board	$ 256,061		$ -		$ 256,061
		TOTAL Sativa Water System	**$ 34,475,000**		**$ (1,309,000)**		**$ 33,166,000**

Depreciation

The American Society of Appraisers, within the book "*Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets,"* 4th edition defines depreciation as "the estimated loss in value of an asset when compared with a new asset; appraisal depreciation measures inferiority caused by a combination of physical deterioration, functional obsolescence, and economic obsolescence."

This is essentially the same definition as that used by the American Standards Board in its publication of Uniform Standards of Professional Appraisal Practice. The above definition implies that the difference or loss in value includes all forms of depreciation. For an appraiser, the question becomes how to categorize and measure the various motivations in the market in a way that explains and classifies this difference.

Several mathematical processes have been developed to accomplish and explain depreciation; however, it is well to remember that because market value is ultimately based on the judgment of both the buyer and the seller, depreciation is also ultimately based on the judgment of both the buyer and the seller or in the case of an appraisal, depreciation is ultimately based on the judgment of the appraiser. For this reason, in determining depreciation, one factor to consider is the physical inspection of the assets which aids in bringing the various depreciation processes into perspective. A physical inspection of the Sativa Water System was not practical since the majority of the system is buried. During the interview process with the County, we requested samples of extracted pipe segments from any ongoing construction activities. The County provided a four-inch steel pipe segment and a four-inch PVC segment from two documented locations. Photographs of these pipe sections are included in Appendix 2.

For the appraiser, the quantification and classification of depreciation are needed for directly developing **REPRODUCTION Cost New Less Depreciation** and **REPLACEMENT Cost New Less Depreciation**. Typical depreciation techniques can be as simple as the estimate of a single age over life ratio or as complicated as the breakdown of the subject asset's depreciation into its various components for individual consideration. The selection of the appropriate depreciation model(s) by the appraiser will be based on the type and amount of data available. While depreciation models are plentiful, the model(s) selected must be commensurate with the types of depreciation occurring in the assets.

Physical Depreciation

Models based on the age-life method are probably the best known and easiest understood of depreciation techniques. These models provide an estimate of the total depreciation for either single or groups of assets. In the simplest form, the economic age-life method arrives at an estimate of accrued depreciation by using the ratio of the effective age over the effective age plus the remaining service life. Often the effective age plus the remaining useful life is equivalent to the service life. The effective age is the measure of the condition of the asset concerning the expected life, which may or may not be the actual or chronological (historical) age. It should also be recognized the expected remaining service life of an asset might change during the life cycle of

the asset. We used an age-life depreciation procedure to calculate physical depreciation for the **REPRODUCTION Cost New Less Depreciation** and **REPLACEMENT Cost New Less Depreciation**.

Life Expectancy (Service Life)

Typically, experience indicates the conditions that can be anticipated in the future, and, thus, can be useful as a major element in estimating the service life of an asset. Factors other than age that contribute to the service life include the effect of wear and tear on the asset, preventative maintenance procedures, operating and capital expenditure policy, thermal cycling, changing technology, changing regulatory and environmental requirements, and obsolescence.

We concluded these service lives from analyzing several sources typically used in the industry, and from our appraisal experience.

- Standard Practice U-4-W: California Public Utilities Commission Water Division, *Standard Practice for Determination of Straight-line Remaining Life Depreciation Accruals,* 1981

- Table 4 – The Useful Lives of Drinking Water System Components: American Society of Civil Engineers, *Failure to Act – The Economic Impact of Current Investment Trends in Water & Wastewater Treatment Infrastructure*, 2011

- Estimated Normal Useful Life Study: American Society of Appraisers – Machinery & Technical Specialties Committee

- US Treasury Department Bureau of Internal Revenue, Bulletin "F" Income Tax Depreciation and Obsolescence Estimated Useful Lives and Depreciation Rates

Table I-2 identifies the service life range based upon Standard Practice U-4-W as promulgated by the California Public Utilities Commission.

An asset may survive longer or shorter than its service life. Service life is the estimated number of years that an asset is expected to remain in service, based upon experience and anticipated future expectations.

After a review of these data, the concluded life expectancy (service life) by asset type used in our analysis is presented in Table I-3.

Table I-2
Chapter 6 – Service Life Estimates (Water Utilities)

Ac. No		Class of Plant	Total Service Life of an Original Group (Av. Service Life in Years) (See Notes 1, 2)	Suggested Method Estimating Remaining Life (See Note 3)
		D. Water Utilities		
		SOURCE OF WATER PLANT		
311		Structures and Improvements	20-60	Forecast
312		Collecting and Impounding Reservoirs	40-100	Forecast
313		Lake, River and Other Intakes	30-70	Forecast
315		Wells	20-40	Forecast
316		Supply Mains	25-100	Forecast
		PUMPING PLANT		
321		Structures and Improvements	20-60	Forecast
324		Pumping Equipment	15-35	Survivor Curve
325		Other Pumping Plant	15-25	Judgment
		WATER TREATMENT PLANT		
331		Structures and Improvements	20-60	Forecast
332		Water Treatment Equipment	15-40	Forecast
		TRANSMISSION AND DISTRIBUTION PLANT		
341		Structures and Improvements	20-60	Forecast
342		Reservoirs and Tanks	25-100	Forecast
343		Transmission and Distribution Mains		
		Cast Iron and Asbestos Cement	50-100	Survivor Curve
		All Other Pipes	25-50	Survivor Curve
345		Services	20-40	Survivor Curve
346		Meters	25-40	Survivor Curve
347		Meter Installations	25-45	Survivor Curve
348		Hydrants	25-50	Survivor Curve
349		Other Transmission and Distribution Plant	15-40	Judgment

Notes: 1. Plant of a particular utility may justify a service life outside of above ranges.

2. Net salvage estimates are to be separately considered.

3. Larger utilities will find more accurate methods, such as selection of a type curve or actuarial solutions, desirable. Small utilities may find only the Approximation Method or the Judgment Method applicable. For further information, see Chapter 5, Section E.

Table I-3
Life Expectancy (Service Life)

CPUC Account	Description	Service Life
303	Land	N/A
304	Structures & Improvements	40 Years
307	Wells	40 Years
311	Pumping Equipment	25 Years
320	Water Treatment Equipment	25 Years
330	Tanks	20 Years
331	Water Mains (Cast Iron & Asbestos Cement)	75 Years
331	Water Mains (Polyvinyl Chloride)	75 Years
331	Water Valves	30 Years
333	Water Services	30 Years
335	Hydrants	40 Years
339	Other Equipment	5 Years

In Table I-2, the service life range is 20 to 40 years. Since the Sativa Wells exceed the upper limit for wells, we utilized 40 years as the service life of the wells.

Age

Historical age is the appraisal year less the placed-in-service year of the assets. Improvements over time can contribute to an asset being effectively younger than its historical age. Conversely, abnormal wear can contribute to an asset effectively being older than its historical age. For the analysis, we utilized effective ages by asset grouping.

Account 303: Land – Land is a non-depreciable asset with an indefinite life.

Account 304: Structures & Improvements – Effective ages for the minor buildings and site improvements at the well sites were determined via interviews, the appraiser's judgment, site photographs, and guidance from Section 97 of *MVS*.

Account 307: Wells – Effective ages for the wells were determined via interviews, installation dates, certain technical documents, and the appraiser's judgment.

Account 311: Pumping / Electrical Equipment – Effective ages for the pumping / electrical equipment were determined via interviews, certain technical documents, and the appraiser's judgment.

Account 320: Water Treatment Equipment – Effective ages for the water treatment equipment were determined via interviews, certain technical documents, and the appraiser's judgment.

Account 330: Reservoirs, Tanks, & Standpipes – Effective ages for the hydropneumatic tanks at the well sites were determined via interviews, the appraiser's judgment, site photographs, and guidance from Section 97 of *MVS*.

Account 331: Water Mains & Valves – Effective ages of the water mains were used by determining the percent good via an R3 Probable Life Curve, as published in the *Statistical Analyses of Industrial Property Retirements* of Iowa State University, "the Iowa Curves." Additionally, we performed visual inspections of extracted pipe from the actual Sativa Water System as well as the appraiser's judgment.

Account 333: Water Services – Effective ages of the water services were used by determining the percent good via an R3 Probable Life Curve, as published in the *Statistical Analyses of Industrial Property Retirements* of Iowa State University, "the Iowa Curves" and the appraiser's judgment.

Account 335: Hydrants – Effective ages of the water services were used by determining the percent good via an R3 Probable Life Curve, as published in the *Statistical Analyses of Industrial Property Retirements* of Iowa State University, "the Iowa Curves" and the appraiser's judgment.

Other Equipment – Effective ages for other equipment were determined via interviews, certain technical documents, and the appraiser's judgment.

Physical Deterioration

Physical deterioration is the physical wear and tear due to age that diminishes the value of an asset. Physical deterioration can be estimated by the straight-line method, by the age-life method, using mortality dispersion techniques, and by property inspection.

The straight-line depreciation technique is commonly accepted and used in the valuation of public utility assets. The technique is used in our analyses not simply because it is a common accounting tool, but rather because it is the most accurate technique in the cost approach valuation of public utility assets, as a valuation tool and as an economic reality. The following equation defines straight-line depreciation:

$$\textbf{Depreciation (percent)} = \textbf{Age (years)} / \textbf{Service Life (years)} \times \textbf{100 percent}$$

However, we utilized the following alternative straight-line depreciation equation (where Age and Remaining Life are both expressed in years):

$$\textbf{Depreciation (percent)} = \textbf{Age} / (\textbf{Remaining Life} + \textbf{Age}) \times \textbf{100 percent}$$

Correspondingly, the percent good of an asset can be defined as the complement of depreciation:

$$\textbf{\textit{Percent Good}}\ (\textbf{\textit{percent}}) = \mathbf{1} - \textbf{\textit{Depreciation}}\ (\textbf{\textit{percent}})$$

We then multiplied the **REPRODUCTION Cost New Less Depreciation** and **REPLACEMENT Cost New Less Depreciation** of the Assets by its percent good factor to determine physical depreciation, summarized in Table I-4.

Asset Retirement Expense / Future Net Salvage

The Sativa Water System is a going concern. As a going concern, it assumes the water company will remain in business indefinitely and continue to be profitable.

MRV Consulting considered the asset retirement expense and the future net salvage of the System. The results were immaterial; therefore, we did not include a retirement expense in the analysis.

Functional Obsolescence

Functional obsolescence is the loss of value due to functional deficiencies, overcapacity, excess capital costs, lack of functional utility, excess operating costs, or inadequacies within the property itself. An improvement is functionally obsolete when the improvement requires an operation, use, or activity to be completed in a way that current replacement improvements would not. Some types of functional obsolescence are curable if the costs to repair, modify, or add are offset by the increased value of the asset. Typical examples of functional obsolescence issues involve the current costs to construct new replacement assets, efficiencies, and the cost to maintain the assets or improve operations based on changes in available technology.

Functional obsolescence can be characterized by:

- Deficiencies requiring an addition – Not currently included in the estimate of cost new and is currently desired or required in the market.
- Deficiencies requiring a modification – Included in the estimate of cost new but is not adequate or outmoded.
- Super-adequacies – Included in the reproduction cost (likely not in replacement cost) and are cost components that surpass current market standards.
- Deficiencies requiring an additional operating cost.

We considered functional obsolescence within the Sativa Water System in the form of excess capital costs. As previously discussed, excess capital costs are the difference between reproduction and replacement costs.

Table I-4
Physical Depreciation – Sativa Water System
As of April 20, 2021

CPUC Account	Funding	Account Category	REPRODUCTION Cost New	Physical Depreciation	REPLACEMENT Cost New	Physical Depreciation
303	Surburban Water Systems	Land	$ 1,011,000	$ -	$ 1,011,000	$ -
304	Surburban Water Systems	Structures & Improvements	$ 1,026,026	$ (412,647)	$ 1,026,026	$ (412,647)
307	Surburban Water Systems	Wells	$ 6,697,698	$ (3,493,051)	$ 6,697,698	$ (3,493,051)
307	SWB Grant	Wells	$ 513,700	$ -	$ 513,700	$ -
311	Surburban Water Systems	Pumping / Electrical Equipment	$ 951,942	$ (495,010)	$ 951,942	$ (495,010)
311	SWB Grant	Pumping / Electrical Equipment	$ 202,819	$ -	$ 202,819	$ -
320	Surburban Water Systems	Water Treatment Equipment	$ 173,821	$ (90,387)	$ 173,821	$ (90,387)
320	SWB Grant	Water Treatment Equipment	$ 37,034	$ -	$ 37,034	$ -
320	IRWM Grant	Water Treatment Equipment	$ 2,250,000	$ -	$ 2,250,000	$ -
330	Surburban Water Systems	Reservoirs, Tanks, & Standpipes	$ 662,691	$ (265,076)	$ 662,691	$ (265,076)
331	SWB Grant	Water Mains & Valves	$ 760,385	$ -	$ 760,385	$ -
331	Surburban Water Systems	Water Mains & Valves (Non-PVC)	$ 4,218,942	$ (1,321,770)	$ 3,371,408	$ (1,018,589)
331	Surburban Water Systems	Water Mains & Valves (PVC)	$ 3,231,229	$ (1,255,634)	$ 3,443,004	$ (1,373,561)
331	Surburban Water Systems	Water Mains & Valves (Water Valves)	$ 406,450	$ (203,225)	$ 406,450	$ (203,225)
333	Surburban Water Systems	Water Services & Meters	$ 3,136,065	$ (2,508,852)	$ 2,463,119	$ (1,970,495)
335	Surburban Water Systems	Hydrants	$ 1,634,718	$ (1,307,775)	$ 1,634,718	$ (1,307,775)
339	Surburban Water Systems	Kubota L39TL & Ingersoll Rand 185	$ 55,205	$ (18,595)	$ 55,205	$ (18,595)
339	Surburban Water Systems	Generator - Trailer Mounted	$ 143,591	$ (114,873)	$ 143,591	$ (114,873)
N/A	Surburban Water Systems	Water Rights	$ 7,105,517	$ -	$ 7,105,517	$ -
N/A	SWB Grant	Grant - State Water Board	$ 256,061	$ -	$ 256,061	$ -
		TOTAL Sativa Water System	**$ 34,475,000**	**$ (11,487,000)**	**$ 33,166,000**	**$ (10,763,000)**

Economic Obsolescence

Economic obsolescence (external obsolescence) is the loss of earnings and value stemming from negative changes in the market, or due to other factors external to the property. Changes in market demand, federal or state law, the economy, and/or any operational constraints external to the asset that are detrimental to the asset's earnings can be measured by capitalizing the expected losses in the earnings over the period that the condition is expected to exist.

During an 18 to 24 month period that spanned 2019 to 2021, the Department of Public Works, Los Angeles County is completing grant-funded projects to replace existing operable equipment at Well No. 5. This was identified as economic obsolescence because it forced certain equipment into early retirement. These assets include pumping equipment, electrical equipment, and water treatment equipment. The economic obsolescence penalty identified within Sativa Water System is ($180,000), as of April 20, 2021. The supporting spreadsheet analysis is included within Appendices 3 through 6.

REPRODUCTION Cost New Less Depreciation

Based on valuation theory, employed methodology, assumptions, and analyses, the **REPRODUCTION Cost New Less Depreciation** of the Sativa Water System is ***$22,808,000***, as of April 20, 2021.

This value conclusion is comprised of $18,788,000 of non-grant funded and $4,020,000 of grant-funded assets (the grant-funded assets are net of depreciation).

REPLACEMENT Cost New Less Depreciation

Based on valuation theory, employed methodology, assumptions, and analyses, the **REPLACEMENT Cost New Less Depreciation** of the Sativa Water System is ***$22,223,000***, as of April 20, 2021.

This value conclusion is comprised of $18,203,000 of non-grant funded and $4,020,000 of grant-funded assets (the grant-funded assets are net of depreciation).

Conclusion – RCNLD

In the valuation process, more than one approach to value is usually applied, and each approach typically provides a different indication of value. Moreover, several value indications may be derived in a single approach. If two or more methods are used, the appraiser must reconcile the value indications.

The appraiser resolves multiple value indications derived within a single approach as part of the application of that approach. Furthermore, after resolving multiple value indications within a single approach, the appraiser applies the same process to the value indications of multiple approaches, providing a clear analysis of why the results of one (or more) of the approaches to

value are given more weight than the results of the others. Resolving the differences among various value indications is called reconciliation. There is a 2.3 percent difference between the two methods. The replacement method strongly supports the reproduction cost method.

California Public Utilities Code Section 2720 states that if fair market value exceeds reproduction cost, the CPUC may include the difference in the rate base for ratesetting purposes if it finds that the additional amounts are fair and reasonable. Therefore, the **REPRODUCTION Cost New Less Depreciation** analysis is assigned 100 percent weight. Therefore, the RCNLD of the Sativa Water System is ***$22,808,000***, as of April 20, 2021.

APPENDIX 1

PROFESSIONAL QUALIFICATIONS

Mark Rodriguez, ASA MRICS is the founder and managing partner of MRV Consulting. Mr. Rodriguez is an Accredited Senior Appraiser with the American Society of Appraisers and a Member of the Royal Institution of Chartered Surveyors. He holds a bachelor's degree in mechanical engineering and a master's degree in management.

With over 29 years of experience, Mr. Rodriguez has developed a specialization in domestic and international transactions involving complex valuation matters and special-purpose properties. Before founding MR Valuation Consulting, LLC, Mr. Rodriguez worked in the valuation group of Deloitte & Touche. There he served as the developer and head of the independent power and public utility valuation practice performing consulting projects throughout North America, Latin America, and Europe. His previous experience also includes engineering and construction management experience at Dick Corporation with specific involvement in the design and construction of power generation facilities, industrial and commercial properties. Mr. Rodriguez has been honored by the American Society of Appraisers with special recognition of his services and contribution to the organization and the appraisal profession as he served as president and vice president at the Northern New Jersey Chapter.

He has supervised and performed a diversity of valuation, appraisal, and consulting engagements, including the valuation of electric generating/transmission/distribution facilities (including renewables and nuclear) and systems, water systems and facilities, healthcare facilities and operations, public utilities, independent power producers, complex manufacturing, processing and industrial facilities, commercial buildings, and residential rental apartments. These assignments were performed for transactional pricing for taxation and management reporting purposes, property tax negotiations, transfer tax, project financing, acquisitions, divestitures, insurance, due diligence, non-cash charitable contributions, bankruptcy and restructuring proceedings, litigation support, and purchase price allocations for tax and financial reporting including compliance with FASB ASC and IFRS. Mr. Rodriguez's expert witness testimony experience is multi-dimensional, as he has successfully testified and provided numerous litigation and negotiation support services on behalf of both taxpayers and municipalities.

Mr. Rodriguez was responsible for the valuation of the Sativa Water System Assets. He performed the RCNLD analysis and is the primary author of the narrative report.

APPENDIX 2

SITE PHOTOGRAPHS



Photograph 1: Well Site No. 2 – 2015 East Hatchway Street, Compton, CA



Photograph 2: Well Site No. 2 – Hydropneumatic Tank

Photographs Provided by Suburban Water Systems



Photograph 3: Well Site No. 3 – Electrical Equipment



Photograph 4: Well Site No. 3 – Water Treatment Equipment

Photographs Provided by Suburban Water Systems



Photograph 5: Well Site No. 4 – Trailer Mounted Diesel Generator



Photograph 6: Well Site No. 4 – Kabuto Tractor with Backhoe

Photographs Provided by Suburban Water Systems



Photograph 7: Well Site No. 5 – Well Enclosure

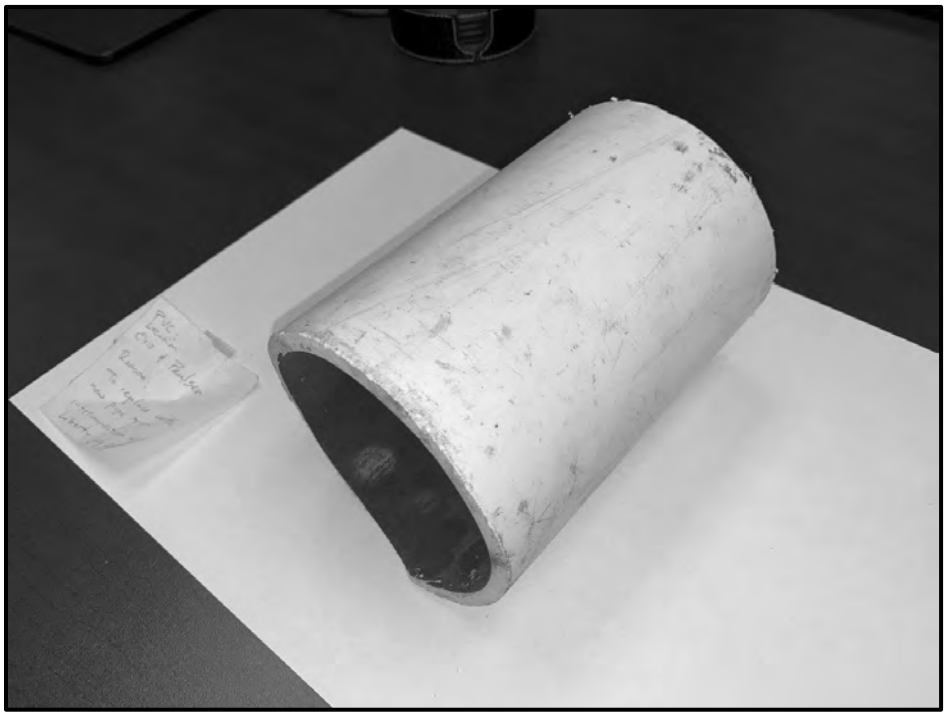


Photograph 8: Well Site No. 5 – Site Improvements

Photographs Provided by Suburban Water Systems



Photograph 9: SAMPLE 4-Inch Steel Pipe (from Lucien St. at Largo Ave.)



Photograph 10: SAMPLE 4-Inch PVC Pipe (from Otis St. at Paulsen Ave.)

Photograph Date: November 11, 2020

APPENDIX 3

EXECUTIVE SUMMARY
(REPRODUCTION COST NEW LESS DEPRECIATION)

EXECUTIVE SUMMARY
Reproduction Cost New Less Depreciation Analysis
(As of April 20, 2021)

CPUC Account	Account Category	Description	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
303	Land	Land	$ 881,000	$ -	$ -	$ -	$ 881,000	$ 881,000		
303	Land	Private Easements	$ 130,000	$ -	$ -	$ -	$ 130,000	$ 130,000		
304	Structures & Improvements	Buildings & Land Improvements	$ 1,026,026	$ (412,647)	$ -	$ -	$ 613,379	$ 613,379		
307	Wells	Well No. 2	$ 1,584,261	$ (792,131)	$ -	$ -	$ 792,131	$ 792,131		
307	Wells	Well No. 3	$ 1,340,679	$ (670,340)	$ -	$ -	$ 670,340	$ 670,340		
307	Wells	Well No. 4	$ 1,310,468	$ (1,168,779)	$ -	$ -	$ 141,689	$ 141,689		
307	Wells	Well No. 5	$ 2,462,290	$ (861,801)	$ -	$ -	$ 1,600,488	$ 1,600,488		
307	Wells	Well Improvements (Well No. 5)	$ 513,700	$ -	$ -	$ -	$ 513,700		$ 513,700	
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 2)	$ 317,314	$ (165,003)	$ -	$ -	$ 152,311	$ 152,311		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 3)	$ 317,314	$ (165,003)	$ -	$ -	$ 152,311	$ 152,311		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 5)	$ 317,314	$ (165,003)	$ -	$ (152,311)	$ -	$ -		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 5)	$ 202,819	$ -	$ -	$ -	$ 202,819		$ 202,819	
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 2)	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 3)	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 5)	$ 57,940	$ (30,129)	$ -	$ (27,811)	$ -	$ -		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 5)	$ 37,034	$ -	$ -	$ -	$ 37,034		$ 37,034	
320	Water Treatment Equipment	Manganese Water Treatment (Well No. 5)	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000			$ 2,250,000
330	Reservoirs, Tanks, & Standpipes	Hydropneumatic Tanks	$ 662,691	$ (265,076)	$ -	$ -	$ 397,615	$ 397,615		
331	Water Mains & Valves	Lucien Street Waterline (8-inch)	$ 760,385	$ -	$ -	$ -	$ 760,385		$ 760,385	
331	Water Mains & Valves	Water Mains (Non-PVC)	$ 4,218,942	$ (1,321,770)	$ -	$ -	$ 2,897,172	$ 2,897,172		
331	Water Mains & Valves	Water Mains (PVC)	$ 3,231,229	$ (1,255,634)	$ -	$ -	$ 1,975,595	$ 1,975,595		
331	Water Mains & Valves	Water Valves	$ 406,450	$ (203,225)	$ -	$ -	$ 203,225	$ 203,225		
333	Water Services & Meters	Water Services	$ 3,136,065	$ (2,508,852)	$ -	$ -	$ 627,213	$ 627,213		
335	Hydrants	Hydrants	$ 1,634,718	$ (1,307,775)	$ -	$ -	$ 326,944	$ 326,944		
339	Other Equipment	Kubota L39TL & Ingersoll Rand 185	$ 55,205	$ (18,595)	$ -	$ -	$ 36,610	$ 36,610		
339	Other Equipment	Generator - Trailer Mounted	$ 143,591	$ (114,873)	$ -	$ -	$ 28,718	$ 28,718		
N/A	Water Rights	Water Rights (by Stratecon Inc.)	$ 7,105,517	$ -	$ -	$ -	$ 7,105,517	$ 7,105,517		
N/A	Grant - State Water Board	Infrastructural Grant - Other Costs	$ 256,061	$ -	$ -	$ -	$ 256,061		$ 256,061	
Reproduction Cost New Less Depreciation Analysis			**$ 34,475,000**	**$ (11,487,000)**	**$ -**	**$ (180,000)**	**$ 22,808,000**	**$ 18,788,000**	**$ 1,770,000**	**$ 2,250,000**

APPENDIX 4

FIXED ASSET REGISTER
(REPRODUCTION COST NEW LESS DEPRECIATION)

FIXED ASSET REGISTER
Reproduction Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10000	303	Land	Well Site No. 2	Land (Parcel No. 6155-017-900)	6,553	SF	$ 249,000	$ -	$ -	$ -	$ 249,000	$ 249,000		
10001	303	Land	Well Site No. 3	Land (Parcel No. 6154-010-900)	7,203	SF	$ 259,000	$ -	$ -	$ -	$ 259,000	$ 259,000		
10002	303	Land	Well Site No. 4	Land (Parcel No. 6152-019-901)	4,934	SF	$ 197,000	$ -	$ -	$ -	$ 197,000	$ 197,000		
10003	303	Land	Well Site No. 5	Land (Parcel No. 6155-005-900 & 901)	4,398	SF	$ 176,000	$ -	$ -	$ -	$ 176,000	$ 176,000		
10004	303	Land	Multiple	Private Easements	13,040	SF	$ 130,000	$ -	$ -	$ -	$ 130,000	$ 130,000		
10005														
10006	304	Structures & Improvements	Well Site No. 2	Sativa Office	1,879	SF	$ 406,175	$ (146,223)	$ -	$ -	$ 259,952	$ 259,952		
10007	304	Structures & Improvements	Well Site No. 2	Well No. 2 Enclosure	1,052	SF	$ 146,086	$ (87,652)	$ -	$ -	$ 58,434	$ 58,434		
10008	304	Structures & Improvements	Well Site No. 2	Paving	3,436	SF	$ 45,627	$ (17,110)	$ -	$ -	$ 28,517	$ 28,517		
10009	304	Structures & Improvements	Well Site No. 2	Steel Fence	100	SF	$ 4,314	$ (1,294)	$ -	$ -	$ 3,020	$ 3,020		
10010	304	Structures & Improvements	Well Site No. 2	Steel Gate	90	SF	$ 4,726	$ (1,418)	$ -	$ -	$ 3,308	$ 3,308		
10011	304	Structures & Improvements	Well Site No. 2	Underground Sanitary Sewer Utility	15	LF	$ 587	$ (220)	$ -	$ -	$ 367	$ 367		
10012	304	Structures & Improvements	Well Site No. 2	Underground Electric Utility	15	LF	$ 960	$ (360)	$ -	$ -	$ 600	$ 600		
10013	304	Structures & Improvements	Well Site No. 2	Underground Gas Utility	15	LF	$ 380	$ (142)	$ -	$ -	$ 237	$ 237		
10014														
10015	304	Structures & Improvements	Well Site No. 3	Well No. 3 Enclosure	512	SF	$ 58,332	$ (20,999)	$ -	$ -	$ 37,332	$ 37,332		
10016	304	Structures & Improvements	Well Site No. 3	Paving	4,190	SF	$ 55,639	$ (20,865)	$ -	$ -	$ 34,774	$ 34,774		
10017	304	Structures & Improvements	Well Site No. 3	Wrought Iron Fence	195	SF	$ 8,412	$ (2,524)	$ -	$ -	$ 5,888	$ 5,888		
10018	304	Structures & Improvements	Well Site No. 3	Wrought Iron Gate	25	SF	$ 1,313	$ (394)	$ -	$ -	$ 919	$ 919		
10019	304	Structures & Improvements	Well Site No. 3	Underground Sanitary Sewer Utility	20	LF	$ 783	$ (294)	$ -	$ -	$ 489	$ 489		
10020	304	Structures & Improvements	Well Site No. 3	Underground Electric Utility	20	LF	$ 1,280	$ (480)	$ -	$ -	$ 800	$ 800		
10021	304	Structures & Improvements	Well Site No. 3	Underground Gas Utility	20	LF	$ 506	$ (190)	$ -	$ -	$ 317	$ 317		
10022														
10023	304	Structures & Improvements	Well Site No. 4	Building - Well Site No. 4	922	SF	$ 96,712	$ (34,816)	$ -	$ -	$ 61,896	$ 61,896		
10024	304	Structures & Improvements	Well Site No. 4	Well No. 4 Enclosure	351	SF	$ 36,816	$ (22,089)	$ -	$ -	$ 14,726	$ 14,726		
10025	304	Structures & Improvements	Well Site No. 4	Paving	2,800	SF	$ 37,181	$ (13,943)	$ -	$ -	$ 23,238	$ 23,238		
10026	304	Structures & Improvements	Well Site No. 4	Wrought Iron Fence	300	SF	$ 12,941	$ (3,882)	$ -	$ -	$ 9,059	$ 9,059		
10027	304	Structures & Improvements	Well Site No. 4	Wrought Iron Gate	180	SF	$ 9,453	$ (2,836)	$ -	$ -	$ 6,617	$ 6,617		
10028	304	Structures & Improvements	Well Site No. 4	Underground Sanitary Sewer Utility	30	LF	$ 1,174	$ (440)	$ -	$ -	$ 734	$ 734		
10029	304	Structures & Improvements	Well Site No. 4	Underground Electric Utility	30	LF	$ 1,920	$ (720)	$ -	$ -	$ 1,200	$ 1,200		
10030	304	Structures & Improvements	Well Site No. 4	Underground Gas Utility	30	LF	$ 760	$ (285)	$ -	$ -	$ 475	$ 475		
10031														
10032	304	Structures & Improvements	Well Site No. 5	Well No. 5 Enclosure	277	SF	$ 29,046	$ (10,456)	$ -	$ -	$ 18,589	$ 18,589		
10033	304	Structures & Improvements	Well Site No. 5	Paving	3,267	SF	$ 43,382	$ (16,268)	$ -	$ -	$ 27,114	$ 27,114		
10034	304	Structures & Improvements	Well Site No. 5	Wrought Iron Fence	300	SF	$ 12,941	$ (3,882)	$ -	$ -	$ 9,059	$ 9,059		
10035	304	Structures & Improvements	Well Site No. 5	Wrought Iron Gate	90	SF	$ 4,726	$ (1,418)	$ -	$ -	$ 3,308	$ 3,308		
10036	304	Structures & Improvements	Well Site No. 5	Underground Sanitary Sewer Utility	30	LF	$ 1,174	$ (440)	$ -	$ -	$ 734	$ 734		
10037	304	Structures & Improvements	Well Site No. 5	Underground Electric Utility	30	LF	$ 1,920	$ (720)	$ -	$ -	$ 1,200	$ 1,200		
10038	304	Structures & Improvements	Well Site No. 5	Underground Gas Utility	30	LF	$ 760	$ (285)	$ -	$ -	$ 475	$ 475		
10039														
10040	307	Wells	Well Site No. 2	Well Drilling - 36 Inch Diameter	24	LF	$ 11,447	$ (5,724)	$ -	$ -	$ 5,724	$ 5,724		
10041	307	Wells	Well Site No. 2	Well Drilling - 30 Inch Diameter	205	LF	$ 80,640	$ (40,320)	$ -	$ -	$ 40,320	$ 40,320		
10042	307	Wells	Well Site No. 2	Well Drilling - 26 Inch Diameter	215	LF	$ 69,502	$ (34,751)	$ -	$ -	$ 34,751	$ 34,751		
10043	307	Wells	Well Site No. 2	Steel Well Casing - 18 Inch Diameter	445	LF	$ 678,674	$ (339,337)	$ -	$ -	$ 339,337	$ 339,337		

FIXED ASSET REGISTER
Reproduction Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10044	307	Wells	Well Site No. 2	Develop Well	156	HR	$ 231,610	$ (115,805)	$ -	$ -	$ 115,805	$ 115,805		
10045	307	Wells	Well Site No. 2	Pump Test Well	36	HR	$ 35,554	$ (17,777)	$ -	$ -	$ 17,777	$ 17,777		
10046	307	Wells	Well Site No. 2	Observation Well	1,000	LF	$ 189,746	$ (94,873)	$ -	$ -	$ 94,873	$ 94,873		
10047	307	Wells	Well Site No. 2	Well Structural Components	1	LS	$ 287,088	$ (143,544)	$ -	$ -	$ 143,544	$ 143,544		
10048														
10049	307	Wells	Well Site No. 3	Well Drilling - 36 Inch Diameter	17	LF	$ 8,129	$ (4,064)	$ -	$ -	$ 4,064	$ 4,064		
10050	307	Wells	Well Site No. 3	Well Drilling - 30 Inch Diameter	146	LF	$ 57,263	$ (28,632)	$ -	$ -	$ 28,632	$ 28,632		
10051	307	Wells	Well Site No. 3	Well Drilling - 26 Inch Diameter	153	LF	$ 49,354	$ (24,677)	$ -	$ -	$ 24,677	$ 24,677		
10052	307	Wells	Well Site No. 3	Steel Well Casing - 18 Inch Diameter	316	LF	$ 481,935	$ (240,968)	$ -	$ -	$ 240,968	$ 240,968		
10053	307	Wells	Well Site No. 3	Develop Well	156	HR	$ 231,610	$ (115,805)	$ -	$ -	$ 115,805	$ 115,805		
10054	307	Wells	Well Site No. 3	Pump Test Well	36	HR	$ 35,554	$ (17,777)	$ -	$ -	$ 17,777	$ 17,777		
10055	307	Wells	Well Site No. 3	Observation Well	1,000	LF	$ 189,746	$ (94,873)	$ -	$ -	$ 94,873	$ 94,873		
10056	307	Wells	Well Site No. 3	Well Structural Components	1	LS	$ 287,088	$ (143,544)	$ -	$ -	$ 143,544	$ 143,544		
10057														
10058	307	Wells	Well Site No. 4	Well Drilling - 36 Inch Diameter	16	LF	$ 7,717	$ (7,717)	$ -	$ -	$ -	$ -		
10059	307	Wells	Well Site No. 4	Well Drilling - 30 Inch Diameter	138	LF	$ 54,364	$ (54,364)	$ -	$ -	$ -	$ -		
10060	307	Wells	Well Site No. 4	Well Drilling - 26 Inch Diameter	145	LF	$ 46,855	$ (46,855)	$ -	$ -	$ -	$ -		
10061	307	Wells	Well Site No. 4	Steel Well Casing - 18 Inch Diameter	300	LF	$ 457,533	$ (457,533)	$ -	$ -	$ -	$ -		
10062	307	Wells	Well Site No. 4	Develop Well	156	HR	$ 231,610	$ (185,288)	$ -	$ -	$ 46,322	$ 46,322		
10063	307	Wells	Well Site No. 4	Pump Test Well	36	HR	$ 35,554	$ (35,554)	$ -	$ -	$ -	$ -		
10064	307	Wells	Well Site No. 4	Observation Well	1,000	LF	$ 189,746	$ (151,797)	$ -	$ -	$ 37,949	$ 37,949		
10065	307	Wells	Well Site No. 4	Well Structural Components	1	LS	$ 287,088	$ (229,671)	$ -	$ -	$ 57,418	$ 57,418		
10066														
10067	307	Wells	Well Site No. 5	Well Drilling - 36 Inch Diameter	50	LF	$ 23,409	$ (8,193)	$ -	$ -	$ 15,216	$ 15,216		
10068	307	Wells	Well Site No. 5	Well Drilling - 30 Inch Diameter	420	LF	$ 164,904	$ (57,716)	$ -	$ -	$ 107,188	$ 107,188		
10069	307	Wells	Well Site No. 5	Well Drilling - 26 Inch Diameter	440	LF	$ 142,128	$ (49,745)	$ -	$ -	$ 92,383	$ 92,383		
10070	307	Wells	Well Site No. 5	Steel Well Casing - 18 Inch Diameter	910	LF	$ 1,387,851	$ (485,748)	$ -	$ -	$ 902,103	$ 902,103		
10071	307	Wells	Well Site No. 5	Develop Well	156	HR	$ 231,610	$ (81,063)	$ -	$ -	$ 150,546	$ 150,546		
10072	307	Wells	Well Site No. 5	Pump Test Well	36	HR	$ 35,554	$ (12,444)	$ -	$ -	$ 23,110	$ 23,110		
10073	307	Wells	Well Site No. 5	Observation Well	1,000	LF	$ 189,746	$ (66,411)	$ -	$ -	$ 123,335	$ 123,335		
10074	307	Wells	Well Site No. 5	Well Structural Components	1	LS	$ 287,088	$ (100,481)	$ -	$ -	$ 186,608	$ 186,608		
10075														
10076	307	Wells	Well Site No. 5	Well Liner & Redevelopment	1	LS	$ 374,898	$ -	$ -	$ -	$ 374,898		$ 374,898	
10077	307	Wells	Well Site No. 5	Piping Components & Install	1	LS	$ 20,376	$ -	$ -	$ -	$ 20,376		$ 20,376	
10078	307	Wells	Well Site No. 5	Pull Well & Video	1	LS	$ 13,460	$ -	$ -	$ -	$ 13,460		$ 13,460	
10079	307	Wells	Well Site No. 5	Rehabilitation & Test Pump	1	LS	$ 104,966	$ -	$ -	$ -	$ 104,966		$ 104,966	
10080														
10081	311	Pumping / Electrical Equipment	Well Site No. 2	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ -	$ 109,111	$ 109,111		
10082	311	Pumping / Electrical Equipment	Well Site No. 2	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ -	$ 43,199	$ 43,199		
10083														
10084	311	Pumping / Electrical Equipment	Well Site No. 3	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ -	$ 109,111	$ 109,111		
10085	311	Pumping / Electrical Equipment	Well Site No. 3	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ -	$ 43,199	$ 43,199		
10086														

FIXED ASSET REGISTER
Reproduction Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10087	311	Pumping / Electrical Equipment	Well Site No. 5	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ (109,111)	$ -	$ -		
10088	311	Pumping / Electrical Equipment	Well Site No. 5	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ (43,199)	$ -	$ -		
10089														
10090	311	Pumping / Electrical Equipment	Well Site No. 5	Re-Equip Pump, Motor, & Components	1	LS	$ 145,294	$ -	$ -	$ -	$ 145,294		$ 145,294	
10091	311	Pumping / Electrical Equipment	Well Site No. 5	VFD & Components	1	LS	$ 34,023	$ -	$ -	$ -	$ 34,023		$ 34,023	
10092	311	Pumping / Electrical Equipment	Well Site No. 5	VFD Installation & Pump Testing (Freeboarding)	1	LS	$ 23,502	$ -	$ -	$ -	$ 23,502		$ 23,502	
10093														
10094	320	Water Treatment Equipment	Well Site No. 2	Gas Chlorination System (Regal Model 210)	1	EA	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
10095														
10096	320	Water Treatment Equipment	Well Site No. 3	Gas Chlorination System (Sureflow Technologies Series 4500)	1	EA	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
10097														
10098	320	Water Treatment Equipment	Well Site No. 5	Gas Chlorination System (Regal Model 216)	1	EA	$ 57,940	$ (30,129)	$ -	$ (27,811)	$ -	$ -		
10099														
10100	320	Water Treatment Equipment	Well Site No. 5	Chlorine Room Components (Pumps, Scales, Analyzer)	1	LS	$ 35,943	$ -	$ -	$ -	$ 35,943		$ 35,943	
10101	320	Water Treatment Equipment	Well Site No. 5	Chlorine Gas Pump	1	LS	$ 1,091	$ -	$ -	$ -	$ 1,091		$ 1,091	
10102	320	Water Treatment Equipment	Well Site No. 5	Manganese Water Treatment	1	LS	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000			$ 2,250,000
10103														
10104	330	Reservoirs, Tanks, & Standpipes	Well Site No. 2	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 165,673	$ (66,269)	$ -	$ -	$ 99,404	$ 99,404		
10105	330	Reservoirs, Tanks, & Standpipes	Well Site No. 3	Hydropneumatic Tank (10,000 Gallons)	2	EA	$ 331,345	$ (132,538)	$ -	$ -	$ 198,807	$ 198,807		
10106	330	Reservoirs, Tanks, & Standpipes	Well Site No. 5	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 165,673	$ (66,269)	$ -	$ -	$ 99,404	$ 99,404		
10107														
10108	331	Water Mains & Valves	Lucien Street	Reimbursement	1	LS	$ 500	$ -	$ -	$ -	$ 500		$ 500	
10109	331	Water Mains & Valves	Lucien Street	Plumber	1	LS	$ 6,497	$ -	$ -	$ -	$ 6,497		$ 6,497	
10110	331	Water Mains & Valves	Lucien Street	Flag person and Traffic Control	1	LS	$ 33,909	$ -	$ -	$ -	$ 33,909		$ 33,909	
10111	331	Water Mains & Valves	Lucien Street	Steel Plate	1	LS	$ 11,165	$ -	$ -	$ -	$ 11,165		$ 11,165	
10112	331	Water Mains & Valves	Lucien Street	Equipment	1	LS	$ 44,017	$ -	$ -	$ -	$ 44,017		$ 44,017	
10113	331	Water Mains & Valves	Lucien Street	Hauling and Disposal	1	LS	$ 33,288	$ -	$ -	$ -	$ 33,288		$ 33,288	
10114	331	Water Mains & Valves	Lucien Street	Cleaning	1	LS	$ 7,540	$ -	$ -	$ -	$ 7,540		$ 7,540	
10115	331	Water Mains & Valves	Lucien Street	Test Pit	1	LS	$ 1,324	$ -	$ -	$ -	$ 1,324		$ 1,324	
10116	331	Water Mains & Valves	Lucien Street	Sawcut	1	LS	$ 6,006	$ -	$ -	$ -	$ 6,006		$ 6,006	
10117	331	Water Mains & Valves	Lucien Street	Abatement	1	LS	$ 3,921	$ -	$ -	$ -	$ 3,921		$ 3,921	
10118	331	Water Mains & Valves	Lucien Street	Demo Asphalt	1	LS	$ 10,758	$ -	$ -	$ -	$ 10,758		$ 10,758	
10119	331	Water Mains & Valves	Lucien Street	Concrete	1	LS	$ 5,684	$ -	$ -	$ -	$ 5,684		$ 5,684	
10120	331	Water Mains & Valves	Lucien Street	Sand Bedding	1	LS	$ 13,652	$ -	$ -	$ -	$ 13,652		$ 13,652	
10121	331	Water Mains & Valves	Lucien Street	Import Soil	1	LS	$ 7,633	$ -	$ -	$ -	$ 7,633		$ 7,633	
10122	331	Water Mains & Valves	Lucien Street	Excavation	1	LS	$ 5,174	$ -	$ -	$ -	$ 5,174		$ 5,174	
10123	331	Water Mains & Valves	Lucien Street	Backfilling	1	LS	$ 4,001	$ -	$ -	$ -	$ 4,001		$ 4,001	
10124	331	Water Mains & Valves	Lucien Street	Compaction	1	LS	$ 4,679	$ -	$ -	$ -	$ 4,679		$ 4,679	
10125	331	Water Mains & Valves	Lucien Street	Sand Bags	1	LS	$ 3,223	$ -	$ -	$ -	$ 3,223		$ 3,223	
10126	331	Water Mains & Valves	Lucien Street	Wood Shoring	1	LS	$ 28,202	$ -	$ -	$ -	$ 28,202		$ 28,202	
10127	331	Water Mains & Valves	Lucien Street	Removal of Spoils from the Roadway	1	LS	$ 3,134	$ -	$ -	$ -	$ 3,134		$ 3,134	
10128	331	Water Mains & Valves	Lucien Street	Base Coarse	1	LS	$ 6,161	$ -	$ -	$ -	$ 6,161		$ 6,161	
10129	331	Water Mains & Valves	Lucien Street	Asphalt	1	LS	$ 19,876	$ -	$ -	$ -	$ 19,876		$ 19,876	
10130	331	Water Mains & Valves	Lucien Street	Video Camera	1	LS	$ 648	$ -	$ -	$ -	$ 648		$ 648	

FIXED ASSET REGISTER
Reproduction Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10131	331	Water Mains & Valves	Lucien Street	Boring	1	LS	$ 36,766	$ -	$ -	$ -	$ 36,766		$ 36,766	
10132	331	Water Mains & Valves	Lucien Street	Waterline and Fittings	1	LS	$ 113,273	$ -	$ -	$ -	$ 113,273		$ 113,273	
10133	331	Water Mains & Valves	Lucien Street	Fire Hydrant	1	LS	$ 9,210	$ -	$ -	$ -	$ 9,210		$ 9,210	
10134	331	Water Mains & Valves	Lucien Street	General Requirements	1	LS	$ 3,572	$ -	$ -	$ -	$ 3,572		$ 3,572	
10135	331	Water Mains & Valves	Lucien Street	Existing Conditions	1	LS	$ 925	$ -	$ -	$ -	$ 925		$ 925	
10136	331	Water Mains & Valves	Lucien Street	Concrete	1	LS	$ 233	$ -	$ -	$ -	$ 233		$ 233	
10137	331	Water Mains & Valves	Lucien Street	Exterior Improvements	1	LS	$ 1,801	$ -	$ -	$ -	$ 1,801		$ 1,801	
10138	331	Water Mains & Valves	Lucien Street	Utilities	1	LS	$ (2,103)	$ -	$ -	$ -	$ (2,103)		$ (2,103)	
10139	331	Water Mains & Valves	Lucien Street	PE Costs	1	LS	$ 145,321	$ -	$ -	$ -	$ 145,321		$ 145,321	
10140	331	Water Mains & Valves	Lucien Street	CE Costs	1	LS	$ 190,396	$ -	$ -	$ -	$ 190,396		$ 190,396	
10141														
10142	331	Water Mains & Valves	Multiple	Water Mains (2" Copper)	722	LF	$ 127,588	$ (67,515)	$ -	$ -	$ 60,073	$ 60,073		
10143	331	Water Mains & Valves	Multiple	Water Mains (4" PVC)	7,334	LF	$ 908,875	$ (528,810)	$ -	$ -	$ 380,065	$ 380,065		
10144	331	Water Mains & Valves	Multiple	Water Mains (4" AC)	14,837	LF	$ 2,257,213	$ (809,341)	$ -	$ -	$ 1,447,872	$ 1,447,872		
10145	331	Water Mains & Valves	Multiple	Water Mains (4" Steel)	1,408	LF	$ 339,337	$ (121,672)	$ -	$ -	$ 217,665	$ 217,665		
10146	331	Water Mains & Valves	Multiple	Water Mains (4" Cast Iron)	1,610	LF	$ 388,020	$ (139,128)	$ -	$ -	$ 248,892	$ 248,892		
10147	331	Water Mains & Valves	Multiple	Water Mains (6" PVC)	15,330	LF	$ 2,132,517	$ (616,372)	$ -	$ -	$ 1,516,145	$ 1,516,145		
10148	331	Water Mains & Valves	Multiple	Water Mains (6" AC)	5,373	LF	$ 835,722	$ (86,924)	$ -	$ -	$ 748,799	$ 748,799		
10149	331	Water Mains & Valves	Multiple	Water Mains (6" Cast Iron)	1,008	LF	$ 271,062	$ (97,191)	$ -	$ -	$ 173,871	$ 173,871		
10150	331	Water Mains & Valves	Multiple	Water Mains (8" PVC)	1,300	LF	$ 189,837	$ (110,452)	$ -	$ -	$ 79,384	$ 79,384		
10151														
10152	331	Water Mains & Valves	Multiple	Water Valves	147	EA	$ 406,450	$ (203,225)	$ -	$ -	$ 203,225	$ 203,225		
10153														
10154	333	Water Mains & Valves	Multiple	Water Services (3/4" Copper)	32,860	LF	$ 3,136,065	$ (2,508,852)	$ -	$ -	$ 627,213	$ 627,213		
10155														
10156	335	Hydrants	Multiple	Fire Hydrants (4" Diameter)	29	EA	$ 804,744	$ (643,795)	$ -	$ -	$ 160,949	$ 160,949		
10157	335	Hydrants	Multiple	Fire Hydrants (6" Diameter)	29	EA	$ 829,974	$ (663,979)	$ -	$ -	$ 165,995	$ 165,995		
10158														
10159	339	Other Equipment	Well Site No. 4	Kubota L39TL (Tractor with Loader)	1	EA	$ 46,488	$ (18,595)	$ -	$ -	$ 27,893	$ 27,893		
10160	339	Other Equipment	Well Site No. 4	Ingersoll Rand 185 Air Compressor	1	EA	$ 8,717	$ -	$ -	$ -	$ 8,717	$ 8,717		
10161	339	Other Equipment	Well Site No. 4	WhisperWatt Diesel Generator (Serial No. 1337508)	1	LS	$ 143,591	$ (114,873)	$ -	$ -	$ 28,718	$ 28,718		
10162														
10163	N/A	Water Rights	Multiple	Water Rights (by Stratecon Inc.)	1	LS	$ 7,105,517	$ -	$ -	$ -	$ 7,105,517	$ 7,105,517		
10164	N/A	Grant - State Water Board	Multiple	Infrastructural Grant - Other Costs	1	LS	$ 256,061	$ -	$ -	$ -	$ 256,061		$ 256,061	
10165														
10166				**Fixed Asset Register - Reproduction Cost New Less Depreciation Analysis**			**$ 34,475,000**	**$ (11,487,000)**	**$ -**	**$ (180,000)**	**$ 22,808,000**	**$ 18,788,000**	**$ 1,770,000**	**$ 2,250,000**

APPENDIX 5

SUPPLEMENTAL DATA
FIXED ASSET REGISTER DETAIL
(REPRODUCTION COST NEW LESS DEPRECIATION)

FIXED ASSET REGISTER DETAIL
WELL SITE FACILITIES

FIXED ASSET REGISTER - FACILITIES

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Line No.	CPUC Account	Facility Name	Address	Description	Quantity	Unit	Unit Cost	Source	Intermediate Cost	Current Cost Multiplier	Congestion Multiplier	Local Multiplier	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs
2																		
3	1000	303	Well Site No. 2	2015 E. Hatchway St.	Land (Parcel No. 6155-017-900)	6,553	SF	$ 38.00	FAC	$ 249,014	1.00	1.00	1.00	$ 249,000	$ -	$ 249,000	$ -	$ 249,000
4	1001	304	Well Site No. 2	2015 E. Hatchway St.	Sativa Office	1,879	SF	See Building Sheet	M&S 15-17	See Building Sheet	1.10	1.05	1.17	$ 322,792	$ 56,811	$ 379,603	$ 29,033	$ 408,636
5	1002	304	Well Site No. 2	2015 E. Hatchway St.	Well No. 2 Enclosure	1,052	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 116,096	$ 20,433	$ 136,529	$ 10,442	$ 146,971
6	1003	304	Well Site No. 2	2015 E. Hatchway St.	Paving	3,436	SF	$ 7.21	M&S 66-1	$ 24,774	1.09	1.05	1.19	$ 33,684	$ 5,928	$ 39,612	$ 3,030	$ 42,642
7	1004	304	Well Site No. 2	2015 E. Hatchway St.	Steel Fence	100	SF	$ 23.00	M&S 66-4	$ 2,300	1.11	1.05	1.19	$ 3,185	$ 560	$ 3,745	$ 286	$ 4,032
8	1005	304	Well Site No. 2	2015 E. Hatchway St.	Steel Gate	90	SF	$ 28.00	M&S 66-4	$ 2,520	1.11	1.05	1.19	$ 3,489	$ 614	$ 4,103	$ 314	$ 4,417
9	1006	304	Well Site No. 2	2015 E. Hatchway St.	Underground Sanitary Sewer Utility	15	LF	$ 21.25	M&S 66-1	$ 319	1.09	1.05	1.19	$ 433	$ 76	$ 510	$ 39	$ 549
10	1007	304	Well Site No. 2	2015 E. Hatchway St.	Underground Electric Utility	15	LF	$ 34.75	M&S 66-1	$ 521	1.09	1.05	1.19	$ 709	$ 125	$ 833	$ 64	$ 897
11	1008	304	Well Site No. 2	2015 E. Hatchway St.	Underground Gas Utility	15	LF	$ 13.75	M&S 66-1	$ 206	1.09	1.05	1.19	$ 280	$ 49	$ 330	$ 25	$ 355
12	1009	330	Well Site No. 2	2015 E. Hatchway St.	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 92,500.00	M&S 61-8	$ 92,500	1.06	1.05	1.19	$ 122,308	$ 21,526	$ 143,834	$ 11,001	$ 154,834
13	1010	303	Well Site No. 3	13320 S. Willowbrook Ave.	Land (Parcel No. 6154-010-900)	7,203	SF	$ 36.00	FAC	$ 259,308	1.00	1.00	1.00	$ 259,000	$ -	$ 259,000	$ -	$ 259,000
14	1011	304	Well Site No. 3	13320 S. Willowbrook Ave.	Well No. 3 Enclosure	512	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 46,357	$ 8,159	$ 54,515	$ 4,169	$ 58,685
15	1012	304	Well Site No. 3	13320 S. Willowbrook Ave.	Paving	4,190	SF	$ 7.21	M&S 66-1	$ 30,210	1.09	1.05	1.19	$ 41,075	$ 7,229	$ 48,305	$ 3,694	$ 51,999
16	1013	304	Well Site No. 3	13320 S. Willowbrook Ave.	Wrought Iron Fence	195	SF	$ 23.00	M&S 66-4	$ 4,485	1.11	1.05	1.19	$ 6,210	$ 1,093	$ 7,303	$ 559	$ 7,861
17	1014	304	Well Site No. 3	13320 S. Willowbrook Ave.	Wrought Iron Gate	25	SF	$ 28.00	M&S 66-4	$ 700	1.11	1.05	1.19	$ 969	$ 171	$ 1,140	$ 87	$ 1,227
18	1015	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Sanitary Sewer Utility	20	LF	$ 21.25	M&S 66-1	$ 425	1.09	1.05	1.19	$ 578	$ 102	$ 680	$ 52	$ 732
19	1016	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Electric Utility	20	LF	$ 34.75	M&S 66-1	$ 695	1.09	1.05	1.19	$ 945	$ 166	$ 1,111	$ 85	$ 1,196
20	1017	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Gas Utility	20	LF	$ 13.75	M&S 66-1	$ 275	1.09	1.05	1.19	$ 374	$ 66	$ 440	$ 34	$ 473
21	1018	330	Well Site No. 3	13320 S. Willowbrook Ave.	Hydropneumatic Tank (10,000 Gallons)	2	EA	$ 92,500.00	M&S 61-8	$ 185,000	1.06	1.05	1.19	$ 244,615	$ 43,052	$ 287,667	$ 22,001	$ 309,669
22	1019	303	Well Site No. 4	13139 S. Aranbe Ave.	Land (Parcel No. 6152-019-901)	4,934	SF	$ 40.00	FAC	$ 197,360	1.00	1.00	1.00	$ 197,000	$ -	$ 197,000	$ -	$ 197,000
23	1020	304	Well Site No. 4	13139 S. Aranbe Ave.	Building - Well Site No. 4	922	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 76,858	$ 13,527	$ 90,385	$ 6,913	$ 97,298
24	1021	304	Well Site No. 4	13139 S. Aranbe Ave.	Well No. 4 Enclosure	351	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 29,258	$ 5,149	$ 34,407	$ 2,632	$ 37,039
25	1022	304	Well Site No. 4	13139 S. Aranbe Ave.	Paving	2,800	SF	$ 7.21	M&S 66-1	$ 20,188	1.09	1.05	1.19	$ 27,449	$ 4,831	$ 32,280	$ 2,469	$ 34,749
26	1023	304	Well Site No. 4	13139 S. Aranbe Ave.	Wrought Iron Fence	300	SF	$ 23.00	M&S 66-4	$ 6,900	1.11	1.05	1.19	$ 9,554	$ 1,681	$ 11,235	$ 859	$ 12,095
27	1024	304	Well Site No. 4	13139 S. Aranbe Ave.	Wrought Iron Gate	180	SF	$ 28.00	M&S 66-4	$ 5,040	1.11	1.05	1.19	$ 6,978	$ 1,228	$ 8,207	$ 628	$ 8,834
28	1025	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Sanitary Sewer Utility	30	LF	$ 21.25	M&S 66-1	$ 638	1.09	1.05	1.19	$ 867	$ 153	$ 1,019	$ 78	$ 1,097
29	1026	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Electric Utility	30	LF	$ 34.75	M&S 66-1	$ 1,043	1.09	1.05	1.19	$ 1,417	$ 249	$ 1,667	$ 127	$ 1,794
30	1027	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Gas Utility	30	LF	$ 13.75	M&S 66-1	$ 413	1.09	1.05	1.19	$ 561	$ 99	$ 660	$ 50	$ 710
31	1028	339	Well Site No. 4	13139 S. Aranbe Ave.	Kubota L39TL (Tractor with Loader)	1	EA	$ 34,320.00	Fastline	$ 34,320	1.00	1.00	1.00	$ 34,320	$ 6,040	$ 40,360	$ 3,087	$ 43,447
32	1029	339	Well Site No. 4	13139 S. Aranbe Ave.	Ingersoll Rand 185 Air Compressor	1	EA	$ 6,435.00	ebay	$ 6,435	1.00	1.00	1.00	$ 6,435	$ 1,133	$ 7,568	$ 579	$ 8,146
33	1030	303	Well Site No. 5	2083 E. Stockwell St.	Land (Parcel No. 6155-005-900 & 901)	4,398	SF	$ 40.00	FAC	$ 175,920	1.00	1.00	1.00	$ 176,000	$ -	$ 176,000	$ -	$ 176,000
34	1031	304	Well Site No. 5	2083 E. Stockwell St.	Well No. 5 Enclosure	277	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 23,083	$ 4,063	$ 27,145	$ 2,076	$ 29,221
35	1032	304	Well Site No. 5	2083 E. Stockwell St.	Paving	3,267	SF	$ 7.21	M&S 66-1	$ 23,555	1.09	1.05	1.19	$ 32,027	$ 5,637	$ 37,664	$ 2,881	$ 40,544
36	1033	304	Well Site No. 5	2083 E. Stockwell St.	Wrought Iron Fence	300	SF	$ 23.00	M&S 66-4	$ 6,900	1.11	1.05	1.19	$ 9,554	$ 1,681	$ 11,235	$ 859	$ 12,095
37	1034	304	Well Site No. 5	2083 E. Stockwell St.	Wrought Iron Gate	90	SF	$ 28.00	M&S 66-4	$ 2,520	1.11	1.05	1.19	$ 3,489	$ 614	$ 4,103	$ 314	$ 4,417
38	1035	304	Well Site No. 5	2083 E. Stockwell St.	Underground Sanitary Sewer Utility	30	LF	$ 21.25	M&S 66-1	$ 638	1.09	1.05	1.19	$ 867	$ 153	$ 1,019	$ 78	$ 1,097
39	1036	304	Well Site No. 5	2083 E. Stockwell St.	Underground Electric Utility	30	LF	$ 34.75	M&S 66-1	$ 1,043	1.09	1.05	1.19	$ 1,417	$ 249	$ 1,667	$ 127	$ 1,794
40	1037	304	Well Site No. 5	2083 E. Stockwell St.	Underground Gas Utility	30	LF	$ 13.75	M&S 66-1	$ 413	1.09	1.05	1.19	$ 561	$ 99	$ 660	$ 50	$ 710
41	1038	330	Well Site No. 5	2083 E. Stockwell St.	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 92,500.00	M&S 61-8	$ 92,500	1.06	1.05	1.19	$ 122,308	$ 21,526	$ 143,834	$ 11,001	$ 154,834
42	1039																	
43	**1040**				**Subtotal Facilities - Sativa Water System**									**$ 2,212,102**	**$ 234,274**	**$ 2,446,376**	**$ 119,722**	**$ 2,566,098**

FIXED ASSET REGISTER - FACILITIES

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	T	U	V	W	X	Y	Z	AA	AB	AC
1	G&A	Reproduction Cost New	Historical Age	Effective Age	Normal Useful Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation
2										
3	$ -	$ 249,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 249,000
4	$ 26,572	$ 406,175	31	31	50	36%	$ (146,223)	$ -	$ -	$ 259,952
5	$ 9,557	$ 146,086	31	31	40	60%	$ (87,652)	$ -	$ -	$ 58,434
6	$ 2,985	$ 45,627	N/A	15	40	38%	$ (17,110)	$ -	$ -	$ 28,517
7	$ 282	$ 4,314	N/A	12	40	30%	$ (1,294)	$ -	$ -	$ 3,020
8	$ 309	$ 4,726	N/A	12	40	30%	$ (1,418)	$ -	$ -	$ 3,308
9	$ 38	$ 587	N/A	15	40	38%	$ (220)	$ -	$ -	$ 367
10	$ 63	$ 960	N/A	15	40	38%	$ (360)	$ -	$ -	$ 600
11	$ 25	$ 380	N/A	15	40	38%	$ (142)	$ -	$ -	$ 237
12	$ 10,838	$ 165,673	N/A	8	20	40%	$ (66,269)	$ -	$ -	$ 99,404
13	$ -	$ 259,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 259,000
14	$ 3,816	$ 58,332	N/A	31	40	36%	$ (20,999)	$ -	$ -	$ 37,332
15	$ 3,640	$ 55,639	N/A	15	40	38%	$ (20,865)	$ -	$ -	$ 34,774
16	$ 550	$ 8,412	N/A	12	40	30%	$ (2,524)	$ -	$ -	$ 5,888
17	$ 86	$ 1,313	N/A	12	40	30%	$ (394)	$ -	$ -	$ 919
18	$ 51	$ 783	N/A	15	40	38%	$ (294)	$ -	$ -	$ 489
19	$ 84	$ 1,280	N/A	15	40	38%	$ (480)	$ -	$ -	$ 800
20	$ 33	$ 506	N/A	15	40	38%	$ (190)	$ -	$ -	$ 317
21	$ 21,677	$ 331,345	N/A	8	20	40%	$ (132,538)	$ -	$ -	$ 198,807
22	$ -	$ 197,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 197,000
23	$ 6,327	$ 96,712	N/A	31	40	36%	$ (34,816)	$ -	$ -	$ 61,896
24	$ 2,409	$ 36,816	N/A	31	40	60%	$ (22,089)	$ -	$ -	$ 14,726
25	$ 2,432	$ 37,181	N/A	15	40	38%	$ (13,943)	$ -	$ -	$ 23,238
26	$ 847	$ 12,941	N/A	12	40	30%	$ (3,882)	$ -	$ -	$ 9,059
27	$ 618	$ 9,453	N/A	12	40	30%	$ (2,836)	$ -	$ -	$ 6,617
28	$ 77	$ 1,174	N/A	15	40	38%	$ (440)	$ -	$ -	$ 734
29	$ 126	$ 1,920	N/A	15	40	38%	$ (720)	$ -	$ -	$ 1,200
30	$ 50	$ 760	N/A	15	40	38%	$ (285)	$ -	$ -	$ 475
31	$ 3,041	$ 46,488	N/A	2	5	40%	$ (18,595)	$ -	$ -	$ 27,893
32	$ 570	$ 8,717	N/A	N/A	N/A	N/A	$ -	$ -	$ -	$ 8,717
33	$ -	$ 176,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 176,000
34	$ 1,900	$ 29,046	26	26	40	36%	$ (10,456)	$ -	$ -	$ 18,589
35	$ 2,838	$ 43,382	N/A	15	40	38%	$ (16,268)	$ -	$ -	$ 27,114
36	$ 847	$ 12,941	N/A	12	40	30%	$ (3,882)	$ -	$ -	$ 9,059
37	$ 309	$ 4,726	N/A	12	40	30%	$ (1,418)	$ -	$ -	$ 3,308
38	$ 77	$ 1,174	N/A	15	40	38%	$ (440)	$ -	$ -	$ 734
39	$ 126	$ 1,920	N/A	15	40	38%	$ (720)	$ -	$ -	$ 1,200
40	$ 50	$ 760	N/A	15	40	38%	$ (285)	$ -	$ -	$ 475
41	$ 10,838	$ 165,673	N/A	8	20	40%	$ (66,269)	$ -	$ -	$ 99,404
42										
43	**$ 114,088**	**$ 2,624,922**					**$ (696,318)**	$ -	$ -	**$ 1,928,603**

FIXED ASSET REGISTER DETAIL
WELL INFRASTRUCTURE

FIXED ASSET REGISTER - WELL INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4	MRV No.	CPUC Account	Account Category	Site No.	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost
5																		
6	2000	307	Wells	Well Site No. 2	Well Drilling - 36 Inch Diameter	24	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
7	2001	307	Wells	Well Site No. 2	Well Drilling - 30 Inch Diameter	205	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
8	2002	307	Wells	Well Site No. 2	Well Drilling - 26 Inch Diameter	215	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
9	2003	307	Wells	Well Site No. 2	Steel Well Casing - 18 Inch Diameter	445	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
10	2004	307	Wells	Well Site No. 2	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
11	2005	307	Wells	Well Site No. 2	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
12	2006	307	Wells	Well Site No. 2	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
13	2007	307	Wells	Well Site No. 2	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
14	2008	311	Pumping / Electrical Equipment	Well Site No. 2	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
15	2009	311	Pumping / Electrical Equipment	Well Site No. 2	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
16	2010	320	Water Treatment Equipment	Well Site No. 2	Gas Chlorination System (Regal Model 210)	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
17	2011																	
18	2012	307	Wells	Well Site No. 3	Well Drilling - 36 Inch Diameter	17	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
19	2013	307	Wells	Well Site No. 3	Well Drilling - 30 Inch Diameter	146	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
20	2014	307	Wells	Well Site No. 3	Well Drilling - 26 Inch Diameter	153	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
21	2015	307	Wells	Well Site No. 3	Steel Well Casing - 18 Inch Diameter	316	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
22	2016	307	Wells	Well Site No. 3	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
23	2017	307	Wells	Well Site No. 3	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
24	2018	307	Wells	Well Site No. 3	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
25	2019	307	Wells	Well Site No. 3	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
26	2020	311	Pumping / Electrical Equipment	Well Site No. 3	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
27	2021	311	Pumping / Electrical Equipment	Well Site No. 3	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
28	2022	320	Water Treatment Equipment	Well Site No. 3	Gas Chlorination System (Sureflow Technologies Series 4500)	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
29	2023																	
30	2024	307	Wells	Well Site No. 4	Well Drilling - 36 Inch Diameter	16	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
31	2025	307	Wells	Well Site No. 4	Well Drilling - 30 Inch Diameter	138	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
32	2026	307	Wells	Well Site No. 4	Well Drilling - 26 Inch Diameter	145	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
33	2027	307	Wells	Well Site No. 4	Steel Well Casing - 18 Inch Diameter	300	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
34	2028	307	Wells	Well Site No. 4	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
35	2029	307	Wells	Well Site No. 4	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
36	2030	307	Wells	Well Site No. 4	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
37	2031	307	Wells	Well Site No. 4	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
38	2032	339	Other Equipment	Well Site No. 4	WhisperWatt Diesel Generator (Serial No. 1337508)	1	LS	26 32 13.13-2800	R-3	$ 52,500.00	$ 3,806.25	$ 5,325.00	$ 820.00	$ 8,355.00	$ 70,806.25	$ 11,286.52	1.118	$ 91,779.71
39	2033																	
40	2034	307	Wells	Well Site No. 5	Well Drilling - 36 Inch Diameter	50	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
41	2035	307	Wells	Well Site No. 5	Well Drilling - 30 Inch Diameter	420	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
42	2036	307	Wells	Well Site No. 5	Well Drilling - 26 Inch Diameter	440	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
43	2037	307	Wells	Well Site No. 5	Steel Well Casing - 18 Inch Diameter	910	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
44	2038	307	Wells	Well Site No. 5	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
45	2039	307	Wells	Well Site No. 5	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
46	2040	307	Wells	Well Site No. 5	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
47	2041	307	Wells	Well Site No. 5	Well Structural Components	1	LS	Wood Rodgers	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
48	2042	311	Pumping / Electrical Equipment	Well Site No. 5	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
49	2043	311	Pumping / Electrical Equipment	Well Site No. 5	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
50	2044	320	Water Treatment Equipment	Well Site No. 5	Gas Chlorination System (Regal Model 216)	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
51	2045																	
52	2046			**Subtotal Well Infrastructure - Sativa Water System**														

FIXED ASSET REGISTER - WELL INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
4	Contractor Costs	Engineering Fees	Permits	Construction Management Fees	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs	G&A	Reproduction Cost New	Effective Age	Service Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation
5																		
6	$ 7,317	$ 439	$ 146	$ 549	$ 8,451	$ 1,487	$ 9,938	$ 760	$ 10,698	$ 749	$ 11,447	20	40	50%	$ (5,724)	$ -	$ -	$ 5,724
7	$ 51,543	$ 3,093	$ 1,031	$ 3,866	$ 59,532	$ 10,478	$ 70,010	$ 5,354	$ 75,364	$ 5,276	$ 80,640	20	40	50%	$ (40,320)	$ -	$ -	$ 40,320
8	$ 44,424	$ 2,665	$ 888	$ 3,332	$ 51,310	$ 9,031	$ 60,340	$ 4,615	$ 64,955	$ 4,547	$ 69,502	20	40	50%	$ (34,751)	$ -	$ -	$ 34,751
9	$ 433,792	$ 26,028	$ 8,676	$ 32,534	$ 501,030	$ 88,181	$ 589,211	$ 45,064	$ 634,275	$ 44,399	$ 678,674	20	40	50%	$ (339,337)	$ -	$ -	$ 339,337
10	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	20	40	50%	$ (115,805)	$ -	$ -	$ 115,805
11	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	20	40	50%	$ (17,777)	$ -	$ -	$ 17,777
12	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	20	40	50%	$ (94,873)	$ -	$ -	$ 94,873
13	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	20	40	50%	$ (143,544)	$ -	$ -	$ 143,544
14	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ -	$ 109,111
15	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ -	$ 43,199
16	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ -	$ 27,811
17																		
18	$ 5,196	$ 312	$ 104	$ 390	$ 6,001	$ 1,056	$ 7,057	$ 540	$ 7,597	$ 532	$ 8,129	20	40	50%	$ (4,064)	$ -	$ -	$ 4,064
19	$ 36,601	$ 2,196	$ 732	$ 2,745	$ 42,275	$ 7,440	$ 49,715	$ 3,802	$ 53,517	$ 3,746	$ 57,263	20	40	50%	$ (28,632)	$ -	$ -	$ 28,632
20	$ 31,546	$ 1,893	$ 631	$ 2,366	$ 36,436	$ 6,413	$ 42,848	$ 3,277	$ 46,125	$ 3,229	$ 49,354	20	40	50%	$ (24,677)	$ -	$ -	$ 24,677
21	$ 308,041	$ 18,482	$ 6,161	$ 23,103	$ 355,788	$ 62,619	$ 418,406	$ 32,000	$ 450,407	$ 31,528	$ 481,935	20	40	50%	$ (240,968)	$ -	$ -	$ 240,968
22	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	20	40	50%	$ (115,805)	$ -	$ -	$ 115,805
23	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	20	40	50%	$ (17,777)	$ -	$ -	$ 17,777
24	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	20	40	50%	$ (94,873)	$ -	$ -	$ 94,873
25	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	20	40	50%	$ (143,544)	$ -	$ -	$ 143,544
26	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ -	$ 109,111
27	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ -	$ 43,199
28	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ -	$ 27,811
29																		
30	$ 4,933	$ 296	$ 99	$ 370	$ 5,697	$ 1,003	$ 6,700	$ 512	$ 7,212	$ 505	$ 7,717	59	40	100%	$ (7,717)	$ -	$ -	$ -
31	$ 34,748	$ 2,085	$ 695	$ 2,606	$ 40,134	$ 7,064	$ 47,198	$ 3,610	$ 50,808	$ 3,557	$ 54,364	59	40	100%	$ (54,364)	$ -	$ -	$ -
32	$ 29,949	$ 1,797	$ 599	$ 2,246	$ 34,591	$ 6,088	$ 40,679	$ 3,111	$ 43,790	$ 3,065	$ 46,855	59	40	100%	$ (46,855)	$ -	$ -	$ -
33	$ 292,444	$ 17,547	$ 5,849	$ 21,933	$ 337,773	$ 59,448	$ 397,221	$ 30,380	$ 427,601	$ 29,932	$ 457,533	59	40	100%	$ (457,533)	$ -	$ -	$ -
34	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	59	40	80%	$ (185,288)	$ -	$ -	$ 46,322
35	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	59	40	100%	$ (35,554)	$ -	$ -	$ -
36	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	59	40	80%	$ (151,797)	$ -	$ -	$ 37,949
37	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	59	40	80%	$ (229,671)	$ -	$ -	$ 57,418
38	$ 91,780	$ 5,507	$ 1,836	$ 6,883	$ 106,006	$ 18,657	$ 124,663	$ 9,534	$ 134,197	$ 9,394	$ 143,591	4	5	80%	$ (114,873)	$ -	$ -	$ 28,718
39																		
40	$ 14,962	$ 898	$ 299	$ 1,122	$ 17,282	$ 3,042	$ 20,323	$ 1,554	$ 21,877	$ 1,531	$ 23,409	14	40	35%	$ (8,193)	$ -	$ -	$ 15,216
41	$ 105,403	$ 6,324	$ 2,108	$ 7,905	$ 121,740	$ 21,426	$ 143,167	$ 10,950	$ 154,116	$ 10,788	$ 164,904	14	40	35%	$ (57,716)	$ -	$ -	$ 107,188
42	$ 90,845	$ 5,451	$ 1,817	$ 6,813	$ 104,926	$ 18,467	$ 123,392	$ 9,437	$ 132,830	$ 9,298	$ 142,128	14	40	35%	$ (49,745)	$ -	$ -	$ 92,383
43	$ 887,081	$ 53,225	$ 17,742	$ 66,531	$ 1,024,578	$ 180,326	$ 1,204,904	$ 92,153	$ 1,297,057	$ 90,794	$ 1,387,851	14	40	35%	$ (485,748)	$ -	$ -	$ 902,103
44	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	14	40	35%	$ (81,063)	$ -	$ -	$ 150,546
45	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	14	40	35%	$ (12,444)	$ -	$ -	$ 23,110
46	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	14	40	35%	$ (66,411)	$ -	$ -	$ 123,335
47	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	14	40	35%	$ (100,481)	$ -	$ -	$ 186,608
48	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ (109,111)	$ -
49	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ (43,199)	$ -
50	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ (27,811)	$ -
51																		
52	**$ 5,092,347**	**$ 305,541**	**$ 101,847**	**$ 381,926**	**$ 5,881,660**	**$ 1,035,172**	**$ 6,916,833**	**$ 529,010**	**$ 7,445,843**	**$ 521,209**	**$ 7,967,052**				**$ (4,193,320)**	**$ -**	**$ (180,122)**	**$ 3,593,610**

FIXED ASSET REGISTER DETAIL
DISTRIBUTION INFRASTRUCTURE

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1																						
2																						
3																						
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost	Contractor Costs	Engineering Fees	Permits	Construction Management Fees
5																						
6	3000	303	Land	N/A	Private Easements	13,040	SF	N/A	N/A	$ 10.00	$ -	$ -	$ -	$ -	$ 10.00	$ -	1.000	$ 10.00	$ 130,000	$ -	$ -	$ -
7	3001																					
8	3002	331	Water Mains & Valves - Cu	2	**Copper Pipe**	722	LF	33 14 13.45-3020	Q-1	$ 26.00	$ 1.89	$ 4.24	$ -	$ 4.76	$ 36.89	$ 5.88	1.118	$ 47.81	$ 34,519	$ 2,071	$ 690	$ 2,589
9	3003	331	Water Mains & Valves - Cu	2	Drilling & Blasting Rock	29	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 5,795	$ 348	$ 116	$ 435
10	3004	331	Water Mains & Valves - Cu	2	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	265	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 4,238	$ 254	$ 85	$ 318
11	3005	331	Water Mains & Valves - Cu	2	Bedding - Sand	147	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 6,646	$ 399	$ 133	$ 498
12	3006	331	Water Mains & Valves - Cu	2	Bedding - Compact Trench Bedding	147	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 1,201	$ 72	$ 24	$ 90
13	3007	331	Water Mains & Valves - Cu	2	Structural Backfill Under Asphalt or Concrete - Crushed Stone	155	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 8,702	$ 522	$ 174	$ 653
14	3008	331	Water Mains & Valves - Cu	2	Backfill Under Seeded Area - Common Earth	1	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 3	$ 0	$ 0	$ 0
15	3009	331	Water Mains & Valves - Cu	2	Utility Mix Grass Seed - Hydro/Air Seeding	241	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 892	$ 54	$ 18	$ 67
16	3010	331	Water Mains & Valves - Cu	2	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	1,949	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 11,549	$ 693	$ 231	$ 866
17	3011	331	Water Mains & Valves - Cu	2	Hauling - Cycle 40 Miles	294	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 8,007	$ 480	$ 160	$ 601
18	3012																					
19	3013	331	Water Mains & Valves - PVC	4	**Polyvinyl Chloride Pipe**	7,314	LF	33 14 13.25-4040	B-20A	$ 3.78	$ 0.27	$ 3.16	$ -	$ 1.96	$ 9.17	$ 1.46	1.118	$ 11.89	$ 87,212	$ 5,233	$ 1,744	$ 6,541
20	3014	331	Water Mains & Valves - PVC	4	Drilling & Blasting Rock	312	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 61,539	$ 3,692	$ 1,231	$ 4,615
21	3015	331	Water Mains & Valves - PVC	4	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,811	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 45,005	$ 2,700	$ 900	$ 3,375
22	3016	331	Water Mains & Valves - PVC	4	Bedding - Sand	1,562	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 70,573	$ 4,234	$ 1,411	$ 5,293
23	3017	331	Water Mains & Valves - PVC	4	Bedding - Compact Trench Bedding	1,562	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 12,754	$ 765	$ 255	$ 957
24	3018	331	Water Mains & Valves - PVC	4	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,645	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 92,411	$ 5,545	$ 1,848	$ 6,931
25	3019	331	Water Mains & Valves - PVC	4	Backfill Under Seeded Area - Common Earth	16	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 28	$ 2	$ 1	$ 2
26	3020	331	Water Mains & Valves - PVC	4	Utility Mix Grass Seed - Hydro/Air Seeding	2,445	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 9,061	$ 544	$ 181	$ 680
27	3021	331	Water Mains & Valves - PVC	4	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	19,802	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 117,317	$ 7,039	$ 2,346	$ 8,799
28	3022	331	Water Mains & Valves - PVC	4	Hauling - Cycle 40 Miles	3,124	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 85,029	$ 5,102	$ 1,701	$ 6,377
29	3023																					
30	3024	331	Water Mains & Valves - AC	4	**Cement Pipe**	14,817	LF	33 42 11.00-1010	B-14	$ 8.05	$ 0.58	$ 8.45	$ 0.81	$ 5.19	$ 23.08	$ 3.68	1.118	$ 29.92	$ 443,941	$ 26,636	$ 8,879	$ 33,296
31	3025	331	Water Mains & Valves - AC	4	Drilling & Blasting Rock	682	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 124,497	$ 7,470	$ 2,490	$ 9,337
32	3026	331	Water Mains & Valves - AC	4	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	5,688	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 91,047	$ 5,463	$ 1,821	$ 6,829
33	3027	331	Water Mains & Valves - AC	4	Bedding - Sand	3,160	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 142,773	$ 8,566	$ 2,855	$ 10,708
34	3028	331	Water Mains & Valves - AC	4	Bedding - Compact Trench Bedding	3,160	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 25,803	$ 1,548	$ 516	$ 1,935
35	3029	331	Water Mains & Valves - AC	4	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,327	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 186,952	$ 11,217	$ 3,739	$ 14,021
36	3030	331	Water Mains & Valves - AC	4	Backfill Under Seeded Area - Common Earth	32	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 56	$ 3	$ 1	$ 4
37	3031	331	Water Mains & Valves - AC	4	Utility Mix Grass Seed - Hydro/Air Seeding	4,946	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 18,331	$ 1,100	$ 367	$ 1,375
38	3032	331	Water Mains & Valves - AC	4	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	40,060	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 237,338	$ 14,240	$ 4,747	$ 17,800
39	3033	331	Water Mains & Valves - AC	4	Hauling - Cycle 40 Miles	6,319	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 172,018	$ 10,321	$ 3,440	$ 12,901
40	3034																					
41	3035	331	Water Mains & Valves - Steel	4	**Steel Pipe**	1,408	LF	33 14 13.15-2020	B-21A	$ 47.00	$ 3.41	$ 7.15	$ 0.95	$ 8.40	$ 66.91	$ 10.67	1.118	$ 86.73	$ 122,110	$ 7,327	$ 2,442	$ 9,158
42	3036	331	Water Mains & Valves - Steel	4	Drilling & Blasting Rock	60	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 11,815	$ 709	$ 236	$ 886
43	3037	331	Water Mains & Valves - Steel	4	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	540	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 8,640	$ 518	$ 173	$ 648
44	3038	331	Water Mains & Valves - Steel	4	Bedding - Sand	300	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 13,549	$ 813	$ 271	$ 1,016
45	3039	331	Water Mains & Valves - Steel	4	Bedding - Compact Trench Bedding	300	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 2,449	$ 147	$ 49	$ 184
46	3040	331	Water Mains & Valves - Steel	4	Structural Backfill Under Asphalt or Concrete - Crushed Stone	316	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 17,741	$ 1,064	$ 355	$ 1,331
47	3041	331	Water Mains & Valves - Steel	4	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 5	$ 0	$ 0	$ 0
48	3042	331	Water Mains & Valves - Steel	4	Utility Mix Grass Seed - Hydro/Air Seeding	459	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 1,740	$ 104	$ 35	$ 130
49	3043	331	Water Mains & Valves - Steel	4	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,802	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 22,523	$ 1,351	$ 450	$ 1,689
50	3044	331	Water Mains & Valves - Steel	4	Hauling - Cycle 40 Miles	600	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 16,324	$ 979	$ 326	$ 1,224
51	3045																					
52	3046	331	Water Mains & Valves - CI	4	**Cast Iron Pipe**	1,610	LF	33 14 13.15-2020	B-21A	$ 47.00	$ 3.41	$ 7.15	$ 0.95	$ 8.40	$ 66.91	$ 10.67	1.118	$ 86.73	$ 139,629	$ 8,378	$ 2,793	$ 10,472
53	3047	331	Water Mains & Valves - CI	4	Drilling & Blasting Rock	69	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 13,509	$ 811	$ 270	$ 1,013
54	3048	331	Water Mains & Valves - CI	4	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	617	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 9,880	$ 593	$ 198	$ 741
55	3049	331	Water Mains & Valves - CI	4	Bedding - Sand	343	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 15,493	$ 930	$ 310	$ 1,162
56	3050	331	Water Mains & Valves - CI	4	Bedding - Compact Trench Bedding	343	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 2,800	$ 168	$ 56	$ 210
57	3051	331	Water Mains & Valves - CI	4	Structural Backfill Under Asphalt or Concrete - Crushed Stone	361	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 20,287	$ 1,217	$ 406	$ 1,521
58	3052	331	Water Mains & Valves - CI	4	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 6	$ 0	$ 0	$ 0
59	3053	331	Water Mains & Valves - CI	4	Utility Mix Grass Seed - Hydro/Air Seeding	537	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 1,989	$ 119	$ 40	$ 149
60	3054	331	Water Mains & Valves - CI	4	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	4,347	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 25,754	$ 1,545	$ 515	$ 1,932
61	3055	331	Water Mains & Valves - CI	4	Hauling - Cycle 40 Miles	686	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 18,666	$ 1,120	$ 373	$ 1,400
62	3056																					
63	3057	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	15,310	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42	$ 297,666	$ 17,860	$ 5,953	$ 22,325
64	3058	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	681	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 134,227	$ 8,054	$ 2,685	$ 10,067
65	3059	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,132	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 98,162	$ 5,890	$ 1,963	$ 7,362
66	3060	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,407	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 153,930	$ 9,236	$ 3,079	$ 11,545
67	3061	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,407	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 27,819	$ 1,669	$ 556	$ 2,086
68	3062	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,587	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 201,562	$ 12,094	$ 4,031	$ 15,117
69	3063	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	34	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 60	$ 4	$ 1	$ 5
70	3064	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	5,110	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 18,940	$ 1,136	$ 379	$ 1,421
71	3065	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	41,391	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 245,224	$ 14,713	$ 4,904	$ 18,392
72	3066	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,813	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 185,462	$ 11,128	$ 3,709	$ 13,910
73	3067																					
74	3068	331	Water Mains & Valves - AC	6	**Cement Pipe**	5,373	LF	33 42 11.00-1010	B-14	$ 8.05	$ 0.58	$ 8.45	$ 0.81	$ 5.19	$ 23.08	$ 3.68	1.118	$ 29.92	$ 160,767	$ 9,646	$ 3,215	$ 12,057
75	3069	331	Water Mains & Valves - AC	6	Drilling & Blasting Rock	239	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 47,045	$ 2,823	$ 941	$ 3,528
76	3070	331	Water Mains & Valves - AC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,149	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 34,405	$ 2,064	$ 688	$ 2,580
77	3071	331	Water Mains & Valves - AC	6	Bedding - Sand	1,194	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 53,951	$ 3,237	$ 1,079	$ 4,046
78	3072	331	Water Mains & Valves - AC	6	Bedding - Compact Trench Bedding	1,194	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 9,750	$ 585	$ 195	$ 731
79	3073	331	Water Mains & Valves - AC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,257	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 70,645	$ 4,239	$ 1,413	$ 5,298
80	3074	331	Water Mains & Valves - AC	6	Backfill Under Seeded Area - Common Earth	12	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 21	$ 1	$ 0	$ 2
81	3075	331	Water Mains & Valves - AC	6	Utility Mix Grass Seed - Hydro/Air Seeding	1,791	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 6,638	$ 398	$ 133	$ 498
82	3076	331	Water Mains & Valves - AC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	14,507	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 85,949	$ 5,157	$ 1,719	$ 6,446

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1																						
2																						
3																						
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost	Contractor Costs	Engineering Fees	Permits	Construction Management Fees
5																						
83	3077	331	Water Mains & Valves - AC	6	Hauling - Cycle 40 Miles	2,388	LCY	31 23 23.30-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 65,002	$ 3,900	$ 1,300	$ 4,875
84	3078																					
85	3079	331	Water Mains & Valves - CI	**6**	**Cast Iron Pipe**	**1,808**	LF	33 14 13.15-2040	B-21A	$ 55.00	$ 3.99	$ 8.95	$ 1.19	$ 9.86	$ 78.99	$ 12.59	1.118	$ 102.38	$ 103,203	$ 6,192	$ 2,064	$ 7,740
86	3080	331	Water Mains & Valves - CI	6	Drilling & Blasting Rock	45	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 8,826	$ 530	$ 177	$ 662
87	3081	331	Water Mains & Valves - CI	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	403	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 6,454	$ 387	$ 129	$ 484
88	3082	331	Water Mains & Valves - CI	6	Bedding - Sand	224	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 10,121	$ 607	$ 202	$ 759
89	3083	331	Water Mains & Valves - CI	6	Bedding - Compact Trench Bedding	224	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 1,829	$ 110	$ 37	$ 137
90	3084	331	Water Mains & Valves - CI	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	236	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 13,253	$ 795	$ 265	$ 994
91	3085	331	Water Mains & Valves - CI	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 4	$ 0	$ 0	$ 0
92	3086	331	Water Mains & Valves - CI	6	Utility Mix Grass Seed - Hydro/Air Seeding	336	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 1,245	$ 75	$ 25	$ 93
93	3087	331	Water Mains & Valves - CI	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	2,722	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 16,124	$ 967	$ 322	$ 1,209
94	3088	331	Water Mains & Valves - CI	6	Hauling - Cycle 40 Miles	448	LCY	31 23 23.30-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 12,195	$ 732	$ 244	$ 915
95	3089																					
96	3090	331	Water Mains & Valves - PVC	**8**	**Polyvinyl Chloride Pipe**	**1,300**	LF	33 14 13.25-4060	B-20A	$ 8.45	$ 0.61	$ 4.55	$ -	$ 3.10	$ 16.71	$ 2.66	1.118	$ 21.66	$ 28,162	$ 1,690	$ 563	$ 2,112
97	3091	331	Water Mains & Valves - PVC	8	Drilling & Blasting Rock	60	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 11,857	$ 711	$ 237	$ 889
98	3092	331	Water Mains & Valves - PVC	8	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	542	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 8,671	$ 520	$ 173	$ 650
99	3093	331	Water Mains & Valves - PVC	8	Bedding - Sand	301	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 13,597	$ 816	$ 272	$ 1,020
100	3094	331	Water Mains & Valves - PVC	8	Bedding - Compact Trench Bedding	301	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 2,457	$ 147	$ 49	$ 184
101	3095	331	Water Mains & Valves - PVC	8	Structural Backfill Under Asphalt or Concrete - Crushed Stone	317	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 17,805	$ 1,068	$ 356	$ 1,335
102	3096	331	Water Mains & Valves - PVC	8	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 5	$ 0	$ 0	$ 0
103	3097	331	Water Mains & Valves - PVC	8	Utility Mix Grass Seed - Hydro/Air Seeding	433	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 1,606	$ 96	$ 32	$ 120
104	3098	331	Water Mains & Valves - PVC	8	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,510	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 20,795	$ 1,248	$ 416	$ 1,560
105	3099	331	Water Mains & Valves - PVC	8	Hauling - Cycle 40 Miles	602	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 16,383	$ 983	$ 328	$ 1,229
106	3100																					
107	3101	331	Water Mains & Valves	6	Mainline Valves	147	EA	33 14 19.10-3140	B-6	$ 875.00	$ 63.44	$ 192.00	$ 36.00	$ 197.00	$ 1,363.44	$ 217.33	1.118	$ 1,767.30	$ 259,793	$ 15,588	$ 5,196	$ 19,484
108	3102																					
109	3103	333	Water Services & Meters - Cu	**0.75**	**Copper Services**	**32,860**	LF	33 14 13.45-2000	Q-1	$ 7.95	$ 0.58	$ 2.44	$ -	$ 2.01	$ 12.98	$ 2.07	1.118	$ 16.82	$ 552,708	$ 33,163	$ 11,054	$ 41,453
110	3104	333	Water Services & Meters - Cu	3/4	Drilling & Blasting Rock	753	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01	$ 148,353	$ 8,901	$ 2,967	$ 11,127
111	3105	333	Water Services & Meters - Cu	3/4	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,777	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01	$ 108,493	$ 6,510	$ 2,170	$ 8,137
112	3106	333	Water Services & Meters - Cu	3/4	Bedding - Sand	3,765	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19	$ 170,131	$ 10,208	$ 3,403	$ 12,760
113	3107	333	Water Services & Meters - Cu	3/4	Bedding - Compact Trench Bedding	3,765	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17	$ 30,747	$ 1,845	$ 615	$ 2,306
114	3108	333	Water Services & Meters - Cu	3/4	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,965	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19	$ 222,776	$ 13,367	$ 4,456	$ 16,708
115	3109	333	Water Services & Meters - Cu	3/4	Backfill Under Seeded Area - Common Earth	38	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78	$ 67	$ 4	$ 1	$ 5
116	3110	333	Water Services & Meters - Cu	3/4	Utility Mix Grass Seed - Hydro/Air Seeding	10,953	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71	$ 40,599	$ 2,436	$ 812	$ 3,045
117	3111	333	Water Services & Meters - Cu	3/4	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	88,722	SF	32 12 16.14-0035	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92	$ 525,641	$ 31,538	$ 10,513	$ 39,423
118	3112	333	Water Services & Meters - Cu	3/4	Hauling - Cycle 40 Miles	7,530	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22	$ 204,981	$ 12,299	$ 4,100	$ 15,374
119	3113																					
120	3114	335	Hydrants	N/A	Fire Hydrants (4 Inch Diameter)	29	EA	G3010 410.1100	N/A	$ 11,500.00	$ 833.75	$ 1,350.00	$ -	$ -	$ 13,683.75	$ 2,181.19	1.118	$ 17,737.00	$ 514,373	$ 30,862	$ 10,287	$ 38,578
121	3115	335	Hydrants	N/A	Fire Hydrants (6 Inch Diameter)	29	EA	G3010 410.5100	N/A	$ 11,900.00	$ 862.75	$ 1,350.00	$ -	$ -	$ 14,112.75	$ 2,249.57	1.118	$ 18,293.08	$ 530,499	$ 31,830	$ 10,610	$ 39,787
122	3116																					
123	3117		**Subtotal Distribution Infrastructure - Sativa Water System**																**$ 8,201,132**	**$ 484,268**	**$ 161,423**	**$ 605,335**

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
4	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs	G&A	Reproduction Cost New	Effective Age	Service Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation
6	$ 130,000	$ -	$ 130,000	$ -	$ 130,000	$ -	$ 130,000	0	0	0%	$ -	$ -	$ -	$ 130,000
8	$ 39,870	$ 7,017	$ 46,887	$ 3,586	$ 50,473	$ 3,533	$ 54,006	40	75	53%	$ (28,578)	$ -	$ -	$ 25,428
9	$ 6,693	$ 1,178	$ 7,871	$ 602	$ 8,473	$ 593	$ 9,066	40	75	53%	$ (4,797)	$ -	$ -	$ 4,269
10	$ 4,895	$ 861	$ 5,756	$ 440	$ 6,197	$ 434	$ 6,630	40	75	53%	$ (3,508)	$ -	$ -	$ 3,122
11	$ 7,676	$ 1,351	$ 9,027	$ 690	$ 9,717	$ 680	$ 10,397	40	75	53%	$ (5,502)	$ -	$ -	$ 4,895
12	$ 1,387	$ 244	$ 1,631	$ 125	$ 1,756	$ 123	$ 1,879	40	75	53%	$ (994)	$ -	$ -	$ 885
13	$ 10,051	$ 1,769	$ 11,820	$ 904	$ 12,724	$ 891	$ 13,614	40	75	53%	$ (7,204)	$ -	$ -	$ 6,410
14	$ 3	$ 1	$ 4	$ 0	$ 4	$ 0	$ 4	40	75	53%	$ (2)	$ -	$ -	$ 2
15	$ 1,030	$ 181	$ 1,212	$ 93	$ 1,304	$ 91	$ 1,396	40	75	53%	$ (739)	$ -	$ -	$ 657
16	$ 13,340	$ 2,348	$ 15,687	$ 1,200	$ 16,887	$ 1,182	$ 18,069	40	75	53%	$ (9,562)	$ -	$ -	$ 8,508
17	$ 9,248	$ 1,628	$ 10,876	$ 832	$ 11,707	$ 820	$ 12,527	40	75	53%	$ (6,629)	$ -	$ -	$ 5,898
19	$ 100,730	$ 17,728	$ 118,459	$ 9,060	$ 127,518	$ 8,926	$ 136,445	44	75	58%	$ (79,388)	$ -	$ -	$ 57,057
20	$ 71,078	$ 12,510	$ 83,588	$ 6,393	$ 89,981	$ 6,299	$ 96,279	44	75	58%	$ (56,018)	$ -	$ -	$ 40,261
21	$ 51,981	$ 9,149	$ 61,129	$ 4,675	$ 65,804	$ 4,606	$ 70,411	44	75	58%	$ (40,967)	$ -	$ -	$ 29,444
22	$ 81,512	$ 14,346	$ 95,858	$ 7,331	$ 103,190	$ 7,223	$ 110,413	44	75	58%	$ (64,241)	$ -	$ -	$ 46,171
23	$ 14,731	$ 2,593	$ 17,324	$ 1,325	$ 18,649	$ 1,305	$ 19,954	44	75	58%	$ (11,610)	$ -	$ -	$ 8,344
24	$ 106,735	$ 18,785	$ 125,520	$ 9,600	$ 135,120	$ 9,458	$ 144,579	44	75	58%	$ (84,120)	$ -	$ -	$ 60,459
25	$ 32	$ 6	$ 38	$ 3	$ 41	$ 3	$ 43	44	75	58%	$ (25)	$ -	$ -	$ 18
26	$ 10,466	$ 1,842	$ 12,308	$ 941	$ 13,249	$ 927	$ 14,176	44	75	58%	$ (8,248)	$ -	$ -	$ 5,928
27	$ 135,502	$ 23,848	$ 159,350	$ 12,187	$ 171,537	$ 12,008	$ 183,545	44	75	58%	$ (106,792)	$ -	$ -	$ 76,753
28	$ 98,209	$ 17,285	$ 115,494	$ 8,833	$ 124,327	$ 8,703	$ 133,030	44	75	58%	$ (77,401)	$ -	$ -	$ 55,629
30	$ 512,752	$ 90,244	$ 602,996	$ 46,118	$ 649,114	$ 45,438	$ 694,552	27	75	36%	$ (249,037)	$ -	$ -	$ 445,515
31	$ 145,794	$ 25,308	$ 169,102	$ 12,933	$ 182,035	$ 12,742	$ 194,777	27	75	36%	$ (69,859)	$ -	$ -	$ 124,938
32	$ 105,159	$ 18,508	$ 123,667	$ 9,458	$ 133,125	$ 9,319	$ 142,444	27	75	36%	$ (51,074)	$ -	$ -	$ 91,370
33	$ 164,902	$ 29,023	$ 193,925	$ 14,832	$ 208,757	$ 14,613	$ 223,370	27	75	36%	$ (80,091)	$ -	$ -	$ 143,279
34	$ 29,802	$ 5,245	$ 35,047	$ 2,680	$ 37,728	$ 2,641	$ 40,369	27	75	36%	$ (14,475)	$ -	$ -	$ 25,894
35	$ 215,930	$ 38,004	$ 253,933	$ 19,421	$ 273,354	$ 19,135	$ 292,489	27	75	36%	$ (104,874)	$ -	$ -	$ 187,615
36	$ 65	$ 11	$ 76	$ 6	$ 82	$ 6	$ 88	27	75	36%	$ (31)	$ -	$ -	$ 56
37	$ 21,172	$ 3,726	$ 24,899	$ 1,904	$ 26,803	$ 1,876	$ 28,679	27	75	36%	$ (10,283)	$ -	$ -	$ 18,396
38	$ 274,126	$ 48,246	$ 322,372	$ 24,655	$ 347,027	$ 24,292	$ 371,319	27	75	36%	$ (133,139)	$ -	$ -	$ 238,180
39	$ 198,681	$ 34,968	$ 233,649	$ 17,870	$ 251,519	$ 17,606	$ 269,125	27	75	36%	$ (96,497)	$ -	$ -	$ 172,628
41	$ 141,037	$ 24,823	$ 165,860	$ 12,685	$ 178,545	$ 12,498	$ 191,043	27	75	36%	$ (68,500)	$ -	$ -	$ 122,543
42	$ 13,646	$ 2,402	$ 16,047	$ 1,227	$ 17,275	$ 1,209	$ 18,484	27	75	36%	$ (6,628)	$ -	$ -	$ 11,856
43	$ 9,979	$ 1,756	$ 11,736	$ 898	$ 12,633	$ 884	$ 13,518	27	75	36%	$ (4,847)	$ -	$ -	$ 8,671
44	$ 15,649	$ 2,754	$ 18,403	$ 1,407	$ 19,811	$ 1,387	$ 21,197	27	75	36%	$ (7,600)	$ -	$ -	$ 13,597
45	$ 2,828	$ 498	$ 3,326	$ 254	$ 3,580	$ 251	$ 3,831	27	75	36%	$ (1,374)	$ -	$ -	$ 2,457
46	$ 20,491	$ 3,606	$ 24,098	$ 1,843	$ 25,941	$ 1,816	$ 27,757	27	75	36%	$ (9,952)	$ -	$ -	$ 17,804
47	$ 6	$ 1	$ 7	$ 1	$ 8	$ 1	$ 8	27	75	36%	$ (3)	$ -	$ -	$ 5
48	$ 2,009	$ 354	$ 2,363	$ 181	$ 2,544	$ 178	$ 2,722	27	75	36%	$ (976)	$ -	$ -	$ 1,746
49	$ 26,014	$ 4,578	$ 30,592	$ 2,340	$ 32,932	$ 2,305	$ 35,237	27	75	36%	$ (12,635)	$ -	$ -	$ 22,603
50	$ 18,854	$ 3,318	$ 22,173	$ 1,696	$ 23,869	$ 1,671	$ 25,539	27	75	36%	$ (9,157)	$ -	$ -	$ 16,382
52	$ 161,272	$ 28,384	$ 189,655	$ 14,505	$ 204,160	$ 14,291	$ 218,452	27	75	36%	$ (78,328)	$ -	$ -	$ 140,124
53	$ 15,603	$ 2,746	$ 18,350	$ 1,403	$ 19,753	$ 1,383	$ 21,136	27	75	36%	$ (7,578)	$ -	$ -	$ 13,557
54	$ 11,411	$ 2,008	$ 13,419	$ 1,026	$ 14,446	$ 1,011	$ 15,457	27	75	36%	$ (5,542)	$ -	$ -	$ 9,915
55	$ 17,894	$ 3,149	$ 21,043	$ 1,609	$ 22,653	$ 1,586	$ 24,238	27	75	36%	$ (8,691)	$ -	$ -	$ 15,548
56	$ 3,234	$ 569	$ 3,803	$ 291	$ 4,094	$ 287	$ 4,381	27	75	36%	$ (1,571)	$ -	$ -	$ 2,810
57	$ 23,431	$ 4,124	$ 27,555	$ 2,107	$ 29,662	$ 2,076	$ 31,739	27	75	36%	$ (11,380)	$ -	$ -	$ 20,359
58	$ 7	$ 1	$ 8	$ 1	$ 9	$ 1	$ 10	27	75	36%	$ (3)	$ -	$ -	$ 6
59	$ 2,297	$ 404	$ 2,702	$ 207	$ 2,908	$ 204	$ 3,112	27	75	36%	$ (1,116)	$ -	$ -	$ 1,996
60	$ 29,746	$ 5,235	$ 34,981	$ 2,675	$ 37,657	$ 2,636	$ 40,293	27	75	36%	$ (14,447)	$ -	$ -	$ 25,845
61	$ 21,559	$ 3,794	$ 25,354	$ 1,939	$ 27,293	$ 1,911	$ 29,203	27	75	36%	$ (10,471)	$ -	$ -	$ 18,732
63	$ 343,804	$ 60,510	$ 404,314	$ 30,923	$ 435,236	$ 30,467	$ 465,703	22	75	29%	$ (134,604)	$ -	$ -	$ 331,098
64	$ 155,032	$ 27,286	$ 182,317	$ 13,944	$ 196,261	$ 13,738	$ 209,999	22	75	29%	$ (60,697)	$ -	$ -	$ 149,302
65	$ 113,377	$ 19,954	$ 133,332	$ 10,197	$ 143,529	$ 10,047	$ 153,576	22	75	29%	$ (44,389)	$ -	$ -	$ 109,187
66	$ 177,790	$ 31,291	$ 209,081	$ 15,991	$ 225,071	$ 15,755	$ 240,826	22	75	29%	$ (69,607)	$ -	$ -	$ 171,219
67	$ 32,131	$ 5,655	$ 37,786	$ 2,890	$ 40,676	$ 2,847	$ 43,524	22	75	29%	$ (12,580)	$ -	$ -	$ 30,944
68	$ 232,805	$ 40,974	$ 273,778	$ 20,939	$ 294,717	$ 20,630	$ 315,347	22	75	29%	$ (91,146)	$ -	$ -	$ 224,201
69	$ 70	$ 12	$ 82	$ 6	$ 88	$ 6	$ 95	22	75	29%	$ (27)	$ -	$ -	$ 67
70	$ 21,876	$ 3,850	$ 25,726	$ 1,968	$ 27,694	$ 1,939	$ 29,632	22	75	29%	$ (8,565)	$ -	$ -	$ 21,068
71	$ 283,234	$ 49,849	$ 333,083	$ 25,475	$ 358,558	$ 25,099	$ 383,657	22	75	29%	$ (110,890)	$ -	$ -	$ 272,767
72	$ 214,208	$ 37,701	$ 251,909	$ 19,266	$ 271,175	$ 18,982	$ 290,157	22	75	29%	$ (83,866)	$ -	$ -	$ 206,292
74	$ 185,685	$ 32,681	$ 218,366	$ 16,701	$ 235,067	$ 16,455	$ 251,522	8	75	10%	$ (26,161)	$ -	$ -	$ 225,361
75	$ 54,337	$ 9,563	$ 63,900	$ 4,887	$ 68,787	$ 4,815	$ 73,603	8	75	10%	$ (7,655)	$ -	$ -	$ 65,947
76	$ 39,738	$ 6,994	$ 46,731	$ 3,574	$ 50,305	$ 3,521	$ 53,827	8	75	10%	$ (5,599)	$ -	$ -	$ 48,228
77	$ 62,313	$ 10,967	$ 73,280	$ 5,605	$ 78,885	$ 5,522	$ 84,407	8	75	10%	$ (8,779)	$ -	$ -	$ 75,628
78	$ 11,262	$ 1,982	$ 13,244	$ 1,013	$ 14,257	$ 998	$ 15,255	8	75	10%	$ (1,587)	$ -	$ -	$ 13,668
79	$ 81,596	$ 14,361	$ 95,956	$ 7,339	$ 103,295	$ 7,231	$ 110,526	8	75	10%	$ (11,496)	$ -	$ -	$ 99,030
80	$ 24	$ 4	$ 29	$ 2	$ 31	$ 2	$ 33	8	75	10%	$ (3)	$ -	$ -	$ 30
81	$ 7,667	$ 1,349	$ 9,017	$ 690	$ 9,706	$ 679	$ 10,386	8	75	10%	$ (1,080)	$ -	$ -	$ 9,306
82	$ 99,271	$ 17,472	$ 116,742	$ 8,929	$ 125,671	$ 8,797	$ 134,468	8	75	10%	$ (13,986)	$ -	$ -	$ 120,482

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1														
2														
3														
4	**Construction Costs**	**Contingency**	**Project Costs**	**Interest During Construction**	**Development Costs**	**G&A**	**Reproduction Cost New**	**Effective Age**	**Service Life**	**Physical Depreciation**	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	**Reproduction Cost New Less Depreciation**
5														
83	$ 75,078	$ 13,214	$ 88,291	$ 6,753	$ 95,044	$ 6,653	$ 101,697	8	75	10%	$ (10,578)	$ -	$ -	$ 91,120
84														
85	$ 119,200	$ 20,979	$ 140,179	$ 10,721	$ 150,900	$ 10,563	$ 161,463	27	75	36%	$ (57,894)	$ -	$ -	$ 103,569
86	$ 10,194	$ 1,794	$ 11,988	$ 917	$ 12,905	$ 903	$ 13,808	27	75	36%	$ (4,951)	$ -	$ -	$ 8,857
87	$ 7,455	$ 1,312	$ 8,767	$ 671	$ 9,438	$ 661	$ 10,098	27	75	36%	$ (3,621)	$ -	$ -	$ 6,477
88	$ 11,690	$ 2,057	$ 13,748	$ 1,051	$ 14,799	$ 1,036	$ 15,835	27	75	36%	$ (5,678)	$ -	$ -	$ 10,157
89	$ 2,113	$ 372	$ 2,485	$ 190	$ 2,675	$ 187	$ 2,862	27	75	36%	$ (1,026)	$ -	$ -	$ 1,836
90	$ 15,308	$ 2,694	$ 18,002	$ 1,377	$ 19,379	$ 1,357	$ 20,735	27	75	36%	$ (7,435)	$ -	$ -	$ 13,300
91	$ 5	$ 1	$ 5	$ 0	$ 6	$ 0	$ 6	27	75	36%	$ (2)	$ -	$ -	$ 4
92	$ 1,438	$ 253	$ 1,692	$ 129	$ 1,821	$ 127	$ 1,948	27	75	36%	$ (699)	$ -	$ -	$ 1,250
93	$ 18,624	$ 3,278	$ 21,901	$ 1,675	$ 23,576	$ 1,650	$ 25,227	27	75	36%	$ (9,045)	$ -	$ -	$ 16,182
94	$ 14,085	$ 2,479	$ 16,564	$ 1,267	$ 17,831	$ 1,248	$ 19,079	27	75	36%	$ (6,841)	$ -	$ -	$ 12,238
95														
96	$ 32,527	$ 5,725	$ 38,252	$ 2,926	$ 41,177	$ 2,882	$ 44,060	44	75	58%	$ (25,635)	$ -	$ -	$ 18,425
97	$ 13,695	$ 2,410	$ 16,105	$ 1,232	$ 17,337	$ 1,214	$ 18,550	44	75	58%	$ (10,793)	$ -	$ -	$ 7,757
98	$ 10,015	$ 1,763	$ 11,778	$ 901	$ 12,679	$ 887	$ 13,566	44	75	58%	$ (7,893)	$ -	$ -	$ 5,673
99	$ 15,705	$ 2,764	$ 18,469	$ 1,413	$ 19,882	$ 1,392	$ 21,273	44	75	58%	$ (12,377)	$ -	$ -	$ 8,896
100	$ 2,838	$ 500	$ 3,338	$ 255	$ 3,593	$ 252	$ 3,845	44	75	58%	$ (2,237)	$ -	$ -	$ 1,608
101	$ 20,565	$ 3,619	$ 24,184	$ 1,850	$ 26,034	$ 1,822	$ 27,856	44	75	58%	$ (16,207)	$ -	$ -	$ 11,649
102	$ 6	$ 1	$ 7	$ 1	$ 8	$ 1	$ 8	44	75	58%	$ (5)	$ -	$ -	$ 3
103	$ 1,855	$ 326	$ 2,182	$ 167	$ 2,348	$ 164	$ 2,513	44	75	58%	$ (1,462)	$ -	$ -	$ 1,051
104	$ 24,019	$ 4,227	$ 28,246	$ 2,160	$ 30,406	$ 2,128	$ 32,535	44	75	58%	$ (18,930)	$ -	$ -	$ 13,605
105	$ 18,922	$ 3,330	$ 22,252	$ 1,702	$ 23,954	$ 1,677	$ 25,631	44	75	58%	$ (14,913)	$ -	$ -	$ 10,718
106														
107	$ 300,061	$ 52,811	$ 352,872	$ 26,988	$ 379,860	$ 26,590	$ 406,450	15	30	50%	$ (203,225)	$ -	$ -	$ 203,225
108														
109	$ 638,378	$ 112,355	$ 750,733	$ 57,417	$ 808,150	$ 56,570	$ 864,720	27	30	80%	$ (691,776)	$ -	$ -	$ 172,944
110	$ 171,348	$ 30,157	$ 201,506	$ 15,411	$ 216,917	$ 15,184	$ 232,101	27	30	80%	$ (185,681)	$ -	$ -	$ 46,420
111	$ 125,310	$ 22,055	$ 147,365	$ 11,271	$ 158,635	$ 11,104	$ 169,740	27	30	80%	$ (135,792)	$ -	$ -	$ 33,948
112	$ 196,501	$ 34,584	$ 231,086	$ 17,674	$ 248,759	$ 17,413	$ 266,173	27	30	80%	$ (212,938)	$ -	$ -	$ 53,235
113	$ 35,513	$ 6,250	$ 41,763	$ 3,194	$ 44,957	$ 3,147	$ 48,104	27	30	80%	$ (38,483)	$ -	$ -	$ 9,621
114	$ 257,307	$ 45,286	$ 302,593	$ 23,143	$ 325,735	$ 22,801	$ 348,537	27	30	80%	$ (278,829)	$ -	$ -	$ 69,707
115	$ 77	$ 14	$ 91	$ 7	$ 98	$ 7	$ 105	27	30	80%	$ (84)	$ -	$ -	$ 21
116	$ 46,891	$ 8,253	$ 55,144	$ 4,218	$ 59,362	$ 4,155	$ 63,517	27	30	80%	$ (50,814)	$ -	$ -	$ 12,703
117	$ 607,115	$ 106,852	$ 713,968	$ 54,605	$ 768,573	$ 53,800	$ 822,373	27	30	80%	$ (657,898)	$ -	$ -	$ 164,475
118	$ 236,753	$ 41,669	$ 278,421	$ 21,294	$ 299,716	$ 20,980	$ 320,696	27	30	80%	$ (256,557)	$ -	$ -	$ 64,139
119														
120	$ 594,101	$ 104,562	$ 698,663	$ 53,435	$ 752,097	$ 52,647	$ 804,744	36	40	80%	$ (643,795)	$ -	$ -	$ 160,949
121	$ 612,727	$ 107,840	$ 720,566	$ 55,110	$ 775,677	$ 54,297	$ 829,974	36	40	80%	$ (663,979)	$ -	$ -	$ 165,995
122														
123	**$ 9,452,158**	**$ 1,640,700**	**$ 11,092,857**	**$ 838,456**	**$ 11,931,314**	**$ 826,092**	**$ 12,757,406**				$ (6,597,257)	$ -	$ -	**$ 6,160,149**

FIXED ASSET REGISTER DETAIL
GRANT-FUNDED PROJECTS

SUBTOTAL - LA COUNTY IMPROVEMENT PROJECTS

Reproduction Cost New Less Depreciation

(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Capital Improvement Project	Contract No.	Scope of Work	Reproduction Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Reproduction Cost New Less Depreciation
4000	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Reimbursement	$ 500	$ -	$ -	$ -	$ 500
4001	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Plumber	$ 6,497	$ -	$ -	$ -	$ 6,497
4002	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Flag person and Traffic Control	$ 33,909	$ -	$ -	$ -	$ 33,909
4003	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Steel Plate	$ 11,165	$ -	$ -	$ -	$ 11,165
4004	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Equipment	$ 44,017	$ -	$ -	$ -	$ 44,017
4005	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Hauling and Disposal	$ 33,288	$ -	$ -	$ -	$ 33,288
4006	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Cleaning	$ 7,540	$ -	$ -	$ -	$ 7,540
4007	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Test Pit	$ 1,324	$ -	$ -	$ -	$ 1,324
4008	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sawcut	$ 6,006	$ -	$ -	$ -	$ 6,006
4009	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Abatement	$ 3,921	$ -	$ -	$ -	$ 3,921
4010	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Demo Asphalt	$ 10,758	$ -	$ -	$ -	$ 10,758
4011	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Concrete	$ 5,684	$ -	$ -	$ -	$ 5,684
4012	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sand Bedding	$ 13,652	$ -	$ -	$ -	$ 13,652
4013	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Import Soil	$ 7,633	$ -	$ -	$ -	$ 7,633
4014	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Excavation	$ 5,174	$ -	$ -	$ -	$ 5,174
4015	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Backfilling	$ 4,001	$ -	$ -	$ -	$ 4,001
4016	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Compaction	$ 4,679	$ -	$ -	$ -	$ 4,679
4017	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sand Bags	$ 3,223	$ -	$ -	$ -	$ 3,223
4018	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Wood Shoring	$ 28,202	$ -	$ -	$ -	$ 28,202
4019	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Removal of Spoils from the Roadway	$ 3,134	$ -	$ -	$ -	$ 3,134
4020	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Base Coarse	$ 6,161	$ -	$ -	$ -	$ 6,161
4021	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Asphalt	$ 19,876	$ -	$ -	$ -	$ 19,876
4022	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Video Camera	$ 648	$ -	$ -	$ -	$ 648
4023	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Boring	$ 36,766	$ -	$ -	$ -	$ 36,766
4024	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Waterline and Fittings	$ 113,273	$ -	$ -	$ -	$ 113,273
4025	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Fire Hydrant	$ 9,210	$ -	$ -	$ -	$ 9,210
4026	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S1	General Requirements	$ 3,572	$ -	$ -	$ -	$ 3,572
4027	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S2	Existing Conditions	$ 925	$ -	$ -	$ -	$ 925
4028	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S3	Concrete	$ 233	$ -	$ -	$ -	$ 233
4029	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S4	Exterior Improvements	$ 1,801	$ -	$ -	$ -	$ 1,801
4030	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S5	Utilities	$ (2,103)	$ -	$ -	$ -	$ (2,103)
4031	331	Water Mains & Valves	Lucien Street Waterline	Multiple	PE Costs	$ 145,321	$ -	$ -	$ -	$ 145,321
4032	331	Water Mains & Valves	Lucien Street Waterline	Multiple	CE Costs	$ 190,396	$ -	$ -	$ -	$ 190,396
4033	307	Well	Well No. 5 Rehabilitation	N/A	Well Liner & Redevelopment	$ 374,898	$ -	$ -	$ -	$ 374,898
4034	307	Well	Well No. 5 Rehabilitation	N/A	Piping Components & Install	$ 20,376	$ -	$ -	$ -	$ 20,376
4035	307	Well	Well No. 5 Rehabilitation	N/A	Pull Well & Video	$ 13,460	$ -	$ -	$ -	$ 13,460
4036	307	Well	Well No. 5 Rehabilitation	N/A	Rehabilitation & Test Pump	$ 104,966	$ -	$ -	$ -	$ 104,966
4037	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	Re-Equip Pump, Motor, & Components	$ 145,294	$ -	$ -	$ -	$ 145,294
4038	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	VFD & Components	$ 34,023	$ -	$ -	$ -	$ 34,023
4039	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	VFD Installation & Pump Testing (Freeboarding)	$ 23,502	$ -	$ -	$ -	$ 23,502
4040	320	Water Treatment Equipment	Well No. 5 Rehabilitation	N/A	Chlorine Room Components (Pumps, Scales, Analyzer)	$ 35,943	$ -	$ -	$ -	$ 35,943
4041	320	Water Treatment Equipment	Well No. 5 Rehabilitation	N/A	Chlorine Gas Pump	$ 1,091	$ -	$ -	$ -	$ 1,091
4042	320	Water Treatment Equipment	Well No. 5 Manganese Treatment		Manganese Water Treatment	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000
4043										
4044			**Subtotal LA County Improvement Projects - Sativa Water System**			**$ 3,763,939**	$ -	$ -	$ -	**$ 3,764,000**

SUPPLEMENTAL DATA
CONSTRUCTION COST DATA

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 02/13/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Well Liner and Redevelopment:** **Phase I > Liner: 1)** Prepare Materials & Inspections; Mobilization of Crane, Flatbed Truck; Service Truck with Crew; Work Includes: Abandonment of the well from 845' to 525' (Fill with gravel), Then fill with a 5-foot Bentonite cap (525' to 520'). **2)** Includes the installation of a 350-feet of 12" ID 304 Stainless Steel Blank Casing Liner and related 170-feet of 12" ID 304 Stainless Steel Johnson Wire Wrap Screen placed appropriately adjacent to existing production zones in Sativa Well 5. Includes Well Video after Liner installation. **3)** Includes the annular area installation of Silibeads® glass bead materials manufactured by Ceroglass Technologies Inc. designed to support the liner and existing casing from 520' to 100' below ground surface. Grout Annular Fill Seal from 100' to Surface. **Phase II > Redevelopment: 1)** Mobilization of Equipment and Tanks for Airburst® technology followed by chemical injection of pre-mixed hydrochloric inhibited acid and Well Renew® placed into each 20-foot zone through a double disk 10-foot injection tool followed by physical redevelopment via airlifting/swabbing for each 20-foot screen section. Followed by Well Video. Other Items Included: Miscellaneous consumables, fuels, Portable Facilities, Pre-mixed chemicals. GPC Proposal is attached showing complete list of GPC Services.	02/13/20	$ 374,897.89
		TOTAL =	**$ 374,897.89**

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952
Serving Southern California and Central Coast

Lic. #496765

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002

February 13, 2020 ***Via Email***

Attn: Gary Hilliard

Subject: Sativa Well 5 Liner and Redevelopment

General Pump Company is pleased to provide this 2-Phase approach for the completion of the liner installation and the rehabilitation of the referenced well.

PHASE I:

1) Will begin with the abandonment of the well from 520' to 845' current depth to eliminate undesirable water below 510' that produced Manganese levels of 380 ug/l during the spinner and depth specific sampling. To accomplish this, we will fill well with 17 Cubic Yards of Gravel with a 5-foot Bentonite cap to fill bottom of well to 520' below ground surface.

2) This phase will also include the installation of a 350-feet of 12" ID 304 Stainless Steel Blank Casing Liner and related 170-feet of 12" ID 304 Stainless Steel Johnson Wire Wrap Screen with .060 Slot sizing with .165 Wire and .217 Rod with beveled weld rings from surface to 510-feet with screen sections place appropriately adjacent to production zones in the well derived from the spinner and water quality sampling previously conducted.

3) The annular area will be filled with .090 to .120 diameter Silibeads® glass bead materials manufactured by Ceroglass Technologies Inc. and designed to support the liner and existing casing from 520' to 100' below ground surface. Grout Annular Fill Seal from 100' to Surface.

PHASE II:

1) This phase will follow the Liner installation and include the rehabilitation and redevelopment of the well utilizing Airburst® technology followed by chemical injection consisting of 2,000 gallons pre-mixed hydrochloric inhibited acid and Well Renew® placed into each 20-foot zone through a double disk 10-foot injection tool followed by physical redevelopment via airlifting/swabbing procedures for each 20-foot screen section until the section is developed.

PHASE I: Furnish and Install Liner:

Shop Labor:

• Load-Unload Materials	30 Hours
• Inspection of Liner materials	30 Hours
• Preparation of materials for installation	30 Hours
• Preparation of annular materials to be installed	14 Hours
• Engineering review	(Included @ no cost)
• Hydrogeologic review	(Included @ no cost)
104 Hours @ 105.00 per Hour	**$10,920.00**

Field Labor:

Mobilize to site with pump rig and crane with crews to place fill material to seal the bottom of the well from 845 to 530' and cement to cap to 520'. Then Install the 12-inch Stainless Steel Liner and screen from 520-feet to surface, place annular material between liner and casing and develop the annular material by swabbing then demobilize.

o Mobilization	$620.00
o 110 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew	$48,400.00
o 110 Hours Crane and Operator @ $300.00/Hour	$33,000.00
o 110 Man Hours Additional Crew @ $50.00/Man Hour.	$5,500.00
Total Estimated Labor for Liner Installation	***$87,520.00***

Note: Includes Pump rig with crew and 30T crane, service support truck, flatbed truck and (4) four-man crew.

Materials:

• 17 CY Gravel and Bentonite to fill bottom of well	$3,066.00
• 170-feet 12" ID SST wire-wrap screen	$25,723.00
• 350-Feet 12" ID SST Blank Casing	$58,525.00
• Annular Fill Material from TD to 100', Seal from 100-feet to Surface	$35,353.00
• Materials for securing liner materials as needed	$15,000.00
• Miscellaneous consumables including fittings, tape, banding etc.	$1,364.00
• Freight	$9,762.00
• Estimated tax at 9.5%	$14,174.76
Total Estimated Materials	***$163,382.76***

Outside Services:

• Video Log Well	$1,280.00
Total Estimated Outside Services	***$1,280.00***

Phase I Liner Install $263,102.76

PHASE II: Rehabilitation and Redevelopment:
Phase II will follow the installation of the liner and include the well rehabilitation and redevelopment to maximize production. It is necessary to redevelop the existing casing through the liner screens as follows:

Shop Labor:

• Load – Unload materials,	20 Hours
• Prepare rehab tools and equipment for use,	25 Hours
• Assemble swab	17 Hours
• Engineering Support (10 Hours)	Included
62 Total Estimated Shop Hours @ $105.00/Hour	**$6,510.00**

Field Labor

- Mobilize Crew and Equipment and Airburst well
- Install Swab Injection system to 240'
- Mix and Inject Chemistry beginning at 240' to 510' in screened areas.
- Setup tanks and discharge equipment as necessary
- Airlift swab develop all screened section until clear
- Demobilize
  - 92 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew — $40,480.00
  - 92 Hours Crane and Operator @ $300.00/Hour — $27,600.00
  - 92 Man Hours Additional Crew @ $50.00/Man Hour. — $4,600.00

Total Estimated Field Labor for Redevelopment ***$72,680.00***

Materials/Rentals (Non-Taxable):

• Swab Rental	$695.00
• Airlift equipment, rods, pipe,	$500.00
• Compressor, hoses etc.	$1,773.00
• Airburst Equipment rental	$6,546.00
• Chemical treatment equipment	$3,855.00
Total Estimated Materials/Rentals (Non-Taxable)	**$13,369.00**

Materials/Rentals (Taxable):

• Fuel for Air Compressor	$910.00
• Batches of Chemicals	$12,364.00
• Freight	$2,001.00
• Tax at 9.5%	$1,451.13
Estimated Materials/Rentals (Taxable) Total	**$16,726.13**

Outside Services:

• Video Log of Well	$1,200.00
• Portable Facilities	$1,310.00
Total Estimated Outside Services	**$2,510.00**

Phase II Rehabilitation and Redevelopment ***$111,795.13***

Summary Totals:

Phase I Liner	*$263,102.76*
Phase II Rehabilitation - Redevelopment	*$111,795.13*
Estimated Grand Total	***$374,897.89***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

Public Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 03/24/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Piping Components & Install:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect and Prepare for installation; Engineering Support **Task II > Field Labor:** Mobilize Welder Service Truck with Welder and Helper for fabrication and installation of the equipment • Conduct brief 5-minute tailgate safety meeting • Cut and weld as needed pipe and fittings to build discharge pipe as required • Demobilize **Task III > Materials:** 10 Each 8" 150# SLIP ON FLANGE R/F, CARBON STEEL, ASTM, SA105/A105, IMPORT • 2 Each 8" 150# WELD NECK FLANGE, R/F, CARBON STEEL, ASTM SA105/A105 IMPORT • 2 Each 8" STD S/R 90 WELD ELL, IMPORT CS SA234 WPB • 8" STD WELD TEE, IMPORT CS SA-243 WPB • 36 - 8" X 2 3000# FS THREAD-O-LET • 36 - 3 X 1 3M FS THREAD-O-LET • 8 PLATED BLOT & NUT KIT (8EA - 3/4" X 3-3/4") W/RING GASKET • 10-FEET 8" STD (.322 28.55#) BLACK GLOBAL A-53--B ERW, P/E, CARBON STEEL • 8" 150# DUO CHECK CS BODY, SS TRIM, BUNA-N SEAT CRANE G15SMF14 CHECK VALVE • 8" ROMAC FLEX COUPLING WITH RESTRAINTS • MISCELLABEOUS CONSUMABLES INCLUDING SUPPORT PADS, AND PIPE AND ALL THREAD AND NUTS FOR RESTRAINTS. • ESTIMATED FREIGHT • ESTIMATED TAX AT 9.5% GPC Proposal is attached showing complete list of GPC Services.	03/24/20	$ 20,376.37
		TOTAL =	**$ 20,376.37**

Message to Recipient: Please proceed with All Work estimates/descriptions listed above

Thank-you,

Sami Kabar P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
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CAMARILLO, CA 93010 * PHONE: (805) 482-1215
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WELL & PUMP SERVICE SINCE 1952
Serving Southern California and Central Coast

Lic #[illegible]

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

March 24, 2020 ***Via Email***

Subject: Sativa Well 5 Furnish and Install Discharge Piping

General Pump Company is pleased to provide this proposal to Furnish and Install the required discharge piping for the referenced well.

The Proposed cost is as follows:

Shop Labor:

- Load – Unload materials,
- Engineering Support (10 Hours) — 20 Hours Included

20 Total Estimated Shop Hours @ $105.00/Hour **$2,100.00**

Field Labor:

Mobilize Welder Service Truck with Welder and Helper for fabrication and installation of the equipment

- Conduct brief 5-minute tailgate safety meeting
- Cut and weld as needed pipe and fittings to build discharge pipe as required
- Demobilize
  - 24 Hours Welder Service Equipment @ $170.00/Hour — $4,080.00
  - 24 Hours Helper @ $110.00/Hour — $2,640.00
  - 16 Man Hours Additional Crew Overtime @ $50.00/Man Hour. — $1,056.00

Total Estimated Field Labor for Redevelopment ***$9,120.00***

Materials:

- 10 Each 8" 150# SLIP ON FLANGE R/F, CARBON STEEL, ASTM, SA105/A105, IMPORT — $1,542.00
- 2 Each 8" 150# WELD NECK FLANGE, R/F, CARBON STEEL, ASTM SA105/A105 IMPORT — $420.00
- 2 Each 8" STD S/R 90 WELD ELL, IMPORT CS SA234 WPB — $416.00
- 8" STD WELD TEE, IMPORT CS SA-243 WPB — $198.00
- 36 - 8" X 2 3000# FS THREAD-O-LET — $54.00

• 36 - 3 X 1 3M FS THREAD-O-LET	$30.00
• 8 PLATED BLOT & NUT KIT (8EA - 3/4" X 3-3/4") W/RING GASKET	$349.00
• 10-FEET 8" STD (.322 28.55#) BLACK GLOBAL A-53--B ERW, P/E, CARBON STEEL	$406.00
• 8" 150# DUO CHECK CS BODY, SS TRIM, BUNA-N SEAT CRANE G15SMF14 CHECK VALVE	$1,732.00
• 8" ROMAC FLEX COUPLING WITH RESTRAINTS	$1,500.00
• MISCELLABEOUS CONSUMABLES INCLUDING SUPPORT PADS, AND PIPE AND ALL THREAD AND NUTS FOR RESTRAINTS.	$819.00
• ESTIMATED FREIGHT	$896.00
• ESTIMATED TAX AT 9.5%	$794.37
Total Estimated Materials	***$9,156.37***
Total Estimated Project Cost	***$20,376.37***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 08/26/2019

TO: Mr. Tom Nanchy
General Pump Company
159 N, Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division
Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**SATIVA WELL 5 > PULL WELL AND VIDEO:** Work Includes: Mobilization of Crane, Flatbed Truck; Service Truck with Crew; Site work includes the complete removal of the pump equipment. The existing motor will be loaded on a L.A. County service truck once removed. The balance of the equipment/materials will be brought to GPC for offloading and inspection. A downhole Well Video will follow several days after the pump removal. All equipment currently being stored (vehicles-Trailers etc.) at the site will be moved off site allowing room for the GPC crane and flatbed truck that are needed for the removal. GPC Estimate / Proposal is attached showing complete list of GPC Services.	08/26/19	$ 13,460.00
		TOTAL =	**$ 13,460.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765
Serving Southern California and Central Coast

August 12, 2019 ***Via Email***

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

Subject: Sativa Well 5

General Pump Company is pleased to provide our quote for "Phase 1" of work associated with well 5. We recently inspected the facility and discussed the scope of work for phase 1. This includes the complete removal of the pump equipment. The existing motor will be loaded on a LA County service truck once removed. The County will put in storage as this particular motor will not be re-used upon pump reinstallation. The balance of the equipment will be brought to GPC for offloading and inspection. The well will be prepared for a video that will follow several days after the initial pump removal. All equipment being stored (vehicles-Trailers etc.) at the site will be required to be moved off site allowing room for the crane and flatbed truck that are needed for the prep removal. Below is the associated cost for Phase 1.

Cost

Shop Labor

- Load elevators, well cover
- Load oil barrel (barrels)
- Load oil bailor and adsorbent materials
- Unload pump equipment, prep for disassembly
- Pressure wash bowl assembly
- Pull tube and shaft assemblies, prepare for inspection
- Inspect bowls, column tube and shaft, head etc.
- Prepare recommendations and quote for phase 2
- Engineering review (Included @ no cost)

Lump sum 1,300.00

Field Labor

- Mobilize to site
- Conduct brief 5-minute tailgate safety meeting
- Setup crane
- Electrical Lock out /Tag out
- Disconnect motor leads, remove pump adjustments

Continued

- Pull motor and load on LA County truck
- Disconnect stretch assembly
- Pull head and complete pump- load on GPC truck for transportation to GPC facility
- Sound well static and T.D
- Bail oil and contain in approved drum (disposal by others)
- Prep well for video
- Install locking well cover
- Demobilize

Note:
Includes 40T crane, service support truck, flatbed truck and (4) four man crew.

Lump Sum *10,960.00*

Outside Services

- Video Log Well 1,200.00

Grand Total Cost ***$ 13,460.00***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Tom Nanchy

Tom Nanchy
Sr. Project Manager

Public Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 03/24/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Re-Equip Pump, Motor, Components:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect, and Prepare Equipment for installation; Receive Pump, dis-assemble, Inspect and reassemble; Engineering Support **Task II > Redevelopment: Field Labor:** Mobilize to site with pump rig and crane with crews for the installation of the equipment • Conduct brief 5-minute tailgate safety meeting • Install Pump to proper pump setting' with Transducer access pipe • Install Motor, Transducer and connect pump, set lateral, start and run pump and document operational information • Demobilize **Task III > Materials:** • 10RJHC-9 Stage Goulds Bowl assembly (Epoxy Coated) • Goulds Discharge Head with Epoxy ID Coating • 100 HP Motor • 30 Sections 8" X 10' Column Assembly (300') ID/OD Epoxy Coated • 30 Each 10' SST Line Shafts and Bearing Retainers • 8-inch X 10 Suction pipe with SST cone Strainer • 300' SST airline with fittings • 285' PVC Transducer Access Pipe • Bolting and gasket kit, Motor oil and field consumables • Electrical components to splice/connect motor leads • Miscellaneous consumables including fittings, tape, banding etc. • Miscellaneous Unforeseeable materials • Estimated Freight • Estimated tax at 9.5% • Field Trim Balance • Portable Facilities GPC Proposal is attached showing complete list of GPC Services.	03/24/20	$ 145,294.30
		TOTAL =	$ 145,294.30

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank you

Sami Kabar, P E
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952
Serving Southern California and Central Coast

Lic. #496765

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

March 24, 2020 *Via Email*

Subject: Sativa Well 5 Pump Equipment

General Pump Company is pleased to provide this proposal to Furnish and Install the pump equipment for the referenced well.

The Proposed cost is as follows:

Shop Labor:

• Load – Unload materials,	20 Hours
• Inspect, and Prepare Equipment for installation	20 Hours
• Receive Pump, dis-assemble, Inspect and reassemble	20 Hours
• Engineering Support (10 Hours)	Included
60 Total Estimated Shop Hours @ $105.00/Hour	**$6,300.00**

Field Labor:

Mobilize to site with pump rig and crane with crews for the installation of the equipment

- Conduct brief 5-minute tailgate safety meeting
- Install Pump to proper pump setting' with Transducer access pipe
- Install Motor and connect pump to electrical and discharge piping
- Set lateral, start and run pump and document operational information
- Demobilize

○ 44 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew	$19,360.00
○ 44 Hours Crane and Operator @ $300.00/Hour	$13,200.00
○ 36 Man Hours Additional Crew @ $50.00/Man Hour.	$1,800.00
Total Estimated Field Labor for Equipment Installation	***$34,360.00***

Note: Includes Pump rig with crew and 40T crane, service support truck, flatbed truck and (4) four-man crew.

Materials:

• 9RCHC-9 Stage Goulds Bowl assembly (Epoxy Coated)	$15,252.00
• Goulds Discharge Head with Epoxy ID Coating	$4,048.00
• 100 HP Motor	$12,728.00
• 28 Sections 6" X 10' Column Assembly (280') ID/OD Epoxy Coated	$25,823.00
• 28 Each 10' SST Line Shafts and Bearing Retainers	$15,019.00
• 6-inch X 10 Suction pipe with SST cone Strainer	$891.00
• 280' SST airline with fittings	$1,037.00
• 570' 1" PVC Transducer and Sounding Access Pipe	$1,814.00
• Discharge Pipe Nipple for Discharge connection with ID Coating	$1,637.00
• Bolting and gasket kit, Motor oil and field consumables	$364.00
• Electrical components to splice/connect motor leads	$228.00
• Miscellaneous consumables including fittings, tape, banding etc.	$1,364.00
• Miscellaneous Unforeseeable materials	$5,455.00
• Estimated Freight	$6,417.00
• Estimated tax at 9.5%	$8,747.30
Total Estimated Taxable Materials	***$100,824.30***

Outside Services:

• Field Trim Balance (if necessary)	$2,500.00
• Portable Facilities	$1,310.00
Total Pump and Motor Estimate	***$145,294.30***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 09/24/2019

TO: Mr. Tom Nanchy
General Pump Company
159 N, Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 Rehab & Test Pump:** Work Includes: Mobilization of Crane, Flatbed Truck; Service Truck with Crew; On-Site services include: Brushing of the Perforated casing with a soft steel brush from 200-feet to 490-feet to total depth at 836-feet; Airburst of the well from the Total depth to the 200-foot perforated interval. Test pump procedure (set-up at 520' depth) to produce flow over 5-Days from 300 GPM up to 1,100 GPM and will be installed with a properly sized access tube to allow for the installation of sampling tools or cameras. Shop Labor to include: Sampling tools and pump equipment for rehabilitation activities; Load-unload materials as needed for rehabilitation and test pumping activities; All tools needed for the rehabilitation; Engineering review. Outside Services to include: Video Log Well and Portable Facilities. Rehab & Test Pump Sub Total Cost $91,993.00 Optional Items Included: Spinner Test and Report; Depth Specific Sampling (1-Liter for each of 10 Samples); Mass Balance Calculations: Total Optional Items $12,973.00 GPC Proposal is attached showing complete list of GPC Services.	09/24/19	$ 104,966.00
		TOTAL =	**$ 104,966.00**

Message to Recipient:

Please proceed with work per estimate: All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager-Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765

Serving Southern California and Central Coast

LA County Public Works
Water Works
1000 South Fremont AVE.
Building A-9E, 4th Floor
Alhambra, CA. 91803-1331
Attn: Gary Hilliard

PROPOSAL September 24, 2019

Subject: *Sativa Well #5 Rehabilitation and Well Profiling (Phase II)*

General Pump Company is pleased to provide our quote for "Phase II" of work associated with well 5. We recently removed the pump and performed a video log service of the well and inspected the facility and discussed the scope of work for phase II. The video log of the well determined there was no oil on the water and there is a significant amount of fill material in the bottom of the well. The video descended to 836.8-feet and the well is thought to be 890 to 910-feet suggesting there may be 55 to 75-feet of fill material covering some of the screen interval of the bottom of the well.

Phase II will include the following scope:

1. Brushing of the Perforated casing with a soft steel brush from 200-feet to 490-feet to total depth at 836-feet

2. Airburst of the well from the Total depth to the 200-foot perforated interval using moderate pressures to penetrate the plugged areas of the wells perforated zones.

Note: Items 1 and 2 above are expected to require 1 week to accomplish

3. The next step will include the installation of a test pump designed to produce up to 1,100 GPM and will be installed so the suction is located at 520-feet with a properly sized access tube to allow for the installation of sampling tools or cameras if needed.

    a. The well will be developed, and test pump as follows:

        i. Day 1; Development and testing with average of 300 GPM for 8 to 10 hours
        ii. Day 2; Development and testing with average of 500 GPM for 8 to 10 hours
        iii. Day 3; Development and testing with an average of 650 GPM for 8 to 10 hours
        iv. Day 4; Step testing with an average of 800 GPM for 8 to 10 hours
        v. Day 5; Constant testing with expected average flow of 900 GPM for 8 to 10 hours

Note: Items 3a above will require 2-weeks for completion.

After Completion of the above tests, A meeting will be scheduled to discuss the results and determine the options or direction for the next steps and if any well, or pump modification would be beneficial for the well production. Any additional testing or sampling may add more time.

4. Upon completion of the well evaluation, the test pump will be removed

The estimated cost for Phase II is as follows:

Shop Labor

- Identify and prepare sampling tools and pump equipment for rehabilitation activities
- Load-unload materials as needed for rehabilitation and test pumping activities,
- Build brush as needed for the rehabilitation
- Unload test pump equipment, prep for disassembly
- Pressure wash test pump bowl assembly, column and other related equipment
- Engineering review (Included @ no cost)

Based on an estimation of 70 Shop Hours at $105.00/Hour **$7,350.00**

Field Labor (Scope/Sequence)

- Mobilize to site
- Conduct daily tailgate safety meeting
- Setup Pump rig, crane, tanks, equipment for rehabilitation, development and testing processes as follows
    - Brush well
    - Airburst well
    - Prep well for video
    - Install Test Pump and Testing equipment
    - Develop well with test pump
    - Remove test pump from well
    - Install locking well cover
    - Demobilize

Note:

Includes Crane with Operator, Pump Rig with Crew, service support truck, flatbed truck for a total (4) four-man crew for approximately 4 weeks

Lump Sum ***$68,960.00***

Materials for Rehabilitation and Re-Development:

- Soft Wire Brush, Airburst equipment, test pump equipment,

Lump Sum Including Freight and Tax **$13,319.00**

Outside Services

• Video Log Well	$1,200.00
• Portable Facilities (60 Days)	$1,164.00
Total Outside Services	**$2,364.00**
Sub *Total Cost*	***$91,993.00***

Optional Items (If Required)

• Spinner Test and Report (Includes Equipment Required)	$7,808.00
• Depth Specific Sampling (1-Liter for each of 10 Samples)	$4,345.00
• Mass Balance Calculations	$820.00
Total Optional Items	**$12,973.00**
Grand Total Cost (With Optional Items)	***$104,966.00***

Comments and Clarifications:

a. Lead time to obtain materials and begin project is 2 to 4 weeks after NTP
b. Install temporary lighting for night security and Victaulic coupling to close door daily.
c. Project Duration expected to be 4 to 6 weeks onsite time

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager
GENERAL PUMP COMPANY, INC.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 04/06/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**SATIVA WELL 5 > VFD & COMPONENTS:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect and Prepare for installation; Engineering Support **Task II > Materials:** ABB ACS880-07 VFD Assembly 100HP, 3/60/480, 124FLA, R6 Frame; NEMA1 Indoor Fan and Filtered Floor Mounted Cabinet; includes Input Circuit Breaker with Door Mounted Disconnect High Speed VFD with Input Fuses - Fused 480 X 120 CPT 2 Contactor Bypass with overload relay Door Mounted Bypass Selector; Switch Door Mounted VFD Keypad Modbus TCP/IP Ethernet Communications; Bottom Entry/Bottom Exit; includes WIKA Model LF-1 Downhole Submersible Liquid Level Transducer, 2-wire, 4-20mA output, with 350' cable length WIKA Model S-20 above ground 0-100PSI pressure transducer, 2-wire, 4-20mA output, and 50' cable length; Cabinet has Overall Dimensions 48"H X 32"W X 18"D Tax (9.5%) and Delivery included. GPC Proposal is attached showing complete list of GPC Services.	04/06/20	$ 34,023.05
		TOTAL =	**$ 34,023.05**

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 06/15/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division
Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 VFD Installation and Pump Testing (Freeboarding) >** GPC to install the VFD and VFD Cabinet; remove existing cabinet; relocate all existing conduits; provide conduits and wiring to downhole transducer; install transducer; relocate transformer; install gauges; provide additional hours to flush the well and collect necessary samples as needed.	06/15/20	$ 23,502.00
		TOTAL =	**$ 23,502.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

June 15, 2020 ***Via Email***

Subject: Sativa Well 5 VFD Installation and Pump Testing (Freeboarding)

GPC is please to provide this estimate to install the VFD and to provide additional hours to flush the well and collect necessary samples as follows:

- Remove existing panel from building, relocate/remove transformer. Relocate sub panel to make room for the VFD panel. Install VFD cabinet and install necessary conduit and wiring to the well head and to the tank to run control wires to VFD cabinet.

Labor $23,502.00

Total Estimate Project $23,502.00

GENERAL PUMP COMPANY, INC.

Prepared By: Ray Reece 6/15/20
Date

Approved By: _____
Date:

Public Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 06/30/2020

TO: Mr. Ray Reece
General Pump Company
159 N, Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well #5 Chlorine Room Components > Pumps, Scales, Analyzer:** • 3 Each Stenner SVP Digital Peristaltic Pump [w/4-20 mA Input, 17 GPD, 100 PSI, 3/8" Tubing, SVP4H2A3S]; • 2 Each Spill Containment Scale [w/Bladder, 4-1/2 Digit Display]; • 2 Each; CL17 Chlorine Analyzer Only, no reagents; PN17365 $10,867.00 • 2 Each; Free Chlorine Reagent Set for Hach CL17/CL17sc; PN 28235 $174.00 • 2 Each; Sulfuric Acid Standard 19.2 N, 100 mL Bottle; PN47875 Delivery and Tax (9.5%) included.	06/30/20	$ 35,943.06
		TOTAL =	**$ 35,943.06**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 09/03/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Chlorine Gas Pump:** Receive, Inspect, Load (1 Hour included); Engineering Support (1 Hour included); Blue Book Part # 12784 > AMT 1-1/4"x1" Centrifugal Pump 1.5HP/115-230V/1PH CI Case Freight and Tax (10.25%) included.	09/03/20	$ 1,091.00
		TOTAL =	**$ 1,091.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765
Serving Southern California and Central Coast

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

September 3, 2020 ***Via Email***

Subject: Sativa Well 5 Gas Chlorine Equipment Pump

Shop Labor:

• Receive, Inspect, Load – Unload and Deliver materials,	1 Hour
• Engineering Support (1 Hour)	Included
1 Total Estimated Shop Hours @ $105.00/Hour	**$105.00**

Materials:

• Pump AMT 1-1/4"x1" Centrifugal Pump 1.5HP/115-230V/1PH CI Case	$777.00
• Estimated Freight	$117.00
• Estimated tax at 10.25%	$92.00
Total Taxable Materials	***$986.00***
Total Estimate Project	***$1,091.00***

GENERAL PUMP COMPANY, INC.

Prepared By: Ray Reece 9/3/20
Date

Approved By: Ray Reece 9/3/20
Date:

SUPPLEMENTAL DATA
MOVEABLE EQUIPMENT DATA

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Bidding has ended on this item.

2008 Ingersoll Rand Airsource Plus 185 185 CFM Towable Air Compressor bidadoo See original listing



Condition: **Used**
"*Please see full equipment details in Description, including photos and video demonstration.*"
Ended: Dec 29, 2020, 3:54PM
Winning bid: **US $5,850.00** [32 bids]
Shipping: Freight - Read the item description or contact the seller for details
Item location: San Antonio, Texas, United States
Seller: **bidadoo_business** (27234) | Seller's other items

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NEW ! DHE1.8 mini excavator 4,000 Lbs + …
$19,900.00
+ $1,850.00 shipping


2012 JLG T350 Towable 35ft Boom Lift
$16,550.00
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2015 Genie TZ-34/20 34ft Towable 34ft Boom Lift
$17,500.00
+ shipping
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Flex-O-Lite 2002 Towable Traffic Arrow Sign Boar…
$355.00
+ shipping 9 bids


2015 Doosan C185WDZ-T4F 185 CFM Towable …
$7,500.00
+ shipping


2015 Miller Big Blue 400 Pro Diesel Towable…
$520.00
+ shipping 35 bids


2004 Sullivan Palatek D185Q Towable Air…
$4,999.00
+ shipping


2010 Genie AL4 Portable Towable Diesel Light…
$520.00
+ shipping 18 bids


2014 Magnum MLT3060K Towable Light Tower…
$3,000.00
+ shipping

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Back to search results | Listed in category: Business & Industrial > Hydraulics, Pneumatics, Pumps & Plumbing > Air Compressors & Blowers > Other Air Compressors

This listing has ended. The seller has relisted this item **or one like this.**

Ingersoll Rand 185 CFM Towable Air Compressor See original listing



Sell one like this

Condition: **Used**
Ended: Nov 03, 2020, 11:21AM
Price: **US $5,800.00**

Shipping: Free Local Pickup
Item location: Sanderson, Florida, United States
Seller: **markmoore144** (553) | Seller's other items

Related sponsored items 1/2 Feedback



Ingersoll-Rand ARO 1500 Series 3/8" Piggyback FRL…
$67.95
~~$97.07~~
Free shipping



1/4" x 100' Ultra Flexible Braided Air Hose…
$22.97
~~$48.98~~
Free shipping
Popular



INGERSOLL RAND F1155IA In Line Air Oil Filter 3" NP…
$199.00
+ $36.98 shipping



115PSI V Type Duplex Air Pump Air compressor…
$195.02
Free shipping



20Pcs Air Compressor Accessory Kit Tool 25FT…
$17.99
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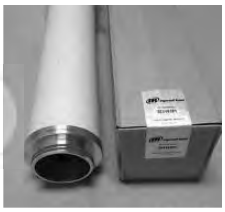

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APPENDIX 6

EXECUTIVE SUMMARY
(REPLACEMENT COST NEW LESS DEPRECIATION)

EXECUTIVE SUMMARY
Replacement Cost New Less Depreciation Analysis
(As of April 20, 2021)

CPUC Account	Account Category	Description	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
303	Land	Land	$ 881,000	$ -	$ -	$ -	$ 881,000	$ 881,000		
303	Land	Private Easements	$ 130,000	$ -	$ -	$ -	$ 130,000	$ 130,000		
304	Structures & Improvements	Buildings & Land Improvements	$ 1,026,026	$ (412,647)	$ -	$ -	$ 613,379	$ 613,379		
307	Wells	Well No. 2	$ 1,584,261	$ (792,131)	$ -	$ -	$ 792,131	$ 792,131		
307	Wells	Well No. 3	$ 1,340,679	$ (670,340)	$ -	$ -	$ 670,340	$ 670,340		
307	Wells	Well No. 4	$ 1,310,468	$ (1,168,779)	$ -	$ -	$ 141,689	$ 141,689		
307	Wells	Well No. 5	$ 2,462,290	$ (861,801)	$ -	$ -	$ 1,600,488	$ 1,600,488		
307	Wells	Well Improvements (Well No. 5)	$ 513,700	$ -	$ -	$ -	$ 513,700		$ 513,700	
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 2)	$ 317,314	$ (165,003)	$ -	$ -	$ 152,311	$ 152,311		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 3)	$ 317,314	$ (165,003)	$ -	$ -	$ 152,311	$ 152,311		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 5)	$ 317,314	$ (165,003)	$ -	$ (152,311)	$ -	$ -		
311	Pumping / Electrical Equipment	Pumping / Electrical Equipment (Well No. 5)	$ 202,819	$ -	$ -	$ -	$ 202,819		$ 202,819	
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 2)	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 3)	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 5)	$ 57,940	$ (30,129)	$ -	$ (27,811)	$ -	$ -		
320	Water Treatment Equipment	Chlorine Treatment Equipment (Well No. 5)	$ 37,034	$ -	$ -	$ -	$ 37,034		$ 37,034	
320	Water Treatment Equipment	Manganese Water Treatment (Well No. 5)	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000			$ 2,250,000
330	Reservoirs, Tanks, & Standpipes	Hydropneumatic Tanks	$ 662,691	$ (265,076)	$ -	$ -	$ 397,615	$ 397,615		
331	Water Mains & Valves	Lucien Street Waterline (8-inch)	$ 760,385	$ -	$ -	$ -	$ 760,385		$ 760,385	
331	Water Mains & Valves	Water Mains (Non-PVC)	$ 3,371,408	$ (1,018,589)	$ -	$ -	$ 2,352,819	$ 2,352,819		
331	Water Mains & Valves	Water Mains (PVC)	$ 3,443,004	$ (1,373,561)	$ -	$ -	$ 2,069,442	$ 2,069,442		
331	Water Mains & Valves	Water Valves	$ 406,450	$ (203,225)	$ -	$ -	$ 203,225	$ 203,225		
333	Water Services & Meters	Water Services	$ 2,463,119	$ (1,970,495)	$ -	$ -	$ 492,624	$ 492,624		
335	Hydrants	Hydrants	$ 1,634,718	$ (1,307,775)	$ -	$ -	$ 326,944	$ 326,944		
339	Other Equipment	Kubota L39TL & Ingersoll Rand 185	$ 55,205	$ (18,595)	$ -	$ -	$ 36,610	$ 36,610		
339	Other Equipment	Generator - Trailer Mounted	$ 143,591	$ (114,873)	$ -	$ -	$ 28,718	$ 28,718		
N/A	Water Rights	Water Rights (by Stratecon Inc.)	$ 7,105,517	$ -	$ -	$ -	$ 7,105,517	$ 7,105,517		
N/A	Grant - State Water Board	Infrastructural Grant - Other Costs	$ 256,061	$ -	$ -	$ -	$ 256,061		$ 256,061	
Replacement Cost New Less Depreciation Analysis			**$ 33,166,000**	**$ (10,763,000)**	**$ -**	**$ (180,000)**	**$ 22,223,000**	**$ 18,203,000**	**$ 1,770,000**	**$ 2,250,000**

APPENDIX 7

FIXED ASSET REGISTER
(REPLACEMENT COST NEW LESS DEPRECIATION)

FIXED ASSET REGISTER
Replacement Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10000	303	Land	Well Site No. 2	Land (Parcel No. 6155-017-900)	6,553	SF	$ 249,000	$ -	$ -	$ -	$ 249,000	$ 249,000		
10001	303	Land	Well Site No. 3	Land (Parcel No. 6154-010-900)	7,203	SF	$ 259,000	$ -	$ -	$ -	$ 259,000	$ 259,000		
10002	303	Land	Well Site No. 4	Land (Parcel No. 6152-019-901)	4,934	SF	$ 197,000	$ -	$ -	$ -	$ 197,000	$ 197,000		
10003	303	Land	Well Site No. 5	Land (Parcel No. 6155-005-900 & 901)	4,398	SF	$ 176,000	$ -	$ -	$ -	$ 176,000	$ 176,000		
10004	303	Land	Multiple	Private Easements	13,040	SF	$ 130,000	$ -	$ -	$ -	$ 130,000	$ 130,000		
10005														
10006	304	Structures & Improvements	Well Site No. 2	Sativa Office	1,879	SF	$ 406,175	$ (146,223)	$ -	$ -	$ 259,952	$ 259,952		
10007	304	Structures & Improvements	Well Site No. 2	Well No. 2 Enclosure	1,052	SF	$ 146,086	$ (87,652)	$ -	$ -	$ 58,434	$ 58,434		
10008	304	Structures & Improvements	Well Site No. 2	Paving	3,436	SF	$ 45,627	$ (17,110)	$ -	$ -	$ 28,517	$ 28,517		
10009	304	Structures & Improvements	Well Site No. 2	Steel Fence	100	SF	$ 4,314	$ (1,294)	$ -	$ -	$ 3,020	$ 3,020		
10010	304	Structures & Improvements	Well Site No. 2	Steel Gate	90	SF	$ 4,726	$ (1,418)	$ -	$ -	$ 3,308	$ 3,308		
10011	304	Structures & Improvements	Well Site No. 2	Underground Sanitary Sewer Utility	15	LF	$ 587	$ (220)	$ -	$ -	$ 367	$ 367		
10012	304	Structures & Improvements	Well Site No. 2	Underground Electric Utility	15	LF	$ 960	$ (360)	$ -	$ -	$ 600	$ 600		
10013	304	Structures & Improvements	Well Site No. 2	Underground Gas Utility	15	LF	$ 380	$ (142)	$ -	$ -	$ 237	$ 237		
10014														
10015	304	Structures & Improvements	Well Site No. 3	Well No. 3 Enclosure	512	SF	$ 58,332	$ (20,999)	$ -	$ -	$ 37,332	$ 37,332		
10016	304	Structures & Improvements	Well Site No. 3	Paving	4,190	SF	$ 55,639	$ (20,865)	$ -	$ -	$ 34,774	$ 34,774		
10017	304	Structures & Improvements	Well Site No. 3	Wrought Iron Fence	195	SF	$ 8,412	$ (2,524)	$ -	$ -	$ 5,888	$ 5,888		
10018	304	Structures & Improvements	Well Site No. 3	Wrought Iron Gate	25	SF	$ 1,313	$ (394)	$ -	$ -	$ 919	$ 919		
10019	304	Structures & Improvements	Well Site No. 3	Underground Sanitary Sewer Utility	20	LF	$ 783	$ (294)	$ -	$ -	$ 489	$ 489		
10020	304	Structures & Improvements	Well Site No. 3	Underground Electric Utility	20	LF	$ 1,280	$ (480)	$ -	$ -	$ 800	$ 800		
10021	304	Structures & Improvements	Well Site No. 3	Underground Gas Utility	20	LF	$ 506	$ (190)	$ -	$ -	$ 317	$ 317		
10022														
10023	304	Structures & Improvements	Well Site No. 4	Building - Well Site No. 4	922	SF	$ 96,712	$ (34,816)	$ -	$ -	$ 61,896	$ 61,896		
10024	304	Structures & Improvements	Well Site No. 4	Well No. 4 Enclosure	351	SF	$ 36,816	$ (22,089)	$ -	$ -	$ 14,726	$ 14,726		
10025	304	Structures & Improvements	Well Site No. 4	Paving	2,800	SF	$ 37,181	$ (13,943)	$ -	$ -	$ 23,238	$ 23,238		
10026	304	Structures & Improvements	Well Site No. 4	Wrought Iron Fence	300	SF	$ 12,941	$ (3,882)	$ -	$ -	$ 9,059	$ 9,059		
10027	304	Structures & Improvements	Well Site No. 4	Wrought Iron Gate	180	SF	$ 9,453	$ (2,836)	$ -	$ -	$ 6,617	$ 6,617		
10028	304	Structures & Improvements	Well Site No. 4	Underground Sanitary Sewer Utility	30	LF	$ 1,174	$ (440)	$ -	$ -	$ 734	$ 734		
10029	304	Structures & Improvements	Well Site No. 4	Underground Electric Utility	30	LF	$ 1,920	$ (720)	$ -	$ -	$ 1,200	$ 1,200		
10030	304	Structures & Improvements	Well Site No. 4	Underground Gas Utility	30	LF	$ 760	$ (285)	$ -	$ -	$ 475	$ 475		
10031														
10032	304	Structures & Improvements	Well Site No. 5	Well No. 5 Enclosure	277	SF	$ 29,046	$ (10,456)	$ -	$ -	$ 18,589	$ 18,589		
10033	304	Structures & Improvements	Well Site No. 5	Paving	3,267	SF	$ 43,382	$ (16,268)	$ -	$ -	$ 27,114	$ 27,114		
10034	304	Structures & Improvements	Well Site No. 5	Wrought Iron Fence	300	SF	$ 12,941	$ (3,882)	$ -	$ -	$ 9,059	$ 9,059		
10035	304	Structures & Improvements	Well Site No. 5	Wrought Iron Gate	90	SF	$ 4,726	$ (1,418)	$ -	$ -	$ 3,308	$ 3,308		
10036	304	Structures & Improvements	Well Site No. 5	Underground Sanitary Sewer Utility	30	LF	$ 1,174	$ (440)	$ -	$ -	$ 734	$ 734		
10037	304	Structures & Improvements	Well Site No. 5	Underground Electric Utility	30	LF	$ 1,920	$ (720)	$ -	$ -	$ 1,200	$ 1,200		
10038	304	Structures & Improvements	Well Site No. 5	Underground Gas Utility	30	LF	$ 760	$ (285)	$ -	$ -	$ 475	$ 475		
10039														
10040	307	Wells	Well Site No. 2	Well Drilling - 36 Inch Diameter	24	LF	$ 11,447	$ (5,724)	$ -	$ -	$ 5,724	$ 5,724		
10041	307	Wells	Well Site No. 2	Well Drilling - 30 Inch Diameter	205	LF	$ 80,640	$ (40,320)	$ -	$ -	$ 40,320	$ 40,320		
10042	307	Wells	Well Site No. 2	Well Drilling - 26 Inch Diameter	215	LF	$ 69,502	$ (34,751)	$ -	$ -	$ 34,751	$ 34,751		
10043	307	Wells	Well Site No. 2	Steel Well Casing - 18 Inch Diameter	445	LF	$ 678,674	$ (339,337)	$ -	$ -	$ 339,337	$ 339,337		

FIXED ASSET REGISTER
Replacement Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10044	307	Wells	Well Site No. 2	Develop Well	156	HR	$ 231,610	$ (115,805)	$ -	$ -	$ 115,805	$ 115,805		
10045	307	Wells	Well Site No. 2	Pump Test Well	36	HR	$ 35,554	$ (17,777)	$ -	$ -	$ 17,777	$ 17,777		
10046	307	Wells	Well Site No. 2	Observation Well	1,000	LF	$ 189,746	$ (94,873)	$ -	$ -	$ 94,873	$ 94,873		
10047	307	Wells	Well Site No. 2	Well Structural Components	1	LS	$ 287,088	$ (143,544)	$ -	$ -	$ 143,544	$ 143,544		
10048														
10049	307	Wells	Well Site No. 3	Well Drilling - 36 Inch Diameter	17	LF	$ 8,129	$ (4,064)	$ -	$ -	$ 4,064	$ 4,064		
10050	307	Wells	Well Site No. 3	Well Drilling - 30 Inch Diameter	146	LF	$ 57,263	$ (28,632)	$ -	$ -	$ 28,632	$ 28,632		
10051	307	Wells	Well Site No. 3	Well Drilling - 26 Inch Diameter	153	LF	$ 49,354	$ (24,677)	$ -	$ -	$ 24,677	$ 24,677		
10052	307	Wells	Well Site No. 3	Steel Well Casing - 18 Inch Diameter	316	LF	$ 481,935	$ (240,968)	$ -	$ -	$ 240,968	$ 240,968		
10053	307	Wells	Well Site No. 3	Develop Well	156	HR	$ 231,610	$ (115,805)	$ -	$ -	$ 115,805	$ 115,805		
10054	307	Wells	Well Site No. 3	Pump Test Well	36	HR	$ 35,554	$ (17,777)	$ -	$ -	$ 17,777	$ 17,777		
10055	307	Wells	Well Site No. 3	Observation Well	1,000	LF	$ 189,746	$ (94,873)	$ -	$ -	$ 94,873	$ 94,873		
10056	307	Wells	Well Site No. 3	Well Structural Components	1	LS	$ 287,088	$ (143,544)	$ -	$ -	$ 143,544	$ 143,544		
10057														
10058	307	Wells	Well Site No. 4	Well Drilling - 36 Inch Diameter	16	LF	$ 7,717	$ (7,717)	$ -	$ -	$ -	$ -		
10059	307	Wells	Well Site No. 4	Well Drilling - 30 Inch Diameter	138	LF	$ 54,364	$ (54,364)	$ -	$ -	$ -	$ -		
10060	307	Wells	Well Site No. 4	Well Drilling - 26 Inch Diameter	145	LF	$ 46,855	$ (46,855)	$ -	$ -	$ -	$ -		
10061	307	Wells	Well Site No. 4	Steel Well Casing - 18 Inch Diameter	300	LF	$ 457,533	$ (457,533)	$ -	$ -	$ -	$ -		
10062	307	Wells	Well Site No. 4	Develop Well	156	HR	$ 231,610	$ (185,288)	$ -	$ -	$ 46,322	$ 46,322		
10063	307	Wells	Well Site No. 4	Pump Test Well	36	HR	$ 35,554	$ (35,554)	$ -	$ -	$ -	$ -		
10064	307	Wells	Well Site No. 4	Observation Well	1,000	LF	$ 189,746	$ (151,797)	$ -	$ -	$ 37,949	$ 37,949		
10065	307	Wells	Well Site No. 4	Well Structural Components	1	LS	$ 287,088	$ (229,671)	$ -	$ -	$ 57,418	$ 57,418		
10066														
10067	307	Wells	Well Site No. 5	Well Drilling - 36 Inch Diameter	50	LF	$ 23,409	$ (8,193)	$ -	$ -	$ 15,216	$ 15,216		
10068	307	Wells	Well Site No. 5	Well Drilling - 30 Inch Diameter	420	LF	$ 164,904	$ (57,716)	$ -	$ -	$ 107,188	$ 107,188		
10069	307	Wells	Well Site No. 5	Well Drilling - 26 Inch Diameter	440	LF	$ 142,128	$ (49,745)	$ -	$ -	$ 92,383	$ 92,383		
10070	307	Wells	Well Site No. 5	Steel Well Casing - 18 Inch Diameter	910	LF	$ 1,387,851	$ (485,748)	$ -	$ -	$ 902,103	$ 902,103		
10071	307	Wells	Well Site No. 5	Develop Well	156	HR	$ 231,610	$ (81,063)	$ -	$ -	$ 150,546	$ 150,546		
10072	307	Wells	Well Site No. 5	Pump Test Well	36	HR	$ 35,554	$ (12,444)	$ -	$ -	$ 23,110	$ 23,110		
10073	307	Wells	Well Site No. 5	Observation Well	1,000	LF	$ 189,746	$ (66,411)	$ -	$ -	$ 123,335	$ 123,335		
10074	307	Wells	Well Site No. 5	Well Structural Components	1	LS	$ 287,088	$ (100,481)	$ -	$ -	$ 186,608	$ 186,608		
10075														
10076	307	Wells	Well Site No. 5	Well Liner & Redevelopment	1	LS	$ 374,898	$ -	$ -	$ -	$ 374,898		$ 374,898	
10077	307	Wells	Well Site No. 5	Piping Components & Install	1	LS	$ 20,376	$ -	$ -	$ -	$ 20,376		$ 20,376	
10078	307	Wells	Well Site No. 5	Pull Well & Video	1	LS	$ 13,460	$ -	$ -	$ -	$ 13,460		$ 13,460	
10079	307	Wells	Well Site No. 5	Rehabilitation & Test Pump	1	LS	$ 104,966	$ -	$ -	$ -	$ 104,966		$ 104,966	
10080														
10081	311	Pumping / Electrical Equipment	Well Site No. 2	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ -	$ 109,111	$ 109,111		
10082	311	Pumping / Electrical Equipment	Well Site No. 2	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ -	$ 43,199	$ 43,199		
10083														
10084	311	Pumping / Electrical Equipment	Well Site No. 3	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ -	$ 109,111	$ 109,111		
10085	311	Pumping / Electrical Equipment	Well Site No. 3	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ -	$ 43,199	$ 43,199		
10086														

FIXED ASSET REGISTER
Replacement Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10087	311	Pumping / Electrical Equipment	Well Site No. 5	Pumping Equipment	1	LS	$ 227,315	$ (118,204)	$ -	$ (109,111)	$ -	$ -		
10088	311	Pumping / Electrical Equipment	Well Site No. 5	Electrical Equipment	1	LS	$ 89,999	$ (46,799)	$ -	$ (43,199)	$ -	$ -		
10089														
10090	311	Pumping / Electrical Equipment	Well Site No. 5	Re-Equip Pump, Motor, & Components	1	LS	$ 145,294	$ -	$ -	$ -	$ 145,294		$ 145,294	
10091	311	Pumping / Electrical Equipment	Well Site No. 5	VFD & Components	1	LS	$ 34,023	$ -	$ -	$ -	$ 34,023		$ 34,023	
10092	311	Pumping / Electrical Equipment	Well Site No. 5	VFD Installation & Pump Testing (Freeboarding)	1	LS	$ 23,502	$ -	$ -	$ -	$ 23,502		$ 23,502	
10093														
10094	320	Water Treatment Equipment	Well Site No. 2	Gas Chlorination System (Regal Model 210)	1	EA	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
10095														
10096	320	Water Treatment Equipment	Well Site No. 3	Gas Chlorination System (Sureflow Technologies Series 4500)	1	EA	$ 57,940	$ (30,129)	$ -	$ -	$ 27,811	$ 27,811		
10097														
10098	320	Water Treatment Equipment	Well Site No. 5	Gas Chlorination System (Regal Model 216)	1	EA	$ 57,940	$ (30,129)	$ -	$ (27,811)	$ -	$ -		
10099														
10100	320	Water Treatment Equipment	Well Site No. 5	Chlorine Room Components (Pumps, Scales, Analyzer)	1	LS	$ 35,943	$ -	$ -	$ -	$ 35,943		$ 35,943	
10101	320	Water Treatment Equipment	Well Site No. 5	Chlorine Gas Pump	1	LS	$ 1,091	$ -	$ -	$ -	$ 1,091		$ 1,091	
10102	320	Water Treatment Equipment	Well Site No. 5	Manganese Water Treatment	1	LS	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000			$ 2,250,000
10103														
10104	330	Reservoirs, Tanks, & Standpipes	Well Site No. 2	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 165,673	$ (66,269)	$ -	$ -	$ 99,404	$ 99,404		
10105	330	Reservoirs, Tanks, & Standpipes	Well Site No. 3	Hydropneumatic Tank (10,000 Gallons)	2	EA	$ 331,345	$ (132,538)	$ -	$ -	$ 198,807	$ 198,807		
10106	330	Reservoirs, Tanks, & Standpipes	Well Site No. 5	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 165,673	$ (66,269)	$ -	$ -	$ 99,404	$ 99,404		
10107														
10108	331	Water Mains & Valves	Lucien Street	Reimbursement	1	LS	$ 500	$ -	$ -	$ -	$ 500		$ 500	
10109	331	Water Mains & Valves	Lucien Street	Plumber	1	LS	$ 6,497	$ -	$ -	$ -	$ 6,497		$ 6,497	
10110	331	Water Mains & Valves	Lucien Street	Flag person and Traffic Control	1	LS	$ 33,909	$ -	$ -	$ -	$ 33,909		$ 33,909	
10111	331	Water Mains & Valves	Lucien Street	Steel Plate	1	LS	$ 11,165	$ -	$ -	$ -	$ 11,165		$ 11,165	
10112	331	Water Mains & Valves	Lucien Street	Equipment	1	LS	$ 44,017	$ -	$ -	$ -	$ 44,017		$ 44,017	
10113	331	Water Mains & Valves	Lucien Street	Hauling and Disposal	1	LS	$ 33,288	$ -	$ -	$ -	$ 33,288		$ 33,288	
10114	331	Water Mains & Valves	Lucien Street	Cleaning	1	LS	$ 7,540	$ -	$ -	$ -	$ 7,540		$ 7,540	
10115	331	Water Mains & Valves	Lucien Street	Test Pit	1	LS	$ 1,324	$ -	$ -	$ -	$ 1,324		$ 1,324	
10116	331	Water Mains & Valves	Lucien Street	Sawcut	1	LS	$ 6,006	$ -	$ -	$ -	$ 6,006		$ 6,006	
10117	331	Water Mains & Valves	Lucien Street	Abatement	1	LS	$ 3,921	$ -	$ -	$ -	$ 3,921		$ 3,921	
10118	331	Water Mains & Valves	Lucien Street	Demo Asphalt	1	LS	$ 10,758	$ -	$ -	$ -	$ 10,758		$ 10,758	
10119	331	Water Mains & Valves	Lucien Street	Concrete	1	LS	$ 5,684	$ -	$ -	$ -	$ 5,684		$ 5,684	
10120	331	Water Mains & Valves	Lucien Street	Sand Bedding	1	LS	$ 13,652	$ -	$ -	$ -	$ 13,652		$ 13,652	
10121	331	Water Mains & Valves	Lucien Street	Import Soil	1	LS	$ 7,633	$ -	$ -	$ -	$ 7,633		$ 7,633	
10122	331	Water Mains & Valves	Lucien Street	Excavation	1	LS	$ 5,174	$ -	$ -	$ -	$ 5,174		$ 5,174	
10123	331	Water Mains & Valves	Lucien Street	Backfilling	1	LS	$ 4,001	$ -	$ -	$ -	$ 4,001		$ 4,001	
10124	331	Water Mains & Valves	Lucien Street	Compaction	1	LS	$ 4,679	$ -	$ -	$ -	$ 4,679		$ 4,679	
10125	331	Water Mains & Valves	Lucien Street	Sand Bags	1	LS	$ 3,223	$ -	$ -	$ -	$ 3,223		$ 3,223	
10126	331	Water Mains & Valves	Lucien Street	Wood Shoring	1	LS	$ 28,202	$ -	$ -	$ -	$ 28,202		$ 28,202	
10127	331	Water Mains & Valves	Lucien Street	Removal of Spoils from the Roadway	1	LS	$ 3,134	$ -	$ -	$ -	$ 3,134		$ 3,134	
10128	331	Water Mains & Valves	Lucien Street	Base Coarse	1	LS	$ 6,161	$ -	$ -	$ -	$ 6,161		$ 6,161	
10129	331	Water Mains & Valves	Lucien Street	Asphalt	1	LS	$ 19,876	$ -	$ -	$ -	$ 19,876		$ 19,876	
10130	331	Water Mains & Valves	Lucien Street	Video Camera	1	LS	$ 648	$ -	$ -	$ -	$ 648		$ 648	

FIXED ASSET REGISTER
Replacement Cost New Less Depreciation Analysis
(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Location	Description	Quantity	Unit	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation	Suburban Water Systems	State Water Board Infrastructural Grant $1,770,000	Proposition 1 IRWM Grant $2,250,000
10131	331	Water Mains & Valves	Lucien Street	Boring	1	LS	$ 36,766	$ -	$ -	$ -	$ 36,766		$ 36,766	
10132	331	Water Mains & Valves	Lucien Street	Waterline and Fittings	1	LS	$ 113,273	$ -	$ -	$ -	$ 113,273		$ 113,273	
10133	331	Water Mains & Valves	Lucien Street	Fire Hydrant	1	LS	$ 9,210	$ -	$ -	$ -	$ 9,210		$ 9,210	
10134	331	Water Mains & Valves	Lucien Street	General Requirements	1	LS	$ 3,572	$ -	$ -	$ -	$ 3,572		$ 3,572	
10135	331	Water Mains & Valves	Lucien Street	Existing Conditions	1	LS	$ 925	$ -	$ -	$ -	$ 925		$ 925	
10136	331	Water Mains & Valves	Lucien Street	Concrete	1	LS	$ 233	$ -	$ -	$ -	$ 233		$ 233	
10137	331	Water Mains & Valves	Lucien Street	Exterior Improvements	1	LS	$ 1,801	$ -	$ -	$ -	$ 1,801		$ 1,801	
10138	331	Water Mains & Valves	Lucien Street	Utilities	1	LS	$ (2,103)	$ -	$ -	$ -	$ (2,103)		$ (2,103)	
10139	331	Water Mains & Valves	Lucien Street	PE Costs	1	LS	$ 145,321	$ -	$ -	$ -	$ 145,321		$ 145,321	
10140	331	Water Mains & Valves	Lucien Street	CE Costs	1	LS	$ 190,396	$ -	$ -	$ -	$ 190,396		$ 190,396	
10141														
10142	331	Water Mains & Valves	Multiple	Water Mains (2" Copper)	722	LF	$ 100,436	$ (53,147)	$ -	$ -	$ 47,289	$ 47,289		
10143	331	Water Mains & Valves	Multiple	Water Mains (4" PVC)	7,334	LF	$ 1,020,214	$ (593,590)	$ -	$ -	$ 426,624	$ 426,624		
10144	331	Water Mains & Valves	Multiple	Water Mains (4" AC)	14,837	LF	$ 2,063,937	$ (740,041)	$ -	$ -	$ 1,323,897	$ 1,323,897		
10145	331	Water Mains & Valves	Multiple	Water Mains (4" Steel)	1,408	LF	$ 195,863	$ (70,228)	$ -	$ -	$ 125,635	$ 125,635		
10146	331	Water Mains & Valves	Multiple	Water Mains (4" Cast Iron)	1,610	LF	$ 223,963	$ (80,304)	$ -	$ -	$ 143,659	$ 143,659		
10147	331	Water Mains & Valves	Multiple	Water Mains (6" PVC)	15,330	LF	$ 2,132,517	$ (616,372)	$ -	$ -	$ 1,516,145	$ 1,516,145		
10148	331	Water Mains & Valves	Multiple	Water Mains (6" AC)	5,373	LF	$ 747,424	$ (77,740)	$ -	$ -	$ 669,685	$ 669,685		
10149	331	Water Mains & Valves	Multiple	Water Mains (6" Cast Iron)	1,008	LF	$ 140,220	$ (50,277)	$ -	$ -	$ 89,943	$ 89,943		
10150	331	Water Mains & Valves	Multiple	Water Mains (8" PVC)	1,300	LF	$ 189,837	$ (110,452)	$ -	$ -	$ 79,384	$ 79,384		
10151														
10152	331	Water Mains & Valves	Multiple	Water Valves	147	EA	$ 406,450	$ (203,225)	$ -	$ -	$ 203,225	$ 203,225		
10153														
10154	333	Water Mains & Valves	Multiple	Water Services (3/4" Copper)	32,860	LF	$ 2,463,119	$ (1,970,495)	$ -	$ -	$ 492,624	$ 492,624		
10155														
10156	335	Hydrants	Multiple	Fire Hydrants (4" Diameter)	29	EA	$ 804,744	$ (643,795)	$ -	$ -	$ 160,949	$ 160,949		
10157	335	Hydrants	Multiple	Fire Hydrants (6" Diameter)	29	EA	$ 829,974	$ (663,979)	$ -	$ -	$ 165,995	$ 165,995		
10158														
10159	339	Other Equipment	Well Site No. 4	Kubota L39TL (Tractor with Loader)	1	EA	$ 46,488	$ (18,595)	$ -	$ -	$ 27,893	$ 27,893		
10160	339	Other Equipment	Well Site No. 4	Ingersoll Rand 185 Air Compressor	1	EA	$ 8,717	$ -	$ -	$ -	$ 8,717	$ 8,717		
10161	339	Other Equipment	Well Site No. 4	WhisperWatt Diesel Generator (Serial No. 1337508)	1	LS	$ 143,591	$ (114,873)	$ -	$ -	$ 28,718	$ 28,718		
10162														
10163	N/A	Water Rights	Multiple	Water Rights (by Stratecon Inc.)	1	LS	$ 7,105,517	$ -	$ -	$ -	$ 7,105,517	$ 7,105,517		
10164	N/A	Grant - State Water Board	Multiple	Infrastructural Grant - Other Costs	1	LS	$ 256,061	$ -	$ -	$ -	$ 256,061		$ 256,061	
10165														
10166				**Fixed Asset Register - Replacement Cost New Less Depreciation Analysis**			**$ 33,166,000**	**$ (10,763,000)**	**$ -**	**$ (180,000)**	**$ 22,223,000**	**$ 18,203,000**	**$ 1,770,000**	**$ 2,250,000**

APPENDIX 8

SUPPLEMENTAL DATA
FIXED ASSET REGISTER DETAIL
(REPLACEMENT COST NEW LESS DEPRECIATION)

FIXED ASSET REGISTER DETAIL
WELL SITE FACILITIES

FIXED ASSET REGISTER - FACILITIES

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Line No.	CPUC Account	Facility Name	Address	Description	Quantity	Unit	Unit Cost	Source	Intermediate Cost	Current Cost Multiplier	Congestion Multiplier	Local Multiplier	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs
2																		
3	1000	303	Well Site No. 2	2015 E. Hatchway St.	Land (Parcel No. 6155-017-900)	6,553	SF	$ 38.00	FAC	$ 249,014	1.00	1.00	1.00	$ 249,000	$ -	$ 249,000	$ -	$ 249,000
4	1001	304	Well Site No. 2	2015 E. Hatchway St.	Sativa Office	1,879	SF	See Building Sheet	M&S 15-17	See Building Sheet	1.10	1.05	1.17	$ 322,792	$ 56,811	$ 379,603	$ 29,033	$ 408,636
5	1002	304	Well Site No. 2	2015 E. Hatchway St.	Well No. 2 Enclosure	1,052	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 116,096	$ 20,433	$ 136,529	$ 10,442	$ 146,971
6	1003	304	Well Site No. 2	2015 E. Hatchway St.	Paving	3,436	SF	$ 7.21	M&S 66-1	$ 24,774	1.09	1.05	1.19	$ 33,684	$ 5,928	$ 39,612	$ 3,030	$ 42,642
7	1004	304	Well Site No. 2	2015 E. Hatchway St.	Steel Fence	100	SF	$ 23.00	M&S 66-4	$ 2,300	1.11	1.05	1.19	$ 3,185	$ 560	$ 3,745	$ 286	$ 4,032
8	1005	304	Well Site No. 2	2015 E. Hatchway St.	Steel Gate	90	SF	$ 28.00	M&S 66-4	$ 2,520	1.11	1.05	1.19	$ 3,489	$ 614	$ 4,103	$ 314	$ 4,417
9	1006	304	Well Site No. 2	2015 E. Hatchway St.	Underground Sanitary Sewer Utility	15	LF	$ 21.25	M&S 66-1	$ 319	1.09	1.05	1.19	$ 433	$ 76	$ 510	$ 39	$ 549
10	1007	304	Well Site No. 2	2015 E. Hatchway St.	Underground Electric Utility	15	LF	$ 34.75	M&S 66-1	$ 521	1.09	1.05	1.19	$ 709	$ 125	$ 833	$ 64	$ 897
11	1008	304	Well Site No. 2	2015 E. Hatchway St.	Underground Gas Utility	15	LF	$ 13.75	M&S 66-1	$ 206	1.09	1.05	1.19	$ 280	$ 49	$ 330	$ 25	$ 355
12	1009	330	Well Site No. 2	2015 E. Hatchway St.	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 92,500.00	M&S 61-8	$ 92,500	1.06	1.05	1.19	$ 122,308	$ 21,526	$ 143,834	$ 11,001	$ 154,834
13	1010	303	Well Site No. 3	13320 S. Willowbrook Ave.	Land (Parcel No. 6154-010-900)	7,203	SF	$ 36.00	FAC	$ 259,308	1.00	1.00	1.00	$ 259,000	$ -	$ 259,000	$ -	$ 259,000
14	1011	304	Well Site No. 3	13320 S. Willowbrook Ave.	Well No. 3 Enclosure	512	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 46,357	$ 8,159	$ 54,515	$ 4,169	$ 58,685
15	1012	304	Well Site No. 3	13320 S. Willowbrook Ave.	Paving	4,190	SF	$ 7.21	M&S 66-1	$ 30,210	1.09	1.05	1.19	$ 41,075	$ 7,229	$ 48,305	$ 3,694	$ 51,999
16	1013	304	Well Site No. 3	13320 S. Willowbrook Ave.	Wrought Iron Fence	195	SF	$ 23.00	M&S 66-4	$ 4,485	1.11	1.05	1.19	$ 6,210	$ 1,093	$ 7,303	$ 559	$ 7,861
17	1014	304	Well Site No. 3	13320 S. Willowbrook Ave.	Wrought Iron Gate	25	SF	$ 28.00	M&S 66-4	$ 700	1.11	1.05	1.19	$ 969	$ 171	$ 1,140	$ 87	$ 1,227
18	1015	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Sanitary Sewer Utility	20	LF	$ 21.25	M&S 66-1	$ 425	1.09	1.05	1.19	$ 578	$ 102	$ 680	$ 52	$ 732
19	1016	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Electric Utility	20	LF	$ 34.75	M&S 66-1	$ 695	1.09	1.05	1.19	$ 945	$ 166	$ 1,111	$ 85	$ 1,196
20	1017	304	Well Site No. 3	13320 S. Willowbrook Ave.	Underground Gas Utility	20	LF	$ 13.75	M&S 66-1	$ 275	1.09	1.05	1.19	$ 374	$ 66	$ 440	$ 34	$ 473
21	1018	330	Well Site No. 3	13320 S. Willowbrook Ave.	Hydropneumatic Tank (10,000 Gallons)	2	EA	$ 92,500.00	M&S 61-8	$ 185,000	1.06	1.05	1.19	$ 244,615	$ 43,052	$ 287,667	$ 22,001	$ 309,669
22	1019	303	Well Site No. 4	13139 S. Aranbe Ave.	Land (Parcel No. 6152-019-901)	4,934	SF	$ 40.00	FAC	$ 197,360	1.00	1.00	1.00	$ 197,000	$ -	$ 197,000	$ -	$ 197,000
23	1020	304	Well Site No. 4	13139 S. Aranbe Ave.	Building - Well Site No. 4	922	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 76,858	$ 13,527	$ 90,385	$ 6,913	$ 97,298
24	1021	304	Well Site No. 4	13139 S. Aranbe Ave.	Well No. 4 Enclosure	351	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 29,258	$ 5,149	$ 34,407	$ 2,632	$ 37,039
25	1022	304	Well Site No. 4	13139 S. Aranbe Ave.	Paving	2,800	SF	$ 7.21	M&S 66-1	$ 20,188	1.09	1.05	1.19	$ 27,449	$ 4,831	$ 32,280	$ 2,469	$ 34,749
26	1023	304	Well Site No. 4	13139 S. Aranbe Ave.	Wrought Iron Fence	300	SF	$ 23.00	M&S 66-4	$ 6,900	1.11	1.05	1.19	$ 9,554	$ 1,681	$ 11,235	$ 859	$ 12,095
27	1024	304	Well Site No. 4	13139 S. Aranbe Ave.	Wrought Iron Gate	180	SF	$ 28.00	M&S 66-4	$ 5,040	1.11	1.05	1.19	$ 6,978	$ 1,228	$ 8,207	$ 628	$ 8,834
28	1025	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Sanitary Sewer Utility	30	LF	$ 21.25	M&S 66-1	$ 638	1.09	1.05	1.19	$ 867	$ 153	$ 1,019	$ 78	$ 1,097
29	1026	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Electric Utility	30	LF	$ 34.75	M&S 66-1	$ 1,043	1.09	1.05	1.19	$ 1,417	$ 249	$ 1,667	$ 127	$ 1,794
30	1027	304	Well Site No. 4	13139 S. Aranbe Ave.	Underground Gas Utility	30	LF	$ 13.75	M&S 66-1	$ 413	1.09	1.05	1.19	$ 561	$ 99	$ 660	$ 50	$ 710
31	1028	339	Well Site No. 4	13139 S. Aranbe Ave.	Kubota L39TL (Tractor with Loader)	1	EA	$ 34,320.00	Fastline	$ 34,320	1.00	1.00	1.00	$ 34,320	$ 6,040	$ 40,360	$ 3,087	$ 43,447
32	1029	339	Well Site No. 4	13139 S. Aranbe Ave.	Ingersoll Rand 185 Air Compressor	1	EA	$ 6,435.00	ebay	$ 6,435	1.00	1.00	1.00	$ 6,435	$ 1,133	$ 7,568	$ 579	$ 8,146
33	1030	303	Well Site No. 5	2083 E. Stockwell St.	Land (Parcel No. 6155-005-900 & 901)	4,398	SF	$ 40.00	FAC	$ 175,920	1.00	1.00	1.00	$ 176,000	$ -	$ 176,000	$ -	$ 176,000
34	1031	304	Well Site No. 5	2083 E. Stockwell St.	Well No. 5 Enclosure	277	SF	See Building Sheet	M&S 14-14	See Building Sheet	1.08	1.05	1.17	$ 23,083	$ 4,063	$ 27,145	$ 2,076	$ 29,221
35	1032	304	Well Site No. 5	2083 E. Stockwell St.	Paving	3,267	SF	$ 7.21	M&S 66-1	$ 23,555	1.09	1.05	1.19	$ 32,027	$ 5,637	$ 37,664	$ 2,881	$ 40,544
36	1033	304	Well Site No. 5	2083 E. Stockwell St.	Wrought Iron Fence	300	SF	$ 23.00	M&S 66-4	$ 6,900	1.11	1.05	1.19	$ 9,554	$ 1,681	$ 11,235	$ 859	$ 12,095
37	1034	304	Well Site No. 5	2083 E. Stockwell St.	Wrought Iron Gate	90	SF	$ 28.00	M&S 66-4	$ 2,520	1.11	1.05	1.19	$ 3,489	$ 614	$ 4,103	$ 314	$ 4,417
38	1035	304	Well Site No. 5	2083 E. Stockwell St.	Underground Sanitary Sewer Utility	30	LF	$ 21.25	M&S 66-1	$ 638	1.09	1.05	1.19	$ 867	$ 153	$ 1,019	$ 78	$ 1,097
39	1036	304	Well Site No. 5	2083 E. Stockwell St.	Underground Electric Utility	30	LF	$ 34.75	M&S 66-1	$ 1,043	1.09	1.05	1.19	$ 1,417	$ 249	$ 1,667	$ 127	$ 1,794
40	1037	304	Well Site No. 5	2083 E. Stockwell St.	Underground Gas Utility	30	LF	$ 13.75	M&S 66-1	$ 413	1.09	1.05	1.19	$ 561	$ 99	$ 660	$ 50	$ 710
41	1038	330	Well Site No. 5	2083 E. Stockwell St.	Hydropneumatic Tank (10,000 Gallons)	1	EA	$ 92,500.00	M&S 61-8	$ 92,500	1.06	1.05	1.19	$ 122,308	$ 21,526	$ 143,834	$ 11,001	$ 154,834
42	1039																	
43	**1040**				**Subtotal Facilities - Sativa Water System**									**$ 2,212,102**	**$ 234,274**	**$ 2,446,376**	**$ 119,722**	**$ 2,566,098**

FIXED ASSET REGISTER - FACILITIES

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	T	U	V	W	X	Y	Z	AA	AB	AC
1	G&A	Replacement Cost New	Historical Age	Effective Age	Normal Useful Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation
2										
3	$ -	$ 249,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 249,000
4	$ 26,572	$ 406,175	31	31	50	36%	$ (146,223)	$ -	$ -	$ 259,952
5	$ 9,557	$ 146,086	31	31	40	60%	$ (87,652)	$ -	$ -	$ 58,434
6	$ 2,985	$ 45,627	N/A	15	40	38%	$ (17,110)	$ -	$ -	$ 28,517
7	$ 282	$ 4,314	N/A	12	40	30%	$ (1,294)	$ -	$ -	$ 3,020
8	$ 309	$ 4,726	N/A	12	40	30%	$ (1,418)	$ -	$ -	$ 3,308
9	$ 38	$ 587	N/A	15	40	38%	$ (220)	$ -	$ -	$ 367
10	$ 63	$ 960	N/A	15	40	38%	$ (360)	$ -	$ -	$ 600
11	$ 25	$ 380	N/A	15	40	38%	$ (142)	$ -	$ -	$ 237
12	$ 10,838	$ 165,673	N/A	8	20	40%	$ (66,269)	$ -	$ -	$ 99,404
13	$ -	$ 259,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 259,000
14	$ 3,816	$ 58,332	N/A	31	40	36%	$ (20,999)	$ -	$ -	$ 37,332
15	$ 3,640	$ 55,639	N/A	15	40	38%	$ (20,865)	$ -	$ -	$ 34,774
16	$ 550	$ 8,412	N/A	12	40	30%	$ (2,524)	$ -	$ -	$ 5,888
17	$ 86	$ 1,313	N/A	12	40	30%	$ (394)	$ -	$ -	$ 919
18	$ 51	$ 783	N/A	15	40	38%	$ (294)	$ -	$ -	$ 489
19	$ 84	$ 1,280	N/A	15	40	38%	$ (480)	$ -	$ -	$ 800
20	$ 33	$ 506	N/A	15	40	38%	$ (190)	$ -	$ -	$ 317
21	$ 21,677	$ 331,345	N/A	8	20	40%	$ (132,538)	$ -	$ -	$ 198,807
22	$ -	$ 197,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 197,000
23	$ 6,327	$ 96,712	N/A	31	40	36%	$ (34,816)	$ -	$ -	$ 61,896
24	$ 2,409	$ 36,816	N/A	31	40	60%	$ (22,089)	$ -	$ -	$ 14,726
25	$ 2,432	$ 37,181	N/A	15	40	38%	$ (13,943)	$ -	$ -	$ 23,238
26	$ 847	$ 12,941	N/A	12	40	30%	$ (3,882)	$ -	$ -	$ 9,059
27	$ 618	$ 9,453	N/A	12	40	30%	$ (2,836)	$ -	$ -	$ 6,617
28	$ 77	$ 1,174	N/A	15	40	38%	$ (440)	$ -	$ -	$ 734
29	$ 126	$ 1,920	N/A	15	40	38%	$ (720)	$ -	$ -	$ 1,200
30	$ 50	$ 760	N/A	15	40	38%	$ (285)	$ -	$ -	$ 475
31	$ 3,041	$ 46,488	N/A	2	5	40%	$ (18,595)	$ -	$ -	$ 27,893
32	$ 570	$ 8,717	N/A	N/A	N/A	N/A	$ -	$ -	$ -	$ 8,717
33	$ -	$ 176,000	N/A	N/A	N/A	0%	$ -	$ -	$ -	$ 176,000
34	$ 1,900	$ 29,046	26	26	40	36%	$ (10,456)	$ -	$ -	$ 18,589
35	$ 2,838	$ 43,382	N/A	15	40	38%	$ (16,268)	$ -	$ -	$ 27,114
36	$ 847	$ 12,941	N/A	12	40	30%	$ (3,882)	$ -	$ -	$ 9,059
37	$ 309	$ 4,726	N/A	12	40	30%	$ (1,418)	$ -	$ -	$ 3,308
38	$ 77	$ 1,174	N/A	15	40	38%	$ (440)	$ -	$ -	$ 734
39	$ 126	$ 1,920	N/A	15	40	38%	$ (720)	$ -	$ -	$ 1,200
40	$ 50	$ 760	N/A	15	40	38%	$ (285)	$ -	$ -	$ 475
41	$ 10,838	$ 165,673	N/A	8	20	40%	$ (66,269)	$ -	$ -	$ 99,404
42										
43	**$ 114,088**	**$ 2,624,922**					**$ (696,318)**	$ -	$ -	**$ 1,928,603**

FIXED ASSET REGISTER DETAIL
WELL INFRASTRUCTURE

FIXED ASSET REGISTER - WELL INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
4	MRV No.	CPUC Account	Account Category	Site No.	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost
5																		
6	2000	307	Wells	Well Site No. 2	Well Drilling - 36 Inch Diameter	24	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
7	2001	307	Wells	Well Site No. 2	Well Drilling - 30 Inch Diameter	205	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
8	2002	307	Wells	Well Site No. 2	Well Drilling - 26 Inch Diameter	215	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
9	2003	307	Wells	Well Site No. 2	Steel Well Casing - 18 Inch Diameter	445	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
10	2004	307	Wells	Well Site No. 2	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
11	2005	307	Wells	Well Site No. 2	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
12	2006	307	Wells	Well Site No. 2	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
13	2007	307	Wells	Well Site No. 2	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
14	2008	311	Pumping / Electrical Equipment	Well Site No. 2	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
15	2009	311	Pumping / Electrical Equipment	Well Site No. 2	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
16	2010	320	Water Treatment Equipment	Well Site No. 2	Gas Chlorination System (Regal Model 210)	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
17	2011																	
18	2012	307	Wells	Well Site No. 3	Well Drilling - 36 Inch Diameter	17	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
19	2013	307	Wells	Well Site No. 3	Well Drilling - 30 Inch Diameter	146	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
20	2014	307	Wells	Well Site No. 3	Well Drilling - 26 Inch Diameter	153	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
21	2015	307	Wells	Well Site No. 3	Steel Well Casing - 18 Inch Diameter	316	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
22	2016	307	Wells	Well Site No. 3	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
23	2017	307	Wells	Well Site No. 3	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
24	2018	307	Wells	Well Site No. 3	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
25	2019	307	Wells	Well Site No. 3	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
26	2020	311	Pumping / Electrical Equipment	Well Site No. 3	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
27	2021	311	Pumping / Electrical Equipment	Well Site No. 3	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
28	2022	320	Water Treatment Equipment	Well Site No. 3	Gas Chlorination System (Sureflow Technologies Series 450(	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
29	2023																	
30	2024	307	Wells	Well Site No. 4	Well Drilling - 36 Inch Diameter	16	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
31	2025	307	Wells	Well Site No. 4	Well Drilling - 30 Inch Diameter	138	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
32	2026	307	Wells	Well Site No. 4	Well Drilling - 26 Inch Diameter	145	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
33	2027	307	Wells	Well Site No. 4	Steel Well Casing - 18 Inch Diameter	300	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
34	2028	307	Wells	Well Site No. 4	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
35	2029	307	Wells	Well Site No. 4	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
36	2030	307	Wells	Well Site No. 4	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
37	2031	307	Wells	Well Site No. 4	Well Structural Components	1	LS	Suburban Water Systems	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
38	2032	339	Other Equipment	Well Site No. 4	WhisperWatt Diesel Generator (Serial No. 1337508)	1	LS	26 32 13.13-2800	R-3	$ 52,500.00	$ 3,806.25	$ 5,325.00	$ 820.00	$ 8,355.00	$ 70,806.25	$ 11,286.52	1.118	$ 91,779.71
39	2033																	
40	2034	307	Wells	Well Site No. 5	Well Drilling - 36 Inch Diameter	50	LF	33 11 13.10-8455	B-23B	$ 39.50	$ 2.86	$ 73.00	$ 68.00	$ 47.50	$ 230.86	$ 36.80	1.118	$ 299.25
41	2035	307	Wells	Well Site No. 5	Well Drilling - 30 Inch Diameter	420	LF	33 11 13.10-8450	B-23B	$ 36.00	$ 2.61	$ 60.00	$ 56.00	$ 39.00	$ 193.61	$ 30.86	1.118	$ 250.96
42	2036	307	Wells	Well Site No. 5	Well Drilling - 26 Inch Diameter	440	LF	33 11 13.10-8445	B-23B	$ 31.50	$ 2.28	$ 48.50	$ 45.50	$ 31.50	$ 159.28	$ 25.39	1.118	$ 206.47
43	2037	307	Wells	Well Site No. 5	Steel Well Casing - 18 Inch Diameter	910	LF	33 11 13.10-8210	B-23A	$ 580.00	$ 42.05	$ 30.50	$ 22.50	$ 77.00	$ 752.05	$ 119.88	1.118	$ 974.81
44	2038	307	Wells	Well Site No. 5	Develop Well	156	HR	33 11 13.10-8500	B-23B	$ 305.00	$ 22.11	$ 150.00	$ 139.00	$ 116.00	$ 732.11	$ 116.70	1.118	$ 948.97
45	2039	307	Wells	Well Site No. 5	Pump Test Well	36	HR	33 11 13.10-8550	B-23B	$ 96.50	$ 7.00	$ 150.00	$ 139.00	$ 94.50	$ 487.00	$ 77.63	1.118	$ 631.25
46	2040	307	Wells	Well Site No. 5	Observation Well	1,000	LF	33 11 13.10-0800	B-23	$ 18.15	$ 1.32	$ 28.30	$ 26.45	$ 19.35	$ 93.57	$ 14.91	1.118	$ 121.28
47	2041	307	Wells	Well Site No. 5	Well Structural Components	1	LS	Wood Rodgers	N/A	N/A	N/A	N/A	N/A	N/A	$ 183,500.00	$ -	1.000	$ 183,500.00
48	2042	311	Pumping / Electrical Equipment	Well Site No. 5	Pumping Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 145,294.30	$ -	1.000	$ 145,294.30
49	2043	311	Pumping / Electrical Equipment	Well Site No. 5	Electrical Equipment	1	LS	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 57,525.05	$ -	1.000	$ 57,525.05
50	2044	320	Water Treatment Equipment	Well Site No. 5	Gas Chlorination System (Regal Model 216)	1	EA	General Pump Company	N/A	N/A	N/A	N/A	N/A	N/A	$ 37,034.06	$ -	1.000	$ 37,034.06
51	2045																	
52	2046			**Subtotal Well Infrastructure - Sativa Water System**														

FIXED ASSET REGISTER - WELL INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
4	Contractor Costs	Engineering Fees	Permits	Construction Management Fees	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs	G&A	Replacement Cost New	Effective Age	Service Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation
5																		
6	$ 7,317	$ 439	$ 146	$ 549	$ 8,451	$ 1,487	$ 9,938	$ 760	$ 10,698	$ 749	$ 11,447	20	40	50%	$ (5,724)	$ -	$ -	$ 5,724
7	$ 51,543	$ 3,093	$ 1,031	$ 3,866	$ 59,532	$ 10,478	$ 70,010	$ 5,354	$ 75,364	$ 5,276	$ 80,640	20	40	50%	$ (40,320)	$ -	$ -	$ 40,320
8	$ 44,424	$ 2,665	$ 888	$ 3,332	$ 51,310	$ 9,031	$ 60,340	$ 4,615	$ 64,955	$ 4,547	$ 69,502	20	40	50%	$ (34,751)	$ -	$ -	$ 34,751
9	$ 433,792	$ 26,028	$ 8,676	$ 32,534	$ 501,030	$ 88,181	$ 589,211	$ 45,064	$ 634,275	$ 44,399	$ 678,674	20	40	50%	$ (339,337)	$ -	$ -	$ 339,337
10	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	20	40	50%	$ (115,805)	$ -	$ -	$ 115,805
11	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	20	40	50%	$ (17,777)	$ -	$ -	$ 17,777
12	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	20	40	50%	$ (94,873)	$ -	$ -	$ 94,873
13	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	20	40	50%	$ (143,544)	$ -	$ -	$ 143,544
14	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ -	$ 109,111
15	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ -	$ 43,199
16	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ -	$ 27,811
17																		
18	$ 5,196	$ 312	$ 104	$ 390	$ 6,001	$ 1,056	$ 7,057	$ 540	$ 7,597	$ 532	$ 8,129	20	40	50%	$ (4,064)	$ -	$ -	$ 4,064
19	$ 36,601	$ 2,196	$ 732	$ 2,745	$ 42,275	$ 7,440	$ 49,715	$ 3,802	$ 53,517	$ 3,746	$ 57,263	20	40	50%	$ (28,632)	$ -	$ -	$ 28,632
20	$ 31,546	$ 1,893	$ 631	$ 2,366	$ 36,436	$ 6,413	$ 42,848	$ 3,277	$ 46,125	$ 3,229	$ 49,354	20	40	50%	$ (24,677)	$ -	$ -	$ 24,677
21	$ 308,041	$ 18,482	$ 6,161	$ 23,103	$ 355,788	$ 62,619	$ 418,406	$ 32,000	$ 450,407	$ 31,528	$ 481,935	20	40	50%	$ (240,968)	$ -	$ -	$ 240,968
22	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	20	40	50%	$ (115,805)	$ -	$ -	$ 115,805
23	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	20	40	50%	$ (17,777)	$ -	$ -	$ 17,777
24	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	20	40	50%	$ (94,873)	$ -	$ -	$ 94,873
25	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	20	40	50%	$ (143,544)	$ -	$ -	$ 143,544
26	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ -	$ 109,111
27	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ -	$ 43,199
28	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ -	$ 27,811
29																		
30	$ 4,933	$ 296	$ 99	$ 370	$ 5,697	$ 1,003	$ 6,700	$ 512	$ 7,212	$ 505	$ 7,717	59	40	100%	$ (7,717)	$ -	$ -	$ -
31	$ 34,748	$ 2,085	$ 695	$ 2,606	$ 40,134	$ 7,064	$ 47,198	$ 3,610	$ 50,808	$ 3,557	$ 54,364	59	40	100%	$ (54,364)	$ -	$ -	$ -
32	$ 29,949	$ 1,797	$ 599	$ 2,246	$ 34,591	$ 6,088	$ 40,679	$ 3,111	$ 43,790	$ 3,065	$ 46,855	59	40	100%	$ (46,855)	$ -	$ -	$ -
33	$ 292,444	$ 17,547	$ 5,849	$ 21,933	$ 337,773	$ 59,448	$ 397,221	$ 30,380	$ 427,601	$ 29,932	$ 457,533	59	40	100%	$ (457,533)	$ -	$ -	$ -
34	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	59	40	80%	$ (185,288)	$ -	$ -	$ 46,322
35	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	59	40	100%	$ (35,554)	$ -	$ -	$ -
36	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	59	40	80%	$ (151,797)	$ -	$ -	$ 37,949
37	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	59	40	80%	$ (229,671)	$ -	$ -	$ 57,418
38	$ 91,780	$ 5,507	$ 1,836	$ 6,883	$ 106,006	$ 18,657	$ 124,663	$ 9,534	$ 134,197	$ 9,394	$ 143,591	4	5	80%	$ (114,873)	$ -	$ -	$ 28,718
39																		
40	$ 14,962	$ 898	$ 299	$ 1,122	$ 17,282	$ 3,042	$ 20,323	$ 1,554	$ 21,877	$ 1,531	$ 23,409	14	40	35%	$ (8,193)	$ -	$ -	$ 15,216
41	$ 105,403	$ 6,324	$ 2,108	$ 7,905	$ 121,740	$ 21,426	$ 143,167	$ 10,950	$ 154,116	$ 10,788	$ 164,904	14	40	35%	$ (57,716)	$ -	$ -	$ 107,188
42	$ 90,845	$ 5,451	$ 1,817	$ 6,813	$ 104,926	$ 18,467	$ 123,392	$ 9,437	$ 132,830	$ 9,298	$ 142,128	14	40	35%	$ (49,745)	$ -	$ -	$ 92,383
43	$ 887,081	$ 53,225	$ 17,742	$ 66,531	$ 1,024,578	$ 180,326	$ 1,204,904	$ 92,153	$ 1,297,057	$ 90,794	$ 1,387,851	14	40	35%	$ (485,748)	$ -	$ -	$ 902,103
44	$ 148,039	$ 8,882	$ 2,961	$ 11,103	$ 170,986	$ 30,093	$ 201,079	$ 15,379	$ 216,458	$ 15,152	$ 231,610	14	40	35%	$ (81,063)	$ -	$ -	$ 150,546
45	$ 22,725	$ 1,363	$ 454	$ 1,704	$ 26,247	$ 4,620	$ 30,867	$ 2,361	$ 33,228	$ 2,326	$ 35,554	14	40	35%	$ (12,444)	$ -	$ -	$ 23,110
46	$ 121,281	$ 7,277	$ 2,426	$ 9,096	$ 140,079	$ 24,654	$ 164,733	$ 12,599	$ 177,333	$ 12,413	$ 189,746	14	40	35%	$ (66,411)	$ -	$ -	$ 123,335
47	$ 183,500	$ 11,010	$ 3,670	$ 13,763	$ 211,943	$ 37,302	$ 249,244	$ 19,063	$ 268,307	$ 18,781	$ 287,088	14	40	35%	$ (100,481)	$ -	$ -	$ 186,608
48	$ 145,294	$ 8,718	$ 2,906	$ 10,897	$ 167,815	$ 29,535	$ 197,350	$ 15,094	$ 212,444	$ 14,871	$ 227,315	13	25	52%	$ (118,204)	$ -	$ (109,111)	$ -
49	$ 57,525	$ 3,452	$ 1,151	$ 4,314	$ 66,441	$ 11,694	$ 78,135	$ 5,976	$ 84,111	$ 5,888	$ 89,999	13	25	52%	$ (46,799)	$ -	$ (43,199)	$ -
50	$ 37,034	$ 2,222	$ 741	$ 2,778	$ 42,774	$ 7,528	$ 50,303	$ 3,847	$ 54,150	$ 3,790	$ 57,940	13	25	52%	$ (30,129)	$ -	$ (27,811)	$ -
51																		
52	**$ 5,092,347**	**$ 305,541**	**$ 101,847**	**$ 381,926**	**$ 5,881,660**	**$ 1,035,172**	**$ 6,916,833**	**$ 529,010**	**$ 7,445,843**	**$ 521,209**	**$ 7,967,052**				**$ (4,193,320)**	$ -	**$ (180,122)**	**$ 3,593,610**

FIXED ASSET REGISTER DETAIL DISTRIBUTION INFRASTRUCTURE

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																		
2																		
3																		
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost
5																		
6	3000	303	Land	N/A	Private Easements	13,040	SF	N/A	N/A	$ 10.00	$ -	$ -	$ -	$ -	$ 10.00	$ -	1.000	$ 10.00
7	3001																	
8	3002	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	722	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
9	3003	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	32	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
10	3004	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	289	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
11	3005	331	Water Mains & Valves - PVC	6	Bedding - Sand	160	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
12	3006	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	160	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
13	3007	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	169	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
14	3008	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
15	3009	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	241	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
16	3010	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	1,949	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
17	3011	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	321	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
18	3012																	
19	3013	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	7,334	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
20	3014	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	326	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
21	3015	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,934	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
22	3016	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,630	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
23	3017	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,630	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
24	3018	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,716	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
25	3019	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	16	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
26	3020	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	2,445	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
27	3021	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	19,802	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
28	3022	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	3,260	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
29	3023																	
30	3024	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	14,837	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
31	3025	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	659	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
32	3026	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	5,935	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
33	3027	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,297	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
34	3028	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,297	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
35	3029	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,472	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
36	3030	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	33	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
37	3031	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	4,946	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
38	3032	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	40,060	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
39	3033	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,594	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
40	3034																	
41	3035	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,408	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
42	3036	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	63	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
43	3037	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	563	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
44	3038	331	Water Mains & Valves - PVC	6	Bedding - Sand	313	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
45	3039	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	313	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
46	3040	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	329	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
47	3041	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
48	3042	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	469	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
49	3043	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,802	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
50	3044	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	626	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
51	3045																	
52	3046	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,410	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
53	3047	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	72	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
54	3048	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	644	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
55	3049	331	Water Mains & Valves - PVC	6	Bedding - Sand	358	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
56	3050	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	358	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
57	3051	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	377	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
58	3052	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	4	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
59	3053	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	537	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
60	3054	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	4,347	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
61	3055	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	716	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
62	3056																	
63	3057	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	15,330	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
64	3058	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	681	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
65	3059	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,132	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
66	3060	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,407	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
67	3061	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,407	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
68	3062	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,587	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
69	3063	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	34	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
70	3064	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	5,110	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
71	3065	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	41,391	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
72	3066	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,813	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
73	3067																	
74	3068	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	5,373	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
75	3069	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	239	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
76	3070	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,149	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
77	3071	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,194	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
78	3072	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,194	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
79	3073	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,257	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
80	3074	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	12	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
81	3075	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	1,791	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
82	3076	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	14,507	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																		
2																		
3																		
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Unit Material Cost	Unit Sales Tax	Unit Labor Cost	Unit Equipment Cost	Contractor O&P	Direct Unit Cost	Insurance Unit Cost	Local Multiplier	Contractor Unit Cost
5																		
83	3077	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	2,388	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
84	3078																	
85	3079	331	Water Mains & Valves - PVC	**6**	**Polyvinyl Chloride Pipe**	**1,008**	LF	33 14 13.25-4050	B-20A	$ 8.00	$ 0.58	$ 3.74	$ -	$ 2.66	$ 14.98	$ 2.39	1.118	$ 19.42
86	3080	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	45	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
87	3081	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	403	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
88	3082	331	Water Mains & Valves - PVC	6	Bedding - Sand	224	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
89	3083	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	224	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
90	3084	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	236	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
91	3085	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
92	3086	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	336	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
93	3087	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	2,722	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
94	3088	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	448	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
95	3089																	
96	3090	331	Water Mains & Valves - PVC	**8**	**Polyvinyl Chloride Pipe**	**1,300**	LF	33 14 13.25-4040	B-20A	$ 8.45	$ 0.61	$ 4.55	$ -	$ 3.10	$ 16.71	$ 2.66	1.118	$ 21.66
97	3091	331	Water Mains & Valves - PVC	8	Drilling & Blasting Rock	60	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
98	3092	331	Water Mains & Valves - PVC	8	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	542	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
99	3093	331	Water Mains & Valves - PVC	8	Bedding - Sand	301	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
100	3094	331	Water Mains & Valves - PVC	8	Bedding - Compact Trench Bedding	301	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
101	3095	331	Water Mains & Valves - PVC	8	Structural Backfill Under Asphalt or Concrete - Crushed Stone	317	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
102	3096	331	Water Mains & Valves - PVC	8	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
103	3097	331	Water Mains & Valves - PVC	8	Utility Mix Grass Seed - Hydro/Air Seeding	433	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
104	3098	331	Water Mains & Valves - PVC	8	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,510	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
105	3099	331	Water Mains & Valves - PVC	8	Hauling - Cycle 40 Miles	602	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
106	3100																	
107	3101	331	Water Mains & Valves	6	Mainline Valves	147	EA	33 14 19.10-3140	B-6	$ 875.00	$ 63.44	$ 192.00	$ 36.00	$ 197.00	$ 1,363.44	$ 217.33	1.118	$ 1,767.30
108	3102																	
109	3103	333	Water Services & Meters - Pex	**1**	**Polyethylene Pipe**	**32,860**	LF	33 14 13.20-1120	Q-1A	$ 0.66	$ 0.05	$ 1.40	$ -	$ 0.77	$ 2.88	$ 0.46	1.118	$ 3.73
110	3104	333	Water Services & Meters - Pex	1	Drilling & Blasting Rock	753	BCY	31 23 16.30-2300	B-47	$ 13.60	$ 0.99	$ 45.00	$ 62.50	$ 29.90	$ 151.99	$ 24.23	1.118	$ 197.01
111	3105	333	Water Services & Meters - Pex	1	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,777	BCY	31 23 16.13-1352	B-13H	$ -	$ -	$ 4.50	$ 5.15	$ 2.70	$ 12.35	$ 1.97	1.118	$ 16.01
112	3106	333	Water Services & Meters - Pex	1	Bedding - Sand	3,765	LCY	31 23 23.16-0200	B-6	$ 18.75	$ 1.36	$ 7.70	$ 1.44	$ 5.61	$ 34.86	$ 5.56	1.118	$ 45.19
113	3107	333	Water Services & Meters - Pex	1	Bedding - Compact Trench Bedding	3,765	ECY	31 23 23.16-0500	A-1D	$ -	$ -	$ 3.95	$ 0.35	$ 2.00	$ 6.30	$ 1.00	1.118	$ 8.17
114	3108	333	Water Services & Meters - Pex	1	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,965	LCY	31 23 23.16-0100	B-6	$ 25.50	$ 1.85	$ 7.70	$ 1.44	$ 6.86	$ 43.35	$ 6.91	1.118	$ 56.19
115	3109	333	Water Services & Meters - Pex	1	Backfill Under Seeded Area - Common Earth	38	LCY	31 23 23.14-3020	B-10W	$ -	$ -	$ 0.53	$ 0.52	$ 0.32	$ 1.37	$ 0.22	1.118	$ 1.78
116	3110	333	Water Services & Meters - Pex	1	Utility Mix Grass Seed - Hydro/Air Seeding	10,953	SY	32 92 19.13-1100	B-81	$ 2.20	$ 0.16	$ 0.14	$ 0.06	$ 0.30	$ 2.86	$ 0.46	1.118	$ 3.71
117	3111	333	Water Services & Meters - Pex	1	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	88,722	SF	32 12 16.14-0335	B-25C	$ 3.32	$ 0.24	$ 0.26	$ 0.27	$ 0.48	$ 4.57	$ 0.73	1.118	$ 5.92
118	3112	333	Water Services & Meters - Pex	1	Hauling - Cycle 40 Miles	7,530	LCY	31 23 23.20-1470	B-34A	$ -	$ -	$ 6.85	$ 9.65	$ 4.50	$ 21.00	$ 3.35	1.118	$ 27.22
119	3113																	
120	3114	335	Hydrants	N/A	Fire Hydrants (4 Inch Diameter)	29	EA	G3010 410.1100	N/A	$ 11,500.00	$ 833.75	$ 1,350.00	$ -	$ -	$ 13,683.75	$ 2,181.19	1.118	$ 17,737.00
121	3115	335	Hydrants	N/A	Fire Hydrants (6 Inch Diameter)	29	EA	G3010 410.5100	N/A	$ 11,900.00	$ 862.75	$ 1,350.00	$ -	$ -	$ 14,112.75	$ 2,249.57	1.118	$ 18,293.08
122	3116																	
123	3117				**Subtotal Distribution Infrastructure - Sativa Water System**													

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	U	V	W	X	Y	Z	AA	AB	AC	AD
1																			
2																			
3																			
4	MHV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Contractor Costs	Engineering Fees	Permits	Construction Management Fees	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs	G&A
5																			
6	3000	303	Land	N/A	Private Easements	13,040	SF	N/A	N/A	$ 130,000	$ -	$ -	$ -	$ 130,000	$ -	$ 130,000	$ -	$ 130,000	$ -
7	3001																		
8	3002	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	722	LF	33 14 13.25-4050	B-20A	$ 14,019	$ 841	$ 280	$ 1,051	$ 16,192	$ 2,850	$ 19,042	$ 1,456	$ 20,498	$ 1,435
9	3003	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	32	BCY	31 23 16.30-2300	B-47	$ 6,322	$ 379	$ 126	$ 474	$ 7,302	$ 1,285	$ 8,587	$ 657	$ 9,243	$ 647
10	3004	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	289	BCY	31 23 16.13-1352	B-13H	$ 4,623	$ 277	$ 92	$ 347	$ 5,340	$ 940	$ 6,280	$ 480	$ 6,760	$ 473
11	3005	331	Water Mains & Valves - PVC	6	Bedding - Sand	160	LCY	31 23 23.16-0200	B-6	$ 7,250	$ 435	$ 145	$ 544	$ 8,373	$ 1,474	$ 9,847	$ 753	$ 10,600	$ 742
12	3006	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	160	ECY	31 23 23.16-0500	A-1D	$ 1,310	$ 79	$ 26	$ 98	$ 1,513	$ 266	$ 1,780	$ 136	$ 1,916	$ 134
13	3007	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	169	LCY	31 23 23.13-0100	B-6	$ 9,493	$ 570	$ 190	$ 712	$ 10,964	$ 1,930	$ 12,894	$ 986	$ 13,880	$ 972
14	3008	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ 3	$ 0	$ 0	$ 0	$ 3	$ 1	$ 4	$ 0	$ 4	$ 0
15	3009	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	241	SY	32 92 19.13-1100	B-81	$ 892	$ 54	$ 18	$ 67	$ 1,030	$ 181	$ 1,212	$ 93	$ 1,304	$ 91
16	3010	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	1,949	SF	32 12 16.14-0335	B-25C	$ 11,549	$ 693	$ 231	$ 866	$ 13,340	$ 2,348	$ 15,687	$ 1,200	$ 16,887	$ 1,182
17	3011	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	321	LCY	31 23 23.20-1470	B-34A	$ 8,735	$ 524	$ 175	$ 655	$ 10,089	$ 1,776	$ 11,864	$ 907	$ 12,772	$ 894
18	3012																		
19	3013	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	7,314	LF	33 14 13.25-4050	B-20A	$ 142,406	$ 8,544	$ 2,848	$ 10,680	$ 164,479	$ 28,948	$ 193,427	$ 14,794	$ 208,221	$ 14,575
20	3014	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	326	BCY	31 23 16.30-2300	B-47	$ 64,215	$ 3,853	$ 1,284	$ 4,816	$ 74,168	$ 13,054	$ 87,222	$ 6,671	$ 93,893	$ 6,573
21	3015	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,934	BCY	31 23 16.13-1352	B-13H	$ 46,962	$ 2,818	$ 939	$ 3,522	$ 54,241	$ 9,546	$ 63,787	$ 4,879	$ 68,666	$ 4,807
22	3016	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,630	LCY	31 23 23.16-0200	B-6	$ 73,642	$ 4,418	$ 1,473	$ 5,523	$ 85,056	$ 14,970	$ 100,026	$ 7,650	$ 107,676	$ 7,537
23	3017	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,630	ECY	31 23 23.16-0500	A-1D	$ 13,309	$ 799	$ 266	$ 998	$ 15,372	$ 2,705	$ 18,077	$ 1,383	$ 19,460	$ 1,362
24	3018	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,716	LCY	31 23 23.13-0100	B-6	$ 96,429	$ 5,786	$ 1,929	$ 7,232	$ 111,376	$ 19,602	$ 130,978	$ 10,017	$ 140,995	$ 9,870
25	3019	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	16	LCY	31 23 23.14-3020	B-10W	$ 29	$ 2	$ 1	$ 2	$ 33	$ 6	$ 39	$ 3	$ 42	$ 3
26	3020	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	2,445	SY	32 92 19.13-1100	B-81	$ 9,061	$ 544	$ 181	$ 680	$ 10,466	$ 1,842	$ 12,308	$ 941	$ 13,249	$ 927
27	3021	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	19,802	SF	32 12 16.14-0335	B-25C	$ 117,317	$ 7,039	$ 2,346	$ 8,799	$ 135,502	$ 23,848	$ 159,350	$ 12,187	$ 171,537	$ 12,008
28	3022	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	3,260	LCY	31 23 23.20-1470	B-34A	$ 88,726	$ 5,324	$ 1,775	$ 6,654	$ 102,479	$ 18,036	$ 120,515	$ 9,217	$ 129,732	$ 9,081
29	3023																		
30	3024	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	14,837	LF	33 14 13.25-4050	B-20A	$ 288,093	$ 17,286	$ 5,762	$ 21,607	$ 332,748	$ 58,564	$ 391,311	$ 29,928	$ 421,239	$ 29,487
31	3025	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	659	BCY	31 23 16.30-2300	B-47	$ 129,910	$ 7,795	$ 2,598	$ 9,743	$ 150,046	$ 26,408	$ 176,454	$ 13,495	$ 189,950	$ 13,296
32	3026	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	5,935	BCY	31 23 16.13-1352	B-13H	$ 95,005	$ 5,700	$ 1,900	$ 7,125	$ 109,731	$ 19,313	$ 129,044	$ 9,869	$ 138,913	$ 9,724
33	3027	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,297	LCY	31 23 23.16-0200	B-6	$ 148,980	$ 8,939	$ 2,980	$ 11,174	$ 172,072	$ 30,285	$ 202,357	$ 15,477	$ 217,833	$ 15,248
34	3028	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,297	ECY	31 23 23.16-0500	A-1D	$ 26,925	$ 1,615	$ 538	$ 2,019	$ 31,098	$ 5,473	$ 36,571	$ 2,797	$ 39,368	$ 2,756
35	3029	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,472	LCY	31 23 23.13-0100	B-6	$ 195,080	$ 11,705	$ 3,902	$ 14,631	$ 225,318	$ 39,656	$ 264,974	$ 20,266	$ 285,239	$ 19,967
36	3030	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	33	LCY	31 23 23.14-3020	B-10W	$ 59	$ 4	$ 1	$ 4	$ 68	$ 12	$ 80	$ 6	$ 86	$ 6
37	3031	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	4,946	SY	32 92 19.13-1100	B-81	$ 18,331	$ 1,100	$ 367	$ 1,375	$ 21,172	$ 3,726	$ 24,899	$ 1,904	$ 26,803	$ 1,876
38	3032	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	40,060	SF	32 12 16.14-0335	B-25C	$ 237,338	$ 14,240	$ 4,747	$ 17,800	$ 274,126	$ 48,246	$ 322,372	$ 24,655	$ 347,027	$ 24,292
39	3033	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,594	LCY	31 23 23.20-1470	B-34A	$ 179,497	$ 10,770	$ 3,590	$ 13,462	$ 207,319	$ 36,488	$ 243,808	$ 18,647	$ 262,454	$ 18,372
40	3034																		
41	3035	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,408	LF	33 14 13.25-4050	B-20A	$ 27,339	$ 1,640	$ 547	$ 2,050	$ 31,577	$ 5,558	$ 37,135	$ 2,840	$ 39,975	$ 2,798
42	3036	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	63	BCY	31 23 16.30-2300	B-47	$ 12,328	$ 740	$ 247	$ 925	$ 14,239	$ 2,506	$ 16,745	$ 1,281	$ 18,026	$ 1,262
43	3037	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	563	BCY	31 23 16.13-1352	B-13H	$ 9,016	$ 541	$ 180	$ 676	$ 10,413	$ 1,833	$ 12,246	$ 937	$ 13,183	$ 923
44	3038	331	Water Mains & Valves - PVC	6	Bedding - Sand	313	LCY	31 23 23.16-0200	B-6	$ 14,138	$ 848	$ 283	$ 1,060	$ 16,329	$ 2,874	$ 19,203	$ 1,469	$ 20,672	$ 1,447
45	3039	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	313	ECY	31 23 23.16-0500	A-1D	$ 2,555	$ 153	$ 51	$ 192	$ 2,951	$ 519	$ 3,471	$ 265	$ 3,736	$ 262
46	3040	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	329	LCY	31 23 23.13-0100	B-6	$ 18,513	$ 1,111	$ 370	$ 1,388	$ 21,382	$ 3,763	$ 25,145	$ 1,923	$ 27,069	$ 1,895
47	3041	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ 6	$ 0	$ 0	$ 0	$ 6	$ 1	$ 8	$ 1	$ 8	$ 1
48	3042	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	469	SY	32 92 19.13-1100	B-81	$ 1,740	$ 104	$ 35	$ 130	$ 2,009	$ 354	$ 2,363	$ 181	$ 2,544	$ 178
49	3043	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,802	SF	32 12 16.14-0335	B-25C	$ 22,523	$ 1,351	$ 450	$ 1,689	$ 26,014	$ 4,578	$ 30,592	$ 2,340	$ 32,932	$ 2,305
50	3044	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	626	LCY	31 23 23.20-1470	B-34A	$ 17,034	$ 1,022	$ 341	$ 1,278	$ 19,674	$ 3,463	$ 23,137	$ 1,770	$ 24,906	$ 1,743
51	3045																		
52	3046	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,410	LF	33 14 13.25-4050	B-20A	$ 31,262	$ 1,876	$ 625	$ 2,345	$ 36,107	$ 6,355	$ 42,462	$ 3,248	$ 45,710	$ 3,200
53	3047	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	72	BCY	31 23 16.30-2300	B-47	$ 14,097	$ 846	$ 282	$ 1,057	$ 16,282	$ 2,866	$ 19,147	$ 1,464	$ 20,612	$ 1,443
54	3048	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	644	BCY	31 23 16.13-1352	B-13H	$ 10,309	$ 619	$ 206	$ 773	$ 11,907	$ 2,096	$ 14,003	$ 1,071	$ 15,074	$ 1,055
55	3049	331	Water Mains & Valves - PVC	6	Bedding - Sand	358	LCY	31 23 23.16-0200	B-6	$ 16,166	$ 970	$ 323	$ 1,212	$ 18,672	$ 3,286	$ 21,958	$ 1,679	$ 23,638	$ 1,655
56	3050	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	358	ECY	31 23 23.16-0500	A-1D	$ 2,922	$ 175	$ 58	$ 219	$ 3,375	$ 594	$ 3,968	$ 304	$ 4,272	$ 299
57	3051	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	377	LCY	31 23 23.13-0100	B-6	$ 21,169	$ 1,270	$ 423	$ 1,588	$ 24,450	$ 4,303	$ 28,753	$ 2,199	$ 30,952	$ 2,167
58	3052	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	4	LCY	31 23 23.14-3020	B-10W	$ 6	$ 0	$ 0	$ 0	$ 7	$ 1	$ 9	$ 1	$ 9	$ 1
59	3053	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	537	SY	32 92 19.13-1100	B-81	$ 1,989	$ 119	$ 40	$ 149	$ 2,297	$ 404	$ 2,702	$ 207	$ 2,908	$ 204
60	3054	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	4,347	SF	32 12 16.14-0335	B-25C	$ 25,754	$ 1,545	$ 515	$ 1,932	$ 29,746	$ 5,235	$ 34,981	$ 2,675	$ 37,657	$ 2,636
61	3055	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	716	LCY	31 23 23.20-1470	B-34A	$ 19,478	$ 1,169	$ 390	$ 1,461	$ 22,497	$ 3,959	$ 26,456	$ 2,023	$ 28,480	$ 1,994
62	3056																		
63	3057	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	15,330	LF	33 14 13.25-4050	B-20A	$ 297,666	$ 17,860	$ 5,953	$ 22,325	$ 343,804	$ 60,510	$ 404,314	$ 30,923	$ 435,236	$ 30,467
64	3058	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	681	BCY	31 23 16.30-2300	B-47	$ 134,227	$ 8,054	$ 2,685	$ 10,067	$ 155,032	$ 27,286	$ 182,317	$ 13,944	$ 196,261	$ 13,738
65	3059	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,132	BCY	31 23 16.13-1352	B-13H	$ 98,162	$ 5,890	$ 1,963	$ 7,362	$ 113,377	$ 19,954	$ 133,332	$ 10,197	$ 143,529	$ 10,047
66	3060	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,407	LCY	31 23 23.16-0200	B-6	$ 153,930	$ 9,236	$ 3,079	$ 11,545	$ 177,790	$ 31,291	$ 209,081	$ 15,991	$ 225,071	$ 15,755
67	3061	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,407	ECY	31 23 23.16-0500	A-1D	$ 27,819	$ 1,669	$ 556	$ 2,086	$ 32,131	$ 5,655	$ 37,786	$ 2,890	$ 40,676	$ 2,847
68	3062	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,587	LCY	31 23 23.13-0100	B-6	$ 201,562	$ 12,094	$ 4,031	$ 15,117	$ 232,805	$ 40,974	$ 273,778	$ 20,939	$ 294,717	$ 20,630
69	3063	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	34	LCY	31 23 23.14-3020	B-10W	$ 60	$ 4	$ 1	$ 5	$ 70	$ 12	$ 82	$ 6	$ 88	$ 6
70	3064	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	5,110	SY	32 92 19.13-1100	B-81	$ 18,940	$ 1,136	$ 379	$ 1,421	$ 21,876	$ 3,850	$ 25,726	$ 1,968	$ 27,694	$ 1,939
71	3065	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	41,391	SF	32 12 16.14-0335	B-25C	$ 245,224	$ 14,713	$ 4,904	$ 18,392	$ 283,234	$ 49,849	$ 333,083	$ 25,475	$ 358,558	$ 25,099
72	3066	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,813	LCY	31 23 23.20-1470	B-34A	$ 185,462	$ 11,128	$ 3,709	$ 13,910	$ 214,208	$ 37,701	$ 251,909	$ 19,266	$ 271,175	$ 18,982
73	3067																		
74	3068	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	5,373	LF	33 14 13.25-4050	B-20A	$ 104,329	$ 6,260	$ 2,087	$ 7,825	$ 120,500	$ 21,208	$ 141,708	$ 10,838	$ 152,546	$ 10,678
75	3069	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	239	BCY	31 23 16.30-2300	B-47	$ 47,045	$ 2,823	$ 941	$ 3,528	$ 54,337	$ 9,563	$ 63,900	$ 4,887	$ 68,787	$ 4,815
76	3070	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,149	BCY	31 23 16.13-1352	B-13H	$ 34,405	$ 2,064	$ 688	$ 2,580	$ 39,738	$ 6,994	$ 46,731	$ 3,574	$ 50,305	$ 3,521
77	3071	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,194	LCY	31 23 23.16-0200	B-6	$ 53,951	$ 3,237	$ 1,079	$ 4,046	$ 62,313	$ 10,967	$ 73,280	$ 5,605	$ 78,885	$ 5,522
78	3072	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,194	ECY	31 23 23.16-0500	A-1D	$ 9,750	$ 585	$ 195	$ 731	$ 11,262	$ 1,982	$ 13,244	$ 1,013	$ 14,257	$ 998
79	3073	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,257	LCY	31 23 23.16-0100	B-6	$ 70,645	$ 4,239	$ 1,413	$ 5,298	$ 81,596	$ 14,361	$ 95,956	$ 7,339	$ 103,295	$ 7,231
80	3074	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	12	LCY	31 23 23.14-3020	B-10W	$ 21	$ 1	$ 0	$ 2	$ 24	$ 4	$ 29	$ 2	$ 31	$ 2
81	3075	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	1,791	SY	32 92 19.13-1100	B-81	$ 6,638	$ 398	$ 133	$ 498	$ 7,667	$ 1,349	$ 9,017	$ 690	$ 9,706	$ 679
82	3076	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	14,507	SF	32 12 16.14-0335	B-25C	$ 85,949	$ 5,157	$ 1,719	$ 6,446	$ 99,271	$ 17,472	$ 116,742	$ 8,929	$ 125,671	$ 8,797

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	U	V	W	X	Y	Z	AA	AB	AC	AD
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Contractor Costs	Engineering Fees	Permits	Construction Management Fees	Construction Costs	Contingency	Project Costs	Interest During Construction	Development Costs	G&A
83	3077	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	2,388	LCY	31 23 23.20-1470	B-34A	$ 65,002	$ 3,900	$ 1,300	$ 4,875	$ 75,078	$ 13,214	$ 88,291	$ 6,753	$ 95,044	$ 6,653
84	3078																		
85	3079	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	**1,008**	LF	33 14 13.25-4050	B-20A	$ 19,573	$ 1,174	$ 391	$ 1,468	$ 22,606	$ 3,979	$ 26,585	$ 2,033	$ 28,618	$ 2,003
86	3080	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	45	BCY	31 23 16.30-2300	B-47	$ 8,826	$ 530	$ 177	$ 662	$ 10,194	$ 1,794	$ 11,988	$ 917	$ 12,905	$ 903
87	3081	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	403	BCY	31 23 16.13-1352	B-13H	$ 6,454	$ 387	$ 129	$ 484	$ 7,455	$ 1,312	$ 8,767	$ 671	$ 9,438	$ 661
88	3082	331	Water Mains & Valves - PVC	6	Bedding - Sand	224	LCY	31 23 23.16-0200	B-6	$ 10,121	$ 607	$ 202	$ 759	$ 11,690	$ 2,057	$ 13,748	$ 1,051	$ 14,799	$ 1,036
89	3083	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	224	ECY	31 23 23.16-0500	A-1D	$ 1,829	$ 110	$ 37	$ 137	$ 2,113	$ 372	$ 2,485	$ 190	$ 2,675	$ 187
90	3084	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	236	LCY	31 23 23.16-0100	B-6	$ 13,253	$ 795	$ 265	$ 994	$ 15,308	$ 2,694	$ 18,002	$ 1,377	$ 19,379	$ 1,357
91	3085	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ 4	$ 0	$ 0	$ 0	$ 5	$ 1	$ 5	$ 0	$ 6	$ 0
92	3086	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	336	SY	32 92 19.13-1100	B-81	$ 1,245	$ 75	$ 25	$ 93	$ 1,438	$ 253	$ 1,692	$ 129	$ 1,821	$ 127
93	3087	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	2,722	SF	32 12 16.14-0335	B-25C	$ 16,124	$ 967	$ 322	$ 1,209	$ 18,624	$ 3,278	$ 21,901	$ 1,675	$ 23,576	$ 1,650
94	3088	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	448	LCY	31 23 23.20-1470	B-34A	$ 12,195	$ 732	$ 244	$ 915	$ 14,085	$ 2,479	$ 16,564	$ 1,267	$ 17,831	$ 1,248
95	3089																		
96	3090	331	Water Mains & Valves - PVC	8	**Polyvinyl Chloride Pipe**	**1,300**	LF	33 14 13.25-4040	B-20A	$ 28,162	$ 1,690	$ 563	$ 2,112	$ 32,527	$ 5,725	$ 38,252	$ 2,926	$ 41,177	$ 2,882
97	3091	331	Water Mains & Valves - PVC	8	Drilling & Blasting Rock	60	BCY	31 23 16.30-2300	B-47	$ 11,857	$ 711	$ 237	$ 889	$ 13,695	$ 2,410	$ 16,105	$ 1,232	$ 17,337	$ 1,214
98	3092	331	Water Mains & Valves - PVC	8	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	542	BCY	31 23 16.13-1352	B-13H	$ 8,671	$ 520	$ 173	$ 650	$ 10,015	$ 1,763	$ 11,778	$ 901	$ 12,679	$ 887
99	3093	331	Water Mains & Valves - PVC	8	Bedding - Sand	301	LCY	31 23 23.16-0200	B-6	$ 13,597	$ 816	$ 272	$ 1,020	$ 15,705	$ 2,764	$ 18,469	$ 1,413	$ 19,882	$ 1,392
100	3094	331	Water Mains & Valves - PVC	8	Bedding - Compact Trench Bedding	301	ECY	31 23 23.16-0500	A-1D	$ 2,457	$ 147	$ 49	$ 184	$ 2,838	$ 500	$ 3,338	$ 255	$ 3,593	$ 252
101	3095	331	Water Mains & Valves - PVC	8	Structural Backfill Under Asphalt or Concrete - Crushed Stone	317	LCY	31 23 23.16-0100	B-6	$ 17,805	$ 1,068	$ 356	$ 1,335	$ 20,565	$ 3,619	$ 24,184	$ 1,850	$ 26,034	$ 1,822
102	3096	331	Water Mains & Valves - PVC	8	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ 5	$ 0	$ 0	$ 0	$ 6	$ 1	$ 7	$ 1	$ 8	$ 1
103	3097	331	Water Mains & Valves - PVC	8	Utility Mix Grass Seed - Hydro/Air Seeding	433	SY	32 92 19.13-1100	B-81	$ 1,606	$ 96	$ 32	$ 120	$ 1,855	$ 326	$ 2,182	$ 167	$ 2,348	$ 164
104	3098	331	Water Mains & Valves - PVC	8	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,510	SF	32 12 16.14-0335	B-25C	$ 20,795	$ 1,248	$ 416	$ 1,560	$ 24,019	$ 4,227	$ 28,246	$ 2,160	$ 30,406	$ 2,128
105	3099	331	Water Mains & Valves - PVC	8	Hauling - Cycle 40 Miles	602	LCY	31 23 23.20-1470	B-34A	$ 16,383	$ 983	$ 328	$ 1,229	$ 18,922	$ 3,330	$ 22,252	$ 1,702	$ 23,954	$ 1,677
106	3100																		
107	3101	331	Water Mains & Valves	6	Mainline Valves	147	EA	33 14 19.10-3140	B-6	$ 239,793	$ 15,588	$ 5,196	$ 19,484	$ 300,061	$ 52,811	$ 352,872	$ 26,988	$ 379,860	$ 26,590
108	3102																		
109	3103	333	Water Services & Meters - Pex	1	**Polyethylene Pipe**	**32,860**	LF	33 14 13.20-1120	Q-1A	$ 122,578	$ 7,355	$ 2,452	$ 9,193	$ 141,577	$ 24,918	$ 166,495	$ 12,734	$ 179,228	$ 12,546
110	3104	333	Water Services & Meters - Pex	1	Drilling & Blasting Rock	753	BCY	31 23 16.30-2300	B-47	$ 148,353	$ 8,901	$ 2,967	$ 11,127	$ 171,348	$ 30,157	$ 201,506	$ 15,411	$ 216,917	$ 15,184
111	3105	333	Water Services & Meters - Pex	1	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,777	BCY	31 23 16.13-1352	B-13H	$ 108,493	$ 6,510	$ 2,170	$ 8,137	$ 125,310	$ 22,055	$ 147,365	$ 11,271	$ 158,635	$ 11,104
112	3106	333	Water Services & Meters - Pex	1	Bedding - Sand	3,765	LCY	31 23 23.16-0200	B-6	$ 170,131	$ 10,208	$ 3,403	$ 12,760	$ 196,501	$ 34,584	$ 231,086	$ 17,674	$ 248,759	$ 17,413
113	3107	333	Water Services & Meters - Pex	1	Bedding - Compact Trench Bedding	3,765	ECY	31 23 23.16-0500	A-1D	$ 30,747	$ 1,845	$ 615	$ 2,306	$ 35,513	$ 6,250	$ 41,763	$ 3,194	$ 44,957	$ 3,147
114	3108	333	Water Services & Meters - Pex	1	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,965	LCY	31 23 23.16-0100	B-6	$ 222,776	$ 13,367	$ 4,456	$ 16,708	$ 257,307	$ 45,286	$ 302,593	$ 23,143	$ 325,735	$ 22,801
115	3109	333	Water Services & Meters - Pex	1	Backfill Under Seeded Area - Common Earth	38	LCY	31 23 23.14-3020	B-10W	$ 67	$ 4	$ 1	$ 5	$ 77	$ 14	$ 91	$ 7	$ 98	$ 7
116	3110	333	Water Services & Meters - Pex	1	Utility Mix Grass Seed - Hydro/Air Seeding	10,953	SY	32 92 19.13-1100	B-81	$ 40,599	$ 2,436	$ 812	$ 3,045	$ 46,891	$ 8,253	$ 55,144	$ 4,218	$ 59,362	$ 4,155
117	3111	333	Water Services & Meters - Pex	1	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	88,722	SF	32 12 16.14-0335	B-25C	$ 525,641	$ 31,538	$ 10,513	$ 39,423	$ 607,115	$ 106,852	$ 713,968	$ 54,605	$ 768,573	$ 53,800
118	3112	333	Water Services & Meters - Pex	1	Hauling - Cycle 40 Miles	7,530	LCY	31 23 23.20-1470	B-34A	$ 204,981	$ 12,299	$ 4,100	$ 15,374	$ 236,753	$ 41,669	$ 278,421	$ 21,294	$ 299,716	$ 20,980
119	3113																	$ -	
120	3114	335	Hydrants	N/A	Fire Hydrants (4 Inch Diameter)	29	EA	G3010 410.1100	N/A	$ 514,373	$ 30,862	$ 10,287	$ 38,578	$ 594,101	$ 104,562	$ 698,663	$ 53,435	$ 752,097	$ 52,647
121	3115	335	Hydrants	N/A	Fire Hydrants (6 Inch Diameter)	29	EA	G3010 410.5100	N/A	$ 530,499	$ 31,830	$ 10,610	$ 39,787	$ 612,727	$ 107,840	$ 720,566	$ 55,110	$ 775,677	$ 54,297
122	3116																		
123	3117		**Subtotal Distribution Infrastructure - Sativa Water System**							**$ 7,364,639**	**$ 434,078**	**$ 144,693**	**$ 542,598**	**$ 8,486,008**	**$ 1,470,657**	**$ 9,956,666**	**$ 751,559**	**$ 10,708,224**	**$ 740,476**

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	AE	AF	AG	AH	AI	AJ	AK	AL
1																	
2																	
3																	
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Replacement Cost New	Effective Age	Service Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation
5																	
6	3000	303	Land	N/A	Private Easements	13,040	SF	N/A	N/A	$ 130,000	0	0	0%	$ -	$ -	$ -	$ 130,000
7	3001																
8	3002	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	722	LF	33 14 13.25-4050	B-20A	$ 21,933	40	75	53%	$ (11,606)	$ -	$ -	$ 10,327
9	3003	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	32	BCY	31 23 16.30-2300	B-47	$ 9,890	40	75	53%	$ (5,234)	$ -	$ -	$ 4,657
10	3004	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	289	BCY	31 23 16.13-1352	B-13H	$ 7,233	40	75	53%	$ (3,827)	$ -	$ -	$ 3,406
11	3005	331	Water Mains & Valves - PVC	6	Bedding - Sand	160	LCY	31 23 23.16-0200	B-6	$ 11,342	40	75	53%	$ (6,002)	$ -	$ -	$ 5,340
12	3006	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	160	ECY	31 23 23.16-0500	A-1D	$ 2,050	40	75	53%	$ (1,085)	$ -	$ -	$ 965
13	3007	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	169	LCY	31 23 23.16-0100	B-6	$ 14,852	40	75	53%	$ (7,859)	$ -	$ -	$ 6,993
14	3008	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ 4	40	75	53%	$ (2)	$ -	$ -	$ 2
15	3009	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	241	SY	32 92 19.13-1100	B-81	$ 1,396	40	75	53%	$ (739)	$ -	$ -	$ 657
16	3010	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	1,949	SF	32 12 16.14-0035	B-25C	$ 18,069	40	75	53%	$ (9,562)	$ -	$ -	$ 8,508
17	3011	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	321	LCY	31 23 23.20-1470	B-34A	$ 13,666	40	75	53%	$ (7,231)	$ -	$ -	$ 6,434
18	3012																
19	3013	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	7,334	LF	33 14 13.25-4050	B-20A	$ 222,796	44	75	58%	$ (129,629)	$ -	$ -	$ 93,167
20	3014	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	326	BCY	31 23 16.30-2300	B-47	$ 100,465	44	75	58%	$ (58,454)	$ -	$ -	$ 42,012
21	3015	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,934	BCY	31 23 16.13-1352	B-13H	$ 73,472	44	75	58%	$ (42,748)	$ -	$ -	$ 30,724
22	3016	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,630	LCY	31 23 23.16-0200	B-6	$ 115,213	44	75	58%	$ (67,034)	$ -	$ -	$ 48,179
23	3017	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,630	ECY	31 23 23.16-0500	A-1D	$ 20,822	44	75	58%	$ (12,115)	$ -	$ -	$ 8,707
24	3018	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,716	LCY	31 23 23.16-0100	B-6	$ 150,865	44	75	58%	$ (87,778)	$ -	$ -	$ 63,087
25	3019	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	16	LCY	31 23 23.14-3020	B-10W	$ 45	44	75	58%	$ (26)	$ -	$ -	$ 19
26	3020	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	2,445	SY	32 92 19.13-1100	B-81	$ 14,176	44	75	58%	$ (8,248)	$ -	$ -	$ 5,928
27	3021	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	19,802	SF	32 12 16.14-0035	B-25C	$ 183,545	44	75	58%	$ (106,792)	$ -	$ -	$ 76,753
28	3022	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	3,260	LCY	31 23 23.20-1470	B-34A	$ 138,814	44	75	58%	$ (80,766)	$ -	$ -	$ 58,048
29	3023																
30	3024	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	14,837	LF	33 14 13.25-4050	B-20A	$ 450,726	27	75	36%	$ (161,611)	$ -	$ -	$ 289,115
31	3025	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	659	BCY	31 23 16.30-2300	B-47	$ 203,146	27	75	36%	$ (72,875)	$ -	$ -	$ 130,271
32	3026	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	5,935	BCY	31 23 16.13-1352	B-13H	$ 148,637	27	75	36%	$ (53,295)	$ -	$ -	$ 95,342
33	3027	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,297	LCY	31 23 23.16-0200	B-6	$ 233,082	27	75	36%	$ (83,573)	$ -	$ -	$ 149,508
34	3028	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,297	ECY	31 23 23.16-0500	A-1D	$ 42,124	27	75	36%	$ (15,104)	$ -	$ -	$ 27,020
35	3029	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,472	LCY	31 23 23.16-0100	B-6	$ 305,206	27	75	36%	$ (109,434)	$ -	$ -	$ 195,772
36	3030	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	33	LCY	31 23 23.14-3020	B-10W	$ 92	27	75	36%	$ (33)	$ -	$ -	$ 59
37	3031	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	4,946	SY	32 92 19.13-1100	B-81	$ 28,679	27	75	36%	$ (10,283)	$ -	$ -	$ 18,396
38	3032	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	40,060	SF	32 12 16.14-0035	B-25C	$ 371,319	27	75	36%	$ (133,139)	$ -	$ -	$ 238,180
39	3033	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,594	LCY	31 23 23.20-1470	B-34A	$ 280,836	27	75	36%	$ (100,692)	$ -	$ -	$ 180,134
40	3034																
41	3035	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,408	LF	33 14 13.25-4050	B-20A	$ 42,773	27	75	36%	$ (15,337)	$ -	$ -	$ 27,436
42	3036	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	63	BCY	31 23 16.30-2300	B-47	$ 19,288	27	75	36%	$ (6,916)	$ -	$ -	$ 12,372
43	3037	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	563	BCY	31 23 16.13-1352	B-13H	$ 14,105	27	75	36%	$ (5,058)	$ -	$ -	$ 9,048
44	3038	331	Water Mains & Valves - PVC	6	Bedding - Sand	313	LCY	31 23 23.16-0200	B-6	$ 22,119	27	75	36%	$ (7,931)	$ -	$ -	$ 14,188
45	3039	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	313	ECY	31 23 23.16-0500	A-1D	$ 3,997	27	75	36%	$ (1,433)	$ -	$ -	$ 2,564
46	3040	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	329	LCY	31 23 23.16-0100	B-6	$ 28,963	27	75	36%	$ (10,385)	$ -	$ -	$ 18,578
47	3041	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ 9	27	75	36%	$ (3)	$ -	$ -	$ 6
48	3042	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	469	SY	32 92 19.13-1100	B-81	$ 2,722	27	75	36%	$ (976)	$ -	$ -	$ 1,746
49	3043	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,802	SF	32 12 16.14-0035	B-25C	$ 35,237	27	75	36%	$ (12,635)	$ -	$ -	$ 22,603
50	3044	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	626	LCY	31 23 23.20-1470	B-34A	$ 26,630	27	75	36%	$ (9,551)	$ -	$ -	$ 17,094
51	3045																
52	3046	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	1,410	LF	33 14 13.25-4050	B-20A	$ 48,909	27	75	36%	$ (17,537)	$ -	$ -	$ 31,373
53	3047	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	72	BCY	31 23 16.30-2300	B-47	$ 22,055	27	75	36%	$ (7,908)	$ -	$ -	$ 14,147
54	3048	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	644	BCY	31 23 16.13-1352	B-13H	$ 16,129	27	75	36%	$ (5,783)	$ -	$ -	$ 10,346
55	3049	331	Water Mains & Valves - PVC	6	Bedding - Sand	358	LCY	31 23 23.16-0200	B-6	$ 25,292	27	75	36%	$ (9,069)	$ -	$ -	$ 16,224
56	3050	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	358	ECY	31 23 23.16-0500	A-1D	$ 4,571	27	75	36%	$ (1,639)	$ -	$ -	$ 2,932
57	3051	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	377	LCY	31 23 23.16-0100	B-6	$ 33,119	27	75	36%	$ (11,875)	$ -	$ -	$ 21,244
58	3052	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	4	LCY	31 23 23.14-3020	B-10W	$ 10	27	75	36%	$ (4)	$ -	$ -	$ 6
59	3053	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	537	SY	32 92 19.13-1100	B-81	$ 3,112	27	75	36%	$ (1,116)	$ -	$ -	$ 1,996
60	3054	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	4,347	SF	32 12 16.14-0035	B-25C	$ 40,293	27	75	36%	$ (14,447)	$ -	$ -	$ 25,845
61	3055	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	716	LCY	31 23 23.20-1470	B-34A	$ 30,473	27	75	36%	$ (10,926)	$ -	$ -	$ 19,547
62	3056																
63	3057	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	15,330	LF	33 14 13.25-4050	B-20A	$ 465,703	22	75	29%	$ (134,604)	$ -	$ -	$ 331,098
64	3058	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	681	BCY	31 23 16.30-2300	B-47	$ 209,999	22	75	29%	$ (60,697)	$ -	$ -	$ 149,302
65	3059	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,132	BCY	31 23 16.13-1352	B-13H	$ 153,576	22	75	29%	$ (44,389)	$ -	$ -	$ 109,187
66	3060	331	Water Mains & Valves - PVC	6	Bedding - Sand	3,407	LCY	31 23 23.16-0200	B-6	$ 240,826	22	75	29%	$ (69,607)	$ -	$ -	$ 171,219
67	3061	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	3,407	ECY	31 23 23.16-0500	A-1D	$ 43,524	22	75	29%	$ (12,580)	$ -	$ -	$ 30,944
68	3062	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,587	LCY	31 23 23.16-0100	B-6	$ 315,347	22	75	29%	$ (91,146)	$ -	$ -	$ 224,201
69	3063	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	34	LCY	31 23 23.14-3020	B-10W	$ 95	22	75	29%	$ (27)	$ -	$ -	$ 67
70	3064	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	5,110	SY	32 92 19.13-1100	B-81	$ 29,632	22	75	29%	$ (8,565)	$ -	$ -	$ 21,068
71	3065	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	41,391	SF	32 12 16.14-0035	B-25C	$ 383,657	22	75	29%	$ (110,890)	$ -	$ -	$ 272,767
72	3066	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	6,813	LCY	31 23 23.20-1470	B-34A	$ 290,157	22	75	29%	$ (83,866)	$ -	$ -	$ 206,292
73	3067																
74	3068	331	Water Mains & Valves - PVC	6	**Polyvinyl Chloride Pipe**	5,373	LF	33 14 13.25-4050	B-20A	$ 163,224	8	75	10%	$ (16,977)	$ -	$ -	$ 146,247
75	3069	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	219	BCY	31 23 16.30-2300	B-47	$ 73,603	8	75	10%	$ (7,655)	$ -	$ -	$ 65,947
76	3070	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	2,149	BCY	31 23 16.13-1352	B-13H	$ 53,827	8	75	10%	$ (5,599)	$ -	$ -	$ 48,228
77	3071	331	Water Mains & Valves - PVC	6	Bedding - Sand	1,194	LCY	31 23 23.16-0200	B-6	$ 84,407	8	75	10%	$ (8,779)	$ -	$ -	$ 75,628
78	3072	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	1,194	ECY	31 23 23.16-0500	A-1D	$ 15,255	8	75	10%	$ (1,587)	$ -	$ -	$ 13,668
79	3073	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	1,257	LCY	31 23 23.16-0100	B-6	$ 110,526	8	75	10%	$ (11,496)	$ -	$ -	$ 99,030
80	3074	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	12	LCY	31 23 23.14-3020	B-10W	$ 33	8	75	10%	$ (3)	$ -	$ -	$ 30
81	3075	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	1,791	SY	32 92 19.13-1100	B-81	$ 10,386	8	75	10%	$ (1,080)	$ -	$ -	$ 9,306
82	3076	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	14,507	SF	32 12 16.14-0035	B-25C	$ 134,468	8	75	10%	$ (13,986)	$ -	$ -	$ 120,482

FIXED ASSET REGISTER - DISTRIBUTION INFRASTRUCTURE

Replacement Cost New Less Depreciation

(As of April 20, 2021)

	A	B	C	D	G	H	I	J	K	AE	AF	AG	AH	AI	AJ	AK	AL
1																	
2																	
3																	
4	MRV No.	CPUC Account	Account Category	Diameter (Inches)	Description	Quantity	Unit	RSMeans Reference	Crew	Replacement Cost New	Effective Age	Service Life	Physical Depreciation	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation
5																	
83	3077	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	2,388	LCY	31 23 23.20-1470	B-34A	$ 101,697	8	75	10%	$ (10,578)	$ -	$ -	$ 91,120
84	3078																
85	3079	331	Water Mains & Valves - PVC	**6**	**Polyvinyl Chloride Pipe**	**1,008**	LF	33 14 13.25-4050	B-20A	$ 30,622	27	75	36%	$ (10,980)	$ -	$ -	$ 19,642
86	3080	331	Water Mains & Valves - PVC	6	Drilling & Blasting Rock	45	BCY	31 23 16.30-2300	B-47	$ 13,808	27	75	36%	$ (4,951)	$ -	$ -	$ 8,857
87	3081	331	Water Mains & Valves - PVC	6	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	403	BCY	31 23 16.13-1352	B-13H	$ 10,098	27	75	36%	$ (3,621)	$ -	$ -	$ 6,477
88	3082	331	Water Mains & Valves - PVC	6	Bedding - Sand	224	LCY	31 23 23.16-0200	B-6	$ 15,835	27	75	36%	$ (5,678)	$ -	$ -	$ 10,157
89	3083	331	Water Mains & Valves - PVC	6	Bedding - Compact Trench Bedding	224	ECY	31 23 23.16-0500	A-1D	$ 2,862	27	75	36%	$ (1,026)	$ -	$ -	$ 1,836
90	3084	331	Water Mains & Valves - PVC	6	Structural Backfill Under Asphalt or Concrete - Crushed Stone	236	LCY	31 23 23.16-0100	B-6	$ 20,735	27	75	36%	$ (7,435)	$ -	$ -	$ 13,300
91	3085	331	Water Mains & Valves - PVC	6	Backfill Under Seeded Area - Common Earth	2	LCY	31 23 23.14-3020	B-10W	$ 6	27	75	36%	$ (2)	$ -	$ -	$ 4
92	3086	331	Water Mains & Valves - PVC	6	Utility Mix Grass Seed - Hydro/Air Seeding	336	SY	32 92 19.13-1100	B-81	$ 1,948	27	75	36%	$ (699)	$ -	$ -	$ 1,250
93	3087	331	Water Mains & Valves - PVC	6	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	2,722	SF	32 12 16.14-0035	B-25C	$ 25,227	27	75	36%	$ (9,045)	$ -	$ -	$ 16,182
94	3088	331	Water Mains & Valves - PVC	6	Hauling - Cycle 40 Miles	448	LCY	31 23 23.20-1470	B-34A	$ 19,079	27	75	36%	$ (6,841)	$ -	$ -	$ 12,238
95	3089																
96	3090	331	Water Mains & Valves - PVC	**8**	**Polyvinyl Chloride Pipe**	**1,300**	LF	33 14 13.25-4040	B-20A	$ 44,000	44	75	58%	$ (25,635)	$ -	$ -	$ 18,425
97	3091	331	Water Mains & Valves - PVC	8	Drilling & Blasting Rock	60	BCY	31 23 16.30-2300	B-47	$ 18,550	44	75	58%	$ (10,793)	$ -	$ -	$ 7,757
98	3092	331	Water Mains & Valves - PVC	8	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	542	BCY	31 23 16.13-1352	B-13H	$ 13,506	44	75	58%	$ (7,893)	$ -	$ -	$ 5,673
99	3093	331	Water Mains & Valves - PVC	8	Bedding - Sand	301	LCY	31 23 23.16-0200	B-6	$ 21,273	44	75	58%	$ (12,377)	$ -	$ -	$ 8,896
100	3094	331	Water Mains & Valves - PVC	8	Bedding - Compact Trench Bedding	301	ECY	31 23 23.16-0500	A-1D	$ 3,845	44	75	58%	$ (2,237)	$ -	$ -	$ 1,608
101	3095	331	Water Mains & Valves - PVC	8	Structural Backfill Under Asphalt or Concrete - Crushed Stone	317	LCY	31 23 23.16-0100	B-6	$ 27,856	44	75	58%	$ (16,207)	$ -	$ -	$ 11,649
102	3096	331	Water Mains & Valves - PVC	8	Backfill Under Seeded Area - Common Earth	3	LCY	31 23 23.14-3020	B-10W	$ 8	44	75	58%	$ (5)	$ -	$ -	$ 3
103	3097	331	Water Mains & Valves - PVC	8	Utility Mix Grass Seed - Hydro/Air Seeding	433	SY	32 92 19.13-1100	B-81	$ 2,513	44	75	58%	$ (1,462)	$ -	$ -	$ 1,051
104	3098	331	Water Mains & Valves - PVC	8	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	3,510	SF	32 12 16.14-0035	B-25C	$ 32,535	44	75	58%	$ (18,930)	$ -	$ -	$ 13,605
105	3099	331	Water Mains & Valves - PVC	8	Hauling - Cycle 40 Miles	602	LCY	31 23 23.20-1470	B-34A	$ 25,631	44	75	58%	$ (14,913)	$ -	$ -	$ 10,718
106	3100																
107	3101	331	Water Mains & Valves	6	Mainline Valves	147	EA	33 14 19.10-3140	B-6	$ 406,430	15	30	50%	$ (203,225)	$ -	$ -	$ 203,225
108	3102																
109	3103	333	Water Services & Meters - Pex	**1**	**Polyethylene Pipe**	**32,860**	LF	33 14 13.20-1120	Q-1A	$ 198,774	27	30	80%	$ (153,419)	$ -	$ -	$ 38,355
110	3104	333	Water Services & Meters - Pex	1	Drilling & Blasting Rock	753	BCY	31 23 16.30-2300	B-47	$ 232,101	27	30	80%	$ (185,681)	$ -	$ -	$ 46,420
111	3105	333	Water Services & Meters - Pex	1	Common Earth Excavating - 1/2 C.Y. Excavator w/ Trench Box	6,777	BCY	31 23 16.13-1352	B-13H	$ 169,740	27	30	80%	$ (135,792)	$ -	$ -	$ 33,948
112	3106	333	Water Services & Meters - Pex	1	Bedding - Sand	3,765	LCY	31 23 23.16-0200	B-6	$ 266,173	27	30	80%	$ (212,938)	$ -	$ -	$ 53,235
113	3107	333	Water Services & Meters - Pex	1	Bedding - Compact Trench Bedding	3,765	ECY	31 23 23.16-0500	A-1D	$ 48,104	27	30	80%	$ (38,483)	$ -	$ -	$ 9,621
114	3108	333	Water Services & Meters - Pex	1	Structural Backfill Under Asphalt or Concrete - Crushed Stone	3,965	LCY	31 23 23.16-0100	B-6	$ 348,537	27	30	80%	$ (278,829)	$ -	$ -	$ 69,707
115	3109	333	Water Services & Meters - Pex	1	Backfill Under Seeded Area - Common Earth	38	LCY	31 23 23.14-3020	B-10W	$ 105	27	30	80%	$ (84)	$ -	$ -	$ 21
116	3110	333	Water Services & Meters - Pex	1	Utility Mix Grass Seed - Hydro/Air Seeding	10,953	SY	32 92 19.13-1100	B-81	$ 63,517	27	30	80%	$ (50,814)	$ -	$ -	$ 12,703
117	3111	333	Water Services & Meters - Pex	1	Backfill Asphalt Paving (6" Stone Base / 4" Binder Course / 2" Topping)	88,722	SF	32 12 16.14-0035	B-25C	$ 822,373	27	30	80%	$ (657,898)	$ -	$ -	$ 164,475
118	3112	333	Water Services & Meters - Pex	1	Hauling - Cycle 40 Miles	7,530	LCY	31 23 23.20-1470	B-34A	$ 320,696	27	30	80%	$ (256,557)	$ -	$ -	$ 64,139
119	3113																
120	3114	335	Hydrants	N/A	Fire Hydrants (4 Inch Diameter)	29	EA	G3010 410.1100	N/A	$ 804,744	36	40	80%	$ (643,795)	$ -	$ -	$ 160,949
121	3115	335	Hydrants	N/A	Fire Hydrants (6 Inch Diameter)	29	EA	G3010 410.5100	N/A	$ 829,974	36	40	80%	$ (663,979)	$ -	$ -	$ 165,995
122	3116																
123	3117				**Subtotal Distribution Infrastructure - Sativa Water System**					**$ 11,448,700**				$ (5,873,646)	$ -	$ -	**$ 5,575,054**

FIXED ASSET REGISTER DETAIL
GRANT-FUNDED PROJECTS

SUBTOTAL - LA COUNTY IMPROVEMENT PROJECTS

Replacement Cost New Less Depreciation

(As of April 20, 2021)

Line No.	CPUC Account	Account Category	Capital Improvement Project	Contract No.	Scope of Work	Replacement Cost New	Physical Depreciation	Functional Obsolescence	Economic Obsolescence	Replacement Cost New Less Depreciation
4000	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Reimbursement	$ 500	$ -	$ -	$ -	$ 500
4001	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Plumber	$ 6,497	$ -	$ -	$ -	$ 6,497
4002	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Flag person and Traffic Control	$ 33,909	$ -	$ -	$ -	$ 33,909
4003	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Steel Plate	$ 11,165	$ -	$ -	$ -	$ 11,165
4004	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Equipment	$ 44,017	$ -	$ -	$ -	$ 44,017
4005	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Hauling and Disposal	$ 33,288	$ -	$ -	$ -	$ 33,288
4006	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Cleaning	$ 7,540	$ -	$ -	$ -	$ 7,540
4007	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Test Pit	$ 1,324	$ -	$ -	$ -	$ 1,324
4008	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sawcut	$ 6,006	$ -	$ -	$ -	$ 6,006
4009	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Abatement	$ 3,921	$ -	$ -	$ -	$ 3,921
4010	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Demo Asphalt	$ 10,758	$ -	$ -	$ -	$ 10,758
4011	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Concrete	$ 5,684	$ -	$ -	$ -	$ 5,684
4012	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sand Bedding	$ 13,652	$ -	$ -	$ -	$ 13,652
4013	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Import Soil	$ 7,633	$ -	$ -	$ -	$ 7,633
4014	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Excavation	$ 5,174	$ -	$ -	$ -	$ 5,174
4015	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Backfilling	$ 4,001	$ -	$ -	$ -	$ 4,001
4016	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Compaction	$ 4,679	$ -	$ -	$ -	$ 4,679
4017	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Sand Bags	$ 3,223	$ -	$ -	$ -	$ 3,223
4018	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Wood Shoring	$ 28,202	$ -	$ -	$ -	$ 28,202
4019	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Removal of Spoils from the Roadway	$ 3,134	$ -	$ -	$ -	$ 3,134
4020	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Base Coarse	$ 6,161	$ -	$ -	$ -	$ 6,161
4021	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Asphalt	$ 19,876	$ -	$ -	$ -	$ 19,876
4022	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Video Camera	$ 648	$ -	$ -	$ -	$ 648
4023	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Boring	$ 36,766	$ -	$ -	$ -	$ 36,766
4024	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Waterline and Fittings	$ 113,273	$ -	$ -	$ -	$ 113,273
4025	331	Water Mains & Valves	Lucien Street Waterline	1812-002.01B4	Fire Hydrant	$ 9,210	$ -	$ -	$ -	$ 9,210
4026	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S1	General Requirements	$ 3,572	$ -	$ -	$ -	$ 3,572
4027	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S2	Existing Conditions	$ 925	$ -	$ -	$ -	$ 925
4028	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S3	Concrete	$ 233	$ -	$ -	$ -	$ 233
4029	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S4	Exterior Improvements	$ 1,801	$ -	$ -	$ -	$ 1,801
4030	331	Water Mains & Valves	Lucien Street Waterline	1812-002.03S5	Utilities	$ (2,103)	$ -	$ -	$ -	$ (2,103)
4031	331	Water Mains & Valves	Lucien Street Waterline	Multiple	PE Costs	$ 145,321	$ -	$ -	$ -	$ 145,321
4032	331	Water Mains & Valves	Lucien Street Waterline	Multiple	CE Costs	$ 190,396	$ -	$ -	$ -	$ 190,396
4033	307	Well	Well No. 5 Rehabilitation	N/A	Well Liner & Redevelopment	$ 374,898	$ -	$ -	$ -	$ 374,898
4034	307	Well	Well No. 5 Rehabilitation	N/A	Piping Components & Install	$ 20,376	$ -	$ -	$ -	$ 20,376
4035	307	Well	Well No. 5 Rehabilitation	N/A	Pull Well & Video	$ 13,460	$ -	$ -	$ -	$ 13,460
4036	307	Well	Well No. 5 Rehabilitation	N/A	Rehabilitation & Test Pump	$ 104,966	$ -	$ -	$ -	$ 104,966
4037	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	Re-Equip Pump, Motor, & Components	$ 145,294	$ -	$ -	$ -	$ 145,294
4038	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	VFD & Components	$ 34,023	$ -	$ -	$ -	$ 34,023
4039	311	Pumping / Electrical Equipment	Well No. 5 Rehabilitation	N/A	VFD Installation & Pump Testing (Freeboarding)	$ 23,502	$ -	$ -	$ -	$ 23,502
4040	320	Water Treatment Equipment	Well No. 5 Rehabilitation	N/A	Chlorine Room Components (Pumps, Scales, Analyzer)	$ 35,943	$ -	$ -	$ -	$ 35,943
4041	320	Water Treatment Equipment	Well No. 5 Rehabilitation	N/A	Chlorine Gas Pump	$ 1,091	$ -	$ -	$ -	$ 1,091
4042	320	Water Treatment Equipment	Well No. 5 Manganese Treatment		Manganese Water Treatment	$ 2,250,000	$ -	$ -	$ -	$ 2,250,000
4043										
4044			**Subtotal LA County Improvement Projects - Sativa Water System**			**$ 3,763,939**	$ -	$ -	$ -	**$ 3,764,000**

SUPPLEMENTAL DATA
CONSTRUCTION COST DATA

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 02/13/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Well Liner and Redevelopment:** **Phase I > Liner: 1)** Prepare Materials & Inspections; Mobilization of Crane, Flatbed Truck; Service Truck with Crew; Work Includes: Abandonment of the well from 845' to 525' (Fill with gravel), Then fill with a 5-foot Bentonite cap (525' to 520'). **2)** Includes the installation of a 350-feet of 12" ID 304 Stainless Steel Blank Casing Liner and related 170-feet of 12" ID 304 Stainless Steel Johnson Wire Wrap Screen placed appropriately adjacent to existing production zones in Sativa Well 5. Includes Well Video after Liner installation. **3)** Includes the annular area installation of Silibeads® glass bead materials manufactured by Ceroglass Technologies Inc. designed to support the liner and existing casing from 520' to 100' below ground surface. Grout Annular Fill Seal from 100' to Surface. **Phase II > Redevelopment: 1)** Mobilization of Equipment and Tanks for Airburst® technology followed by chemical injection of pre-mixed hydrochloric inhibited acid and Well Renew® placed into each 20-foot zone through a double disk 10-foot injection tool followed by physical redevelopment via airlifting/swabbing for each 20-foot screen section. Followed by Well Video. Other Items Included: Miscellaneous consumables, fuels, Portable Facilities, Pre-mixed chemicals. GPC Proposal is attached showing complete list of GPC Services.	02/13/20	$ 374,897.89
		TOTAL =	**$ 374,897.89**

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765
Serving Southern California and Central Coast

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002

February 13, 2020 ***Via Email***

Attn: Gary Hilliard

Subject: Sativa Well 5 Liner and Redevelopment

General Pump Company is pleased to provide this 2-Phase approach for the completion of the liner installation and the rehabilitation of the referenced well.

PHASE I:

1) Will begin with the abandonment of the well from 520' to 845' current depth to eliminate undesirable water below 510' that produced Manganese levels of 380 ug/l during the spinner and depth specific sampling. To accomplish this, we will fill well with 17 Cubic Yards of Gravel with a 5-foot Bentonite cap to fill bottom of well to 520' below ground surface.

2) This phase will also include the installation of a 350-feet of 12" ID 304 Stainless Steel Blank Casing Liner and related 170-feet of 12" ID 304 Stainless Steel Johnson Wire Wrap Screen with .060 Slot sizing with .165 Wire and .217 Rod with beveled weld rings from surface to 510-feet with screen sections place appropriately adjacent to production zones in the well derived from the spinner and water quality sampling previously conducted.

3) The annular area will be filled with .090 to .120 diameter Silibeads® glass bead materials manufactured by Ceroglass Technologies Inc. and designed to support the liner and existing casing from 520' to 100' below ground surface. Grout Annular Fill Seal from 100' to Surface.

PHASE II:

1) This phase will follow the Liner installation and include the rehabilitation and redevelopment of the well utilizing Airburst® technology followed by chemical injection consisting of 2,000 gallons pre-mixed hydrochloric inhibited acid and Well Renew® placed into each 20-foot zone through a double disk 10-foot injection tool followed by physical redevelopment via airlifting/swabbing procedures for each 20-foot screen section until the section is developed.

PHASE I: Furnish and Install Liner:

Shop Labor:

• Load-Unload Materials	30 Hours
• Inspection of Liner materials	30 Hours
• Preparation of materials for installation	30 Hours
• Preparation of annular materials to be installed	14 Hours
• Engineering review	(Included @ no cost)
• Hydrogeologic review	(Included @ no cost)
104 Hours @ 105.00 per Hour	**$10,920.00**

Field Labor:

Mobilize to site with pump rig and crane with crews to place fill material to seal the bottom of the well from 845 to 530' and cement to cap to 520'. Then Install the 12-inch Stainless Steel Liner and screen from 520-feet to surface, place annular material between liner and casing and develop the annular material by swabbing then demobilize.

o Mobilization	$620.00
o 110 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew	$48,400.00
o 110 Hours Crane and Operator @ $300.00/Hour	$33,000.00
o 110 Man Hours Additional Crew @ $50.00/Man Hour.	$5,500.00
Total Estimated Labor for Liner Installation	***$87,520.00***

Note: Includes Pump rig with crew and 30T crane, service support truck, flatbed truck and (4) four-man crew.

Materials:

• 17 CY Gravel and Bentonite to fill bottom of well	$3,066.00
• 170-feet 12" ID SST wire-wrap screen	$25,723.00
• 350-Feet 12" ID SST Blank Casing	$58,525.00
• Annular Fill Material from TD to 100', Seal from 100-feet to Surface	$35,353.00
• Materials for securing liner materials as needed	$15,000.00
• Miscellaneous consumables including fittings, tape, banding etc.	$1,364.00
• Freight	$9,762.00
• Estimated tax at 9.5%	$14,174.76
Total Estimated Materials	***$163,382.76***

Outside Services:

• Video Log Well	$1,280.00
Total Estimated Outside Services	***$1,280.00***

Phase I Liner Install $263,102.76

PHASE II: Rehabilitation and Redevelopment:
Phase II will follow the installation of the liner and include the well rehabilitation and redevelopment to maximize production. It is necessary to redevelop the existing casing through the liner screens as follows:

Shop Labor:

• Load – Unload materials,	20 Hours
• Prepare rehab tools and equipment for use,	25 Hours
• Assemble swab	17 Hours
• Engineering Support (10 Hours)	Included
62 Total Estimated Shop Hours @ $105.00/Hour	**$6,510.00**

Field Labor

- Mobilize Crew and Equipment and Airburst well
- Install Swab Injection system to 240'
- Mix and Inject Chemistry beginning at 240' to 510' in screened areas.
- Setup tanks and discharge equipment as necessary
- Airlift swab develop all screened section until clear
- Demobilize
  - 92 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew — $40,480.00
  - 92 Hours Crane and Operator @ $300.00/Hour — $27,600.00
  - 92 Man Hours Additional Crew @ $50.00/Man Hour. — $4,600.00

Total Estimated Field Labor for Redevelopment ***$72,680.00***

Materials/Rentals (Non-Taxable):

• Swab Rental	$695.00
• Airlift equipment, rods, pipe,	$500.00
• Compressor, hoses etc.	$1,773.00
• Airburst Equipment rental	$6,546.00
• Chemical treatment equipment	$3,855.00
Total Estimated Materials/Rentals (Non-Taxable)	**$13,369.00**

Materials/Rentals (Taxable):

• Fuel for Air Compressor	$910.00
• Batches of Chemicals	$12,364.00
• Freight	$2,001.00
• Tax at 9.5%	$1,451.13
Estimated Materials/Rentals (Taxable) Total	**$16,726.13**

Outside Services:

• Video Log of Well	$1,200.00
• Portable Facilities	$1,310.00
Total Estimated Outside Services	**$2,510.00**

Phase II Rehabilitation and Redevelopment $111,795.13

Summary Totals:

Phase I Liner	*$263,102.76*
Phase II Rehabilitation - Redevelopment	*$111,795.13*
Estimated Grand Total	***$374,897.89***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

Public Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 03/24/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Piping Components & Install:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect and Prepare for installation; Engineering Support **Task II > Field Labor:** Mobilize Welder Service Truck with Welder and Helper for fabrication and installation of the equipment • Conduct brief 5-minute tailgate safety meeting • Cut and weld as needed pipe and fittings to build discharge pipe as required • Demobilize **Task III > Materials:** 10 Each 8" 150# SLIP ON FLANGE R/F, CARBON STEEL, ASTM, SA105/A105, IMPORT • 2 Each 8" 150# WELD NECK FLANGE, R/F, CARBON STEEL, ASTM SA105/A105 IMPORT • 2 Each 8" STD S/R 90 WELD ELL, IMPORT CS SA234 WPB • 8" STD WELD TEE, IMPORT CS SA-243 WPB • 36 - 8" X 2 3000# FS THREAD-O-LET • 36 - 3 X 1 3M FS THREAD-O-LET • 8 PLATED BLOT & NUT KIT (8EA - 3/4" X 3-3/4") W/RING GASKET • 10-FEET 8" STD (.322 28.55#) BLACK GLOBAL A-53--B ERW, P/E, CARBON STEEL • 8" 150# DUO CHECK CS BODY, SS TRIM, BUNA-N SEAT CRANE G15SMF14 CHECK VALVE • 8" ROMAC FLEX COUPLING WITH RESTRAINTS • MISCELLABEOUS CONSUMABLES INCLUDING SUPPORT PADS, AND PIPE AND ALL THREAD AND NUTS FOR RESTRAINTS. • ESTIMATED FREIGHT • ESTIMATED TAX AT 9.5% GPC Proposal is attached showing complete list of GPC Services.	03/24/20	$ 20,376.37
		TOTAL =	$ 20,376.37

Message to Recipient: Please proceed with All Work estimates/descriptions listed above

Thank-you,

Sami Kabar P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952
Serving Southern California and Central Coast

Lic #[illegible]

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

March 24, 2020 ***Via Email***

Subject: Sativa Well 5 Furnish and Install Discharge Piping

General Pump Company is pleased to provide this proposal to Furnish and Install the required discharge piping for the referenced well.

The Proposed cost is as follows:

Shop Labor:

- Load – Unload materials,
- Engineering Support (10 Hours) — 20 Hours Included

20 Total Estimated Shop Hours @ $105.00/Hour **$2,100.00**

Field Labor:

Mobilize Welder Service Truck with Welder and Helper for fabrication and installation of the equipment

- Conduct brief 5-minute tailgate safety meeting
- Cut and weld as needed pipe and fittings to build discharge pipe as required
- Demobilize
  - 24 Hours Welder Service Equipment @ $170.00/Hour — $4,080.00
  - 24 Hours Helper @ $110.00/Hour — $2,640.00
  - 16 Man Hours Additional Crew Overtime @ $50.00/Man Hour. — $1,056.00

Total Estimated Field Labor for Redevelopment ***$9,120.00***

Materials:

- 10 Each 8" 150# SLIP ON FLANGE R/F, CARBON STEEL, ASTM, SA105/A105, IMPORT — $1,542.00
- 2 Each 8" 150# WELD NECK FLANGE, R/F, CARBON STEEL, ASTM SA105/A105 IMPORT — $420.00
- 2 Each 8" STD S/R 90 WELD ELL, IMPORT CS SA234 WPB — $416.00
- 8" STD WELD TEE, IMPORT CS SA-243 WPB — $198.00
- 36 - 8" X 2 3000# FS THREAD-O-LET — $54.00

• 36 - 3 X 1 3M FS THREAD-O-LET	$30.00
• 8 PLATED BLOT & NUT KIT (8EA - 3/4" X 3-3/4") W/RING GASKET	$349.00
• 10-FEET 8" STD (.322 28.55#) BLACK GLOBAL A-53--B ERW, P/E, CARBON STEEL	$406.00
• 8" 150# DUO CHECK CS BODY, SS TRIM, BUNA-N SEAT CRANE G15SMF14 CHECK VALVE	$1,732.00
• 8" ROMAC FLEX COUPLING WITH RESTRAINTS	$1,500.00
• MISCELLABEOUS CONSUMABLES INCLUDING SUPPORT PADS, AND PIPE AND ALL THREAD AND NUTS FOR RESTRAINTS.	$819.00
• ESTIMATED FREIGHT	$896.00
• ESTIMATED TAX AT 9.5%	$794.37
Total Estimated Materials	***$9,156.37***
Total Estimated Project Cost	***$20,376.37***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 08/26/2019

TO: Mr. Tom Nanchy
General Pump Company
159 N, Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division
Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**SATIVA WELL 5 > PULL WELL AND VIDEO:** Work Includes: Mobilization of Crane, Flatbed Truck; Service Truck with Crew; Site work includes the complete removal of the pump equipment. The existing motor will be loaded on a L.A. County service truck once removed. The balance of the equipment/materials will be brought to GPC for offloading and inspection. A downhole Well Video will follow several days after the pump removal. All equipment currently being stored (vehicles-Trailers etc.) at the site will be moved off site allowing room for the GPC crane and flatbed truck that are needed for the removal. GPC Estimate / Proposal is attached showing complete list of GPC Services.	08/26/19	$ 13,460.00
		TOTAL =	**$ 13,460.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765
Serving Southern California and Central Coast

August 12, 2019 ***Via Email***

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

Subject: Sativa Well 5

General Pump Company is pleased to provide our quote for "Phase 1" of work associated with well 5. We recently inspected the facility and discussed the scope of work for phase 1. This includes the complete removal of the pump equipment. The existing motor will be loaded on a LA County service truck once removed. The County will put in storage as this particular motor will not be re-used upon pump reinstallation. The balance of the equipment will be brought to GPC for offloading and inspection. The well will be prepared for a video that will follow several days after the initial pump removal. All equipment being stored (vehicles-Trailers etc.) at the site will be required to be moved off site allowing room for the crane and flatbed truck that are needed for the prep removal. Below is the associated cost for Phase 1.

Cost

Shop Labor

- Load elevators, well cover
- Load oil barrel (barrels)
- Load oil bailor and adsorbent materials
- Unload pump equipment, prep for disassembly
- Pressure wash bowl assembly
- Pull tube and shaft assemblies, prepare for inspection
- Inspect bowls, column tube and shaft, head etc.
- Prepare recommendations and quote for phase 2
- Engineering review (Included @ no cost)

Lump sum 1,300.00

Field Labor

- Mobilize to site
- Conduct brief 5-minute tailgate safety meeting
- Setup crane
- Electrical Lock out /Tag out
- Disconnect motor leads, remove pump adjustments

Continued

- Pull motor and load on LA County truck
- Disconnect stretch assembly
- Pull head and complete pump- load on GPC truck for transportation to GPC facility
- Sound well static and T.D
- Bail oil and contain in approved drum (disposal by others)
- Prep well for video
- Install locking well cover
- Demobilize

Note:
Includes 40T crane, service support truck, flatbed truck and (4) four man crew.

Lump Sum *10,960.00*

Outside Services

- Video Log Well 1,200.00

Grand Total Cost ***$ 13,460.00***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Tom Nanchy

Tom Nanchy
Sr. Project Manager

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 03/24/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Re-Equip Pump, Motor, Components:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect, and Prepare Equipment for installation; Receive Pump, dis-assemble, Inspect and reassemble; Engineering Support **Task II > Redevelopment: Field Labor:** Mobilize to site with pump rig and crane with crews for the installation of the equipment • Conduct brief 5-minute tailgate safety meeting • Install Pump to proper pump setting' with Transducer access pipe • Install Motor, Transducer and connect pump, set lateral, start and run pump and document operational information • Demobilize **Task III > Materials:** • 10RJHC-9 Stage Goulds Bowl assembly (Epoxy Coated) • Goulds Discharge Head with Epoxy ID Coating • 100 HP Motor • 30 Sections 8" X 10' Column Assembly (300') ID/OD Epoxy Coated • 30 Each 10' SST Line Shafts and Bearing Retainers • 8-inch X 10 Suction pipe with SST cone Strainer • 300' SST airline with fittings • 285' PVC Transducer Access Pipe • Bolting and gasket kit, Motor oil and field consumables • Electrical components to splice/connect motor leads • Miscellaneous consumables including fittings, tape, banding etc. • Miscellaneous Unforeseeable materials • Estimated Freight • Estimated tax at 9.5% • Field Trim Balance • Portable Facilities GPC Proposal is attached showing complete list of GPC Services.	03/24/20	$ 145,294.30
		TOTAL =	$ 145,294.30

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank you

Sami Kabar, P E
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
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WELL & PUMP SERVICE SINCE 1952
Serving Southern California and Central Coast

Lic. #496765

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

March 24, 2020 *Via Email*

Subject: Sativa Well 5 Pump Equipment

General Pump Company is pleased to provide this proposal to Furnish and Install the pump equipment for the referenced well.

The Proposed cost is as follows:

Shop Labor:

• Load – Unload materials,	20 Hours
• Inspect, and Prepare Equipment for installation	20 Hours
• Receive Pump, dis-assemble, Inspect and reassemble	20 Hours
• Engineering Support (10 Hours)	Included
60 Total Estimated Shop Hours @ $105.00/Hour	**$6,300.00**

Field Labor:

Mobilize to site with pump rig and crane with crews for the installation of the equipment

- Conduct brief 5-minute tailgate safety meeting
- Install Pump to proper pump setting' with Transducer access pipe
- Install Motor and connect pump to electrical and discharge piping
- Set lateral, start and run pump and document operational information
- Demobilize

○ 44 Hours Pump Rig @ $440.00/Hour-Rig & 2 Man crew	$19,360.00
○ 44 Hours Crane and Operator @ $300.00/Hour	$13,200.00
○ 36 Man Hours Additional Crew @ $50.00/Man Hour.	$1,800.00
Total Estimated Field Labor for Equipment Installation	***$34,360.00***

Note: Includes Pump rig with crew and 40T crane, service support truck, flatbed truck and (4) four-man crew.

Materials:

• 9RCHC-9 Stage Goulds Bowl assembly (Epoxy Coated)	$15,252.00
• Goulds Discharge Head with Epoxy ID Coating	$4,048.00
• 100 HP Motor	$12,728.00
• 28 Sections 6" X 10' Column Assembly (280') ID/OD Epoxy Coated	$25,823.00
• 28 Each 10' SST Line Shafts and Bearing Retainers	$15,019.00
• 6-inch X 10 Suction pipe with SST cone Strainer	$891.00
• 280' SST airline with fittings	$1,037.00
• 570' 1" PVC Transducer and Sounding Access Pipe	$1,814.00
• Discharge Pipe Nipple for Discharge connection with ID Coating	$1,637.00
• Bolting and gasket kit, Motor oil and field consumables	$364.00
• Electrical components to splice/connect motor leads	$228.00
• Miscellaneous consumables including fittings, tape, banding etc.	$1,364.00
• Miscellaneous Unforeseeable materials	$5,455.00
• Estimated Freight	$6,417.00
• Estimated tax at 9.5%	$8,747.30
Total Estimated Taxable Materials	***$100,824.30***

Outside Services:

• Field Trim Balance (if necessary)	$2,500.00
• Portable Facilities	$1,310.00
Total Pump and Motor Estimate	***$145,294.30***

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 09/24/2019

TO: Mr. Tom Nanchy
General Pump Company
159 N, Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 Rehab & Test Pump:** Work Includes: Mobilization of Crane, Flatbed Truck; Service Truck with Crew; On-Site services include: Brushing of the Perforated casing with a soft steel brush from 200-feet to 490-feet to total depth at 836-feet; Airburst of the well from the Total depth to the 200-foot perforated interval. Test pump procedure (set-up at 520' depth) to produce flow over 5-Days from 300 GPM up to 1,100 GPM and will be installed with a properly sized access tube to allow for the installation of sampling tools or cameras. Shop Labor to include: Sampling tools and pump equipment for rehabilitation activities; Load-unload materials as needed for rehabilitation and test pumping activities; All tools needed for the rehabilitation; Engineering review. Outside Services to include: Video Log Well and Portable Facilities. Rehab & Test Pump Sub Total Cost $91,993.00 Optional Items Included: Spinner Test and Report; Depth Specific Sampling (1-Liter for each of 10 Samples); Mass Balance Calculations: Total Optional Items $12,973.00 GPC Proposal is attached showing complete list of GPC Services.	09/24/19	$ 104,966.00
		TOTAL =	**$ 104,966.00**

Message to Recipient:

Please proceed with work per estimate: All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager-Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
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WELL & PUMP SERVICE SINCE 1952 Lic. #496765

Serving Southern California and Central Coast

LA County Public Works
Water Works
1000 South Fremont AVE.
Building A-9E, 4th Floor
Alhambra, CA. 91803-1331
Attn: Gary Hilliard

PROPOSAL September 24, 2019

Subject: *Sativa Well #5 Rehabilitation and Well Profiling (Phase II)*

General Pump Company is pleased to provide our quote for "Phase II" of work associated with well 5. We recently removed the pump and performed a video log service of the well and inspected the facility and discussed the scope of work for phase II. The video log of the well determined there was no oil on the water and there is a significant amount of fill material in the bottom of the well. The video descended to 836.8-feet and the well is thought to be 890 to 910-feet suggesting there may be 55 to 75-feet of fill material covering some of the screen interval of the bottom of the well.

Phase II will include the following scope:

1. Brushing of the Perforated casing with a soft steel brush from 200-feet to 490-feet to total depth at 836-feet

2. Airburst of the well from the Total depth to the 200-foot perforated interval using moderate pressures to penetrate the plugged areas of the wells perforated zones.

Note: Items 1 and 2 above are expected to require 1 week to accomplish

3. The next step will include the installation of a test pump designed to produce up to 1,100 GPM and will be installed so the suction is located at 520-feet with a properly sized access tube to allow for the installation of sampling tools or cameras if needed.

    a. The well will be developed, and test pump as follows:

        i. Day 1; Development and testing with average of 300 GPM for 8 to 10 hours
        ii. Day 2; Development and testing with average of 500 GPM for 8 to 10 hours
        iii. Day 3; Development and testing with an average of 650 GPM for 8 to 10 hours
        iv. Day 4; Step testing with an average of 800 GPM for 8 to 10 hours
        v. Day 5; Constant testing with expected average flow of 900 GPM for 8 to 10 hours

Note: Items 3a above will require 2-weeks for completion.

After Completion of the above tests, A meeting will be scheduled to discuss the results and determine the options or direction for the next steps and if any well, or pump modification would be beneficial for the well production. Any additional testing or sampling may add more time.

4. Upon completion of the well evaluation, the test pump will be removed

The estimated cost for Phase II is as follows:

Shop Labor

- Identify and prepare sampling tools and pump equipment for rehabilitation activities
- Load-unload materials as needed for rehabilitation and test pumping activities,
- Build brush as needed for the rehabilitation
- Unload test pump equipment, prep for disassembly
- Pressure wash test pump bowl assembly, column and other related equipment
- Engineering review (Included @ no cost)

Based on an estimation of 70 Shop Hours at $105.00/Hour **$7,350.00**

Field Labor (Scope/Sequence)

- Mobilize to site
- Conduct daily tailgate safety meeting
- Setup Pump rig, crane, tanks, equipment for rehabilitation, development and testing processes as follows
    - Brush well
    - Airburst well
    - Prep well for video
    - Install Test Pump and Testing equipment
    - Develop well with test pump
    - Remove test pump from well
    - Install locking well cover
    - Demobilize

Note:

Includes Crane with Operator, Pump Rig with Crew, service support truck, flatbed truck for a total (4) four-man crew for approximately 4 weeks

Lump Sum ***$68,960.00***

Materials for Rehabilitation and Re-Development:

- Soft Wire Brush, Airburst equipment, test pump equipment,

Lump Sum Including Freight and Tax **$13,319.00**

Outside Services

• Video Log Well	$1,200.00
• Portable Facilities (60 Days)	$1,164.00
Total Outside Services	**$2,364.00**
Sub *Total Cost*	***$91,993.00***

Optional Items (If Required)

• Spinner Test and Report (Includes Equipment Required)	$7,808.00
• Depth Specific Sampling (1-Liter for each of 10 Samples)	$4,345.00
• Mass Balance Calculations	$820.00
Total Optional Items	**$12,973.00**
Grand Total Cost (With Optional Items)	***$104,966.00***

Comments and Clarifications:

a. Lead time to obtain materials and begin project is 2 to 4 weeks after NTP
b. Install temporary lighting for night security and Victaulic coupling to close door daily.
c. Project Duration expected to be 4 to 6 weeks onsite time

Should you have any questions or need additional information regarding the above, please do not hesitate to contact us. Thank you.

Ray Reece
General Manager
GENERAL PUMP COMPANY, INC.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL - NOTICE TO PROCEED

DATE: 04/06/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
San Dimas, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**SATIVA WELL 5 > VFD & COMPONENTS:** **Task I > Pre-Install Job Prep: 1)** Shop Labor > Load – Unload materials; Inspect and Prepare for installation; Engineering Support **Task II > Materials:** ABB ACS880-07 VFD Assembly 100HP, 3/60/480, 124FLA, R6 Frame; NEMA1 Indoor Fan and Filtered Floor Mounted Cabinet; includes Input Circuit Breaker with Door Mounted Disconnect High Speed VFD with Input Fuses - Fused 480 X 120 CPT 2 Contactor Bypass with overload relay Door Mounted Bypass Selector; Switch Door Mounted VFD Keypad Modbus TCP/IP Ethernet Communications; Bottom Entry/Bottom Exit; includes WIKA Model LF-1 Downhole Submersible Liquid Level Transducer, 2-wire, 4-20mA output, with 350' cable length WIKA Model S-20 above ground 0-100PSI pressure transducer, 2-wire, 4-20mA output, and 50' cable length; Cabinet has Overall Dimensions 48"H X 32"W X 18"D Tax (9.5%) and Delivery included. GPC Proposal is attached showing complete list of GPC Services.	04/06/20	$ 34,023.05
		TOTAL =	**$ 34,023.05**

Message to Recipient: Please proceed with All Work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 06/15/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division
Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 VFD Installation and Pump Testing (Freeboarding) >** GPC to install the VFD and VFD Cabinet; remove existing cabinet; relocate all existing conduits; provide conduits and wiring to downhole transducer; install transducer; relocate transformer; install gauges; provide additional hours to flush the well and collect necessary samples as needed.	06/15/20	$ 23,502.00
		TOTAL =	**$ 23,502.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

June 15, 2020 ***Via Email***

Subject: Sativa Well 5 VFD Installation and Pump Testing (Freeboarding)

GPC is please to provide this estimate to install the VFD and to provide additional hours to flush the well and collect necessary samples as follows:

- Remove existing panel from building, relocate/remove transformer. Relocate sub panel to make room for the VFD panel. Install VFD cabinet and install necessary conduit and wiring to the well head and to the tank to run control wires to VFD cabinet.

Labor $23,502.00

Total Estimate Project $23,502.00

GENERAL PUMP COMPANY, INC.

Prepared By: Ray Reece 6/15/20
Date

Approved By: _____
Date:

Public Works

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 06/30/2020

TO: Mr. Ray Reece
General Pump Company
159 N, Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well #5 Chlorine Room Components > Pumps, Scales, Analyzer:** • 3 Each Stenner SVP Digital Peristaltic Pump [w/4-20 mA Input, 17 GPD, 100 PSI, 3/8" Tubing, SVP4H2A3S]; • 2 Each Spill Containment Scale [w/Bladder, 4-1/2 Digit Display]; • 2 Each; CL17 Chlorine Analyzer Only, no reagents; PN17365 $10,867.00 • 2 Each; Free Chlorine Reagent Set for Hach CL17/CL17sc; PN 28235 $174.00 • 2 Each; Sulfuric Acid Standard 19.2 N, 100 mL Bottle; PN47875 Delivery and Tax (9.5%) included.	06/30/20	$ 35,943.06
		TOTAL =	**$ 35,943.06**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WATERWORKS DIVISION
1000 South Fremont Avenue
Bldg. A-9E, 4th Floor
Alhambra, CA 91803-1331

LETTER OF TRANSMITTAL
NOTICE TO PROCEED

DATE: 09/03/2020

TO: Mr. Ray Reece
General Pump Company
159 N. Acacia Street
Camarillo, CA 93010

FROM: Gary Hilliard
Waterworks Division

Telephone No: (661) 802 - 0448

SUBJECT: Notice to Proceed

We are sending you the following document(s) and/ instructions:

Quantity	Description	Date	Cost
As shown	**Sativa Well 5 > Chlorine Gas Pump:** Receive, Inspect, Load (1 Hour included); Engineering Support (1 Hour included); Blue Book Part # 12784 > AMT 1-1/4"x1" Centrifugal Pump 1.5HP/115-230V/1PH CI Case Freight and Tax (10.25%) included.	09/03/20	$ 1,091.00
		TOTAL =	**$ 1,091.00**

Message to Recipient:

Please proceed with work per estimate:

1. All work estimates/descriptions listed above.

Thank-you,

Sami Kabar, P.E.
Contract Manager Waterworks Division

GENERAL PUMP COMPANY

159 N. ACACIA STREET * SAN DIMAS, CA 91773
PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Lic. #496765
Serving Southern California and Central Coast

LA County Public Works
2120 E. 90th St.
Los Angeles, California 90002
Attn: Gary Hilliard

September 3, 2020 ***Via Email***

Subject: Sativa Well 5 Gas Chlorine Equipment Pump

Shop Labor:

• Receive, Inspect, Load – Unload and Deliver materials,	1 Hour
• Engineering Support (1 Hour)	Included
1 Total Estimated Shop Hours @ $105.00/Hour	**$105.00**

Materials:

• Pump AMT 1-1/4"x1" Centrifugal Pump 1.5HP/115-230V/1PH CI Case	$777.00
• Estimated Freight	$117.00
• Estimated tax at 10.25%	$92.00
Total Taxable Materials	***$986.00***
Total Estimate Project	***$1,091.00***

GENERAL PUMP COMPANY, INC.

Prepared By: Ray Reece 9/3/20
Date

Approved By: Ray Reece 9/3/20
Date:

SUPPLEMENTAL DATA
MOVEABLE EQUIPMENT DATA

Hi! Sign in Sell Watchlist My eBay

Search for anything All Categor…

Back to search results | Listed in category: Business & Industrial > Heavy Equipment, Parts & Attachments > Heavy Equipment > Other Heavy Equipment

Bidding has ended on this item.

2008 Ingersoll Rand Airsource Plus 185 185 CFM Towable Air Compressor bidadoo See original listing



Condition: **Used**
"*Please see full equipment details in Description, including photos and video demonstration.*"
Ended: Dec 29, 2020, 3:54PM
Winning bid: **US $5,850.00** [32 bids]
Shipping: Freight - Read the item description or contact the seller for details
Item location: San Antonio, Texas, United States
Seller: **bidadoo_business** (27234) | Seller's other items

Sell one like this

Related sponsored items Feedback on our suggestions


NEW ! DHE1.8 mini excavator 4,000 Lbs + …
$19,900.00
+ $1,850.00 shipping


2012 JLG T350 Towable 35ft Boom Lift
$16,550.00
+ shipping


2015 Genie TZ-34/20 34ft Towable 34ft Boom Lift
$17,500.00
+ shipping
Popular

People who viewed this item also viewed 1/2 Feedback on our suggestions


Flex-O-Lite 2002 Towable Traffic Arrow Sign Boar…
$355.00
+ shipping 9 bids


2015 Doosan C185WDZ-T4F 185 CFM Towable …
$7,500.00
+ shipping


2015 Miller Big Blue 400 Pro Diesel Towable…
$520.00
+ shipping 35 bids


2004 Sullivan Palatek D185Q Towable Air…
$4,999.00
+ shipping


2010 Genie AL4 Portable Towable Diesel Light…
$520.00
+ shipping 18 bids


2014 Magnum MLT3060K Towable Light Tower…
$3,000.00
+ shipping

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Back to search results | Listed in category: Business & Industrial > Hydraulics, Pneumatics, Pumps & Plumbing > Air Compressors & Blowers > Other Air Compressors

This listing has ended. The seller has relisted this item **or one like this.**

Ingersoll Rand 185 CFM Towable Air Compressor See original listing



Sell one like this

Condition: **Used**
Ended: Nov 03, 2020, 11:21AM
Price: **US $5,800.00**

Shipping: Free Local Pickup
Item location: Sanderson, Florida, United States
Seller: **markmoore144** (553) | Seller's other items

Related sponsored items 1/2 Feedback



Ingersoll-Rand ARO 1500 Series 3/8" Piggyback FRL…
$67.95
~~$97.07~~
Free shipping



1/4" x 100' Ultra Flexible Braided Air Hose…
$22.97
~~$48.98~~
Free shipping
Popular



INGERSOLL RAND F1155IA In Line Air Oil Filter 3" NP…
$199.00
+ $36.98 shipping



115PSI V Type Duplex Air Pump Air compressor…
$195.02
Free shipping



20Pcs Air Compressor Accessory Kit Tool 25FT…
$17.99
Free shipping
Popular



20pc Air Compr Accessory Kit T
$15.99
+ $0.99 shipping

Similar sponsored items 1/2 Feedback



Ingersoll Rand Ss3l3 Electric Air Compressor,1 Stage
$922.59
Free shipping



SCHULZ AIR COMPRESSOR 5HP…
$1,599.00
Free shipping
Popular



INGERSOLL-RAND AIR COMPRESSOR Model 5H…
$1,995.00
+ $500.00 shipping



Ingersoll Rand SIERRA Air Compressor 125HP 807C…
$2,341.00
~~$3,999.99~~
+ shipping



Ingersoll - Rand 25 Hp Air Compressor, Model 25 H-…
$2,850.00
+ shipping



56288756 , ING RAND PILOT V
$69.90
Free shipping
Popular

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ebay Search for anything All Categor…

Back to search results | Listed in category: Business & Industrial > Hydraulics, Pneumatics, Pumps & Plumbing > Air Compressors & Blowers > Other Air Compressors

Bidding has ended on this item.

Ingersol Rand, 185 air compressor, towable See original listing



Sell one like this

Condition: **Used**
Ended: Oct 18, 2020 , 9:00PM
Winning bid: **US $6,050.00** [47 bids]
Shipping: **$4.75** Standard Shipping
Item location: Blooming Prairie, Minnesota, United States
Seller: **gtrom442** (283) | Seller's other items

Related sponsored items 1/2 Feedback on our suggestions



Ingersoll-Rand ARO 1500 Series 3/8" Piggyback…
$67.95
~~$97.07~~
Free shipping



Ingersoll Rand Ultra Coolant Air Compressor…
$60.00
+ $12.95 shipping



1/4" x 100' Ultra Flexible Braided Air Hose…
$22.97
~~$48.98~~
Free shipping
Popular



INGERSOLL RAND MODEL SS5L5…
$59.95
Free shipping
Almost gone

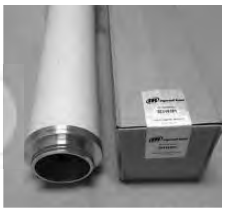


20Pcs Air Compressor Accessory Kit Tool 25F…
$17.99
Free shipping
Popular



3PC AIR BLOW GUN KIT AIR COMPRESSOR…
$24.95
Free shipping
Popular

Similar sponsored items 1/2 Feedback on our suggestions



Ingersoll Rand After Filter Element Air Compresso…
$999.99
+ $28.99 shipping



INGERSOLL RAND AIR COMPRESSOR TYPE…
$1,800.00
+ shipping



Ingersoll Rand Ss3l3 Electric Air Compressor…
$922.59
Free shipping



INGERSOLL-RAND AIR COMPRESSOR Model…
$1,995.00
+ $500.00 shipping



Ingersoll Rand T30 Air Compressor,2 Stage,15…
$2,800.00
+ shipping



Ingersoll Rand Model 2545 compatible Major…
$405.00
Free shipping
Almost gone

Roll over image above to zoom in



2020 KUBOTA L3901HST

$31,999.00 USD

JAYCOX IMPLEMENT, INC.

(507) 376-3147

WORTHINGTON, MN

*** PACKAGE DEAL *** 2020 Kubota L3901HST, 4WD, ROPS, R4 tires, hydro trans, LA525FL loader, grille guard, 66" quick tach bucket, DCT C20BT Trailer tandem Axle 20' w/ ramps, Landpride Sb1574 snow blower, 2 load straps, 0% for 60/0% down *Trailer to be financed at standard rate financing* Located at our Worthington location • Call for more details

CONTACT SELLER

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APPENDIX 9

LAND APPRAISAL

MR VALUATION CONSULTING, LLC

APPRAISAL OF FOUR LAND PARCELS & PRIVATE EASEMENTS SATIVA WATER SYSTEM COMPTON, CALIFORNIA



Report Date: May 24, 2021
Effective Date: April 20, 2021

PRESENTED TO:
Tim Miller
General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

MR VALUATION CONSULTING, LLC

May 24, 2021

Tim Miller
General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

RE: Appraisal of Four Land Parcels & Private Easements of the Sativa Water System

Dear Mr. Miller:

MR Valuation Consulting, LLC ("MRV Consulting") has completed an appraisal of four land parcels and certain private easements that comprise the Sativa Water System (the "System"). We understand that the Department of Public Works, Los Angeles County is selling the physical facilities, operational assets, operational liabilities, and water rights associated with the Sativa Water System within the City of Compton, California. Included with the physical facilities are the four land parcels and the private easements which are identified in Table 1.

Table 1
Sativa Water System
Fee Owned Land & Private Easements

No.	Description	Parcel Number	Address	Area (SF)
1	Land (Well Site No. 2)	6155-017-900	2015 E. Hatchway Street	6,553
2	Land (Well Site No. 3)	6154-010-900	13320 S. Willowbrook Avenue	7,203
3	Land (Well Site No. 4)	6152-019-901	13139 S. Aranbe Avenue	4,934
4	Land (Well Site No. 5)	6155-005-900 / 901	2083 E. Stockwell Street	4,398
5	Private Easements	Length = 3,260 feet	Width = 4 feet	13,040

The purpose of this analysis is to provide Suburban Water Systems with an appraisal of the four land parcels and the private easements as of April 20, 2021, for internal management discussions regarding the acquisition of the Sativa Water System. Our report has been prepared for this exclusive purpose and use only. The intended user of our report is Suburban Water Systems.

The premise of value is a "going-concern" because the business will continue to operate in the foreseeable future, therefore, the premise of value for the assets is in "continued use." The standard of value is the identification of the type of value being used in a specific engagement. For this engagement, the standard of value is market value as defined in the 6th edition of *The Dictionary of Real Estate Appraisal* as "the most probable price, as of a specified date, in cash, or terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress."

We have conducted a complete appraisal analysis of the four land parcels and the private easements and have considered the three traditional approaches to value: the cost approach, the comparable sales (market) approach, and the income approach. Our report is presented in an appraisal report format per the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation, and the standards and codes of ethics of the Appraisal Institute and the American Society of Appraisers.

In appraising the four land parcels and the private easements, we assume there are no significant value-impacting easements (other than those directly addressed in this report), encroachments or other deed restrictions, or limitations upon the use and enjoyment of the four land parcels and the private easements. Except as noted herein, we assume no environmental or engineering issues are negatively affecting the four land parcels and the private easements. We assume that the water utility has the right to access, use, maintain, and repair the distribution pipelines, services, valves, and meters (future) to properly operate the system indefinitely. Our analysis is based upon a desktop appraisal.

Market Conditions – COVID-19 Effect on Economy

The full economic impact of the COVID-19 pandemic is unknown as it continues to impact many aspects of daily life and the global economy. Economists are upgrading their US growth forecasts as Covid vaccinations accelerate and after Washington enacted a $1.9 trillion relief package, known as the American Rescue Plan Act of 2021. The US Federal Reserve continues to closely monitor the post-stimulus effect on the economy with its goals of maximum employment and a 2 percent inflation.

Goldman Sachs is calling for 2021 US GDP growth of 6.9 percent, the fastest since 1984. For average Americans, this optimism signals a stronger jobs market and better prospects for prosperity after a dreadful 2020. Morgan Stanley expects the US unemployment rate will drop below 5 percent by the end of 2021 and below 4 percent by the end of 2022.

Beyond the government rescue measures, the economic outlook is getting a boost from serious progress in defeating the pandemic. The acceleration in the rollout of vaccines, along with declining rates of deaths and cases, is raising hope that health restrictions depressing the economy could be lifted earlier than expected.

The reader is cautioned and reminded that the conclusions presented in this report apply only as of the effective date indicated. MRV Consulting makes no representation as to the effect on the entity of this event, or any event, after the effective date.

Conclusion of Value

Based on our analysis, methodology, and prevailing market conditions, the value of the fee simple interest in the four land parcels is ***$882,000*** and the value of the land interests in the private easements is ***$130,000***. The effective date of our analysis is April 20, 2021.

The conclusions expressed herein are explained throughout the attached report and are subject to the statement of assumptions and limiting conditions and certification. These conclusions should not be used for any purpose other than the purpose specified above. Before the conclusions presented in this letter are relied upon, the attached report should be read and analyzed in its entirety.

It is our pleasure to provide this service to you. We are prepared to discuss this report further should you have any questions concerning the matters discussed herein, please contact us at (732) 780-6000 or by email through MRV@MRValuation.com.

Respectfully submitted,

MR Valuation Consulting, LLC

MR Valuation Consulting, LLC

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B. DEFINITIONS AND ABBREVIATIONS

ADA	Americans with Disability Act
AI	Appraisal Institute
Cap Rate	Capitalization Rate
Client	Suburban Water Systems
Direct Cap	Direct Capitalization
Effective Date	April 20, 2021
MRV Consulting	MR Valuation Consulting, LLC
NOI	Net Operating Income
System	Sativa Water System
US	United States of America
USPAP	Uniform Standards of Professional Appraisal Practice

C. ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal is subject to the following Assumptions and Limiting Conditions. Other assumptions and limiting conditions may be included in this report at other locations in the report.

In this section, the term "report" can mean study, appraisal, valuation, research or analysis, and any report or work product or deliverable about the study, appraisal, valuation, research, or analysis. Further, the term "MRVC" stands for MR Valuation Consulting, LLC, and its employees, consultants, appraisers, staff members, and service providers.

Information and Data Sources

1. Information on the financial, legal, and physical condition of the subject property or assets, provided by the Client, or its representatives, directly to us or the public through various public disclosure methods is assumed to be reliable. Other materials and information obtained from various professionally appropriate public and private sources are assumed to be reliable.

2. The information contained within this report was obtained from sources deemed to be reliable. Reasonable efforts, given the intended use, purpose, and scope of the appraisal, have been made to verify such information; however, no warranty and responsibility is given as to its accuracy.

Property Specific Assumptions and Limiting Conditions

3. Competent and responsible management and ownership are assumed.

4. This report analyzes the leased fee interest of the subject property or assets, free and clear of any or all liens or encumbrances. This appraisal is subject to the restrictions imposed by this agreement.

5. MRVC does not provide legal, accounting, audit, title, engineering, architectural, or environmental sciences services and assumes no responsibility for matters of such services. It is assumed that any legal, engineering, architectural, audit, title, environment, accounting, and financial information as provided by the Client, representatives, and management or obtained from public records are correct and assumed to be reliable.

6. MRVC assumes that there are no hidden or unapparent conditions at the subject land and/or improvements, which would render the subject property or assets more or less valuable, except as noted herein. MRVC assumes no responsibility for such conditions, or for engineering, environmental, legal, or architectural counseling that might be required to discover such conditions. It is assumed that the subject property or assets are not adversely affected by contaminants or health risks and that no contamination or health risks exist on or near the Property. MRVC assumed that there were no ADA issues sufficient to significantly render the subject property or assets more or less valuable.

7. It is assumed that there are no zoning or building code issues concerning the subject real property that would significantly increase or decrease the value of the real property being appraised.

8. Since MRVC is not an engineering or architectural firm, it makes no representation as to quality, functionality, condition, limitations, and size of the subject property or assets, except that a) MRVC has relied upon what has been reported to MRVC as the best available data, where said data was provided by others to MRVC who MRVC assumes to be an appropriate source of said data given the specific purpose, intended use, and scope of work of this study, and b) if a visual inspection was conducted by MRVC then MRVC has relied upon the visual inspection. Given the inherent limitations of MRVC's visual inspection, if conducted, important issues at the Property may not be uncovered. If conducted, MRVC's visual inspection of the Property is not an engineering, architectural, or environmental inspection, and does not test building operations, and does not cover 100 percent of the building(s), machinery and equipment, or the site.

9. This study assumes that, unless specifically noted elsewhere in the report, the subject property or assets suffers no environmental or hazard issues, and that no contamination or health risks exist at or near the Property.

10. If substantive issues are later discovered in data relied upon, then the reported opinions in this study may need to be revised accordingly.

Study Analysis and Format Assumptions

11. This report has been prepared in conformity with the requirements of USPAP of the Appraisal Foundation, and the American Society of Appraisers. When necessary for compliance with local law and assessment procedures, we may employ the jurisdictional exception rule of the USPAP. Extraordinary assumptions or hypothetical conditions, as defined by USPAP, will be disclosed at various points in this report, if applicable. The use of extraordinary assumptions or hypothetical conditions may affect the assignment results.

12. MRVC has determined the scope of work, based on its discussions with the Client, and their reported needs, their reported purposes, and intended use of the appraisal. The appraisal scope is limited to the work necessary to provide for the Client's purpose and use of the report, and as such, this report is not recommended for any other use. The scope of this appraisal is not so confined as to result in misleading or unsupported opinions of value.

13. USPAP prescribes two types of appraisal reports, Restricted Appraisal Reports, and Appraisal Reports. A Restricted Appraisal Report may be provided when the client is the only intended user, or when additional intended users are identified by name, and not by types or categories. MRVC intends that the use of its reports is limited to the Client and intended users. When reports are restricted, MRVC need not provide as extensive reporting that may be found in Appraisal Reports. The use of Restricted Appraisal Reports is limited to the client and the

named intended user(s). Restricted Appraisal Reports may not contain the supporting rationale for the opinions and conclusions in their entirety outlined in the Restricted Appraisal Reports.

Publication, Distribution, Use of Report

14. The opinions proffered in this report are as of a specific date, for a specific client and intended user(s), for a specific purpose and intended use, under a specific, limiting the scope of work, and made under specific assumptions and limiting conditions. Using the opinions proffered herein for any other use or purpose is inappropriate and unwise and is prohibited unless authorized in writing by MRVC. The Client agrees that:

    a) the Client and intended user(s) are explicitly named herein. The Client and the intended user(s) are the only parties to whom the MRVC has a professional responsibility. MRVC offer and assume no professional responsibility to any third parties that receive copies of our report.
    b) any advice or recommendations, written or oral, provided by MRVC in connection with this engagement is exclusively for the Client and intended user(s) specifically identified by MRVC.
    c) will not refer to MRVC by name or otherwise, or their services in any written materials relating to the subject property or assets, including without limitation, any publicly filed documents without the prior written consent of MRVC for each requested use or reference.
    d) neither all nor part of the contents of this report or copy thereof shall be conveyed to the public through advertising, public relations, news, sales, or any other media without the prior written consent of MRVC.
    e) neither all nor part of the contents of this report, or copy thereof, shall be conveyed to the public through such forms or methods such as, but not limited to, advertising, public relations, news, sales, or any other media without written consent and approval of MRVC.
    f) MRVC or any professional organization of which MRVC is a member or candidate, cannot be identified without the prior written consent of MRVC.
    g) this report may not be utilized in any present or proposed, public or private syndication or a public offering of any of the interests in the subject property or assets unless a prior written agreement has been obtained from MRVC.
    h) this report is intended to be utilized in its entirety and may not be used in parts.

15. Any party receiving a copy of this report to satisfy disclosure requirements does not become an intended user(s). Possession of this report, or a copy thereof, does not give the holder the right of publication, nor may this report or any part thereof be used by anyone other than the Client and intended user(s) for the intended use.

16. Disclosure of the contents of this report is governed by the by-laws and regulations of the USPAP of the Appraisal Foundation, the American Society of Appraisers, and the Royal Institution of Chartered Surveyors. MRVC is authorized by the Client to disclose all or any portion of this report, and the work files to appropriate representatives of the Appraisal Foundation, the American Society of Appraisers, and the Royal Institution of Chartered

Surveyors, if such disclosure is required to enable the MRVC to comply with their respective by-laws and regulations now or hereafter in effect, or as may otherwise be required to be disclosed by Court Order or governing laws, rules and/or regulations.

Ownership of MRVC Properties

17. MRVC has created and has rights in, and may, in connection with the performance of its services, employed, provided, modified, created, acquired, or otherwise obtained rights in, various concepts, ideas, methods, methodologies, procedures, processes, know-how, and techniques, models, templates, user interfaces, and screen designs, general-purpose consulting and software tools, methods of operation of systems and other intellectual property (collectively, referred to as "MRVC Knowhow and Copyrights").

18. Upon full and final payment to MRVC for its services, to the extent that any MRVC Knowhow and Copyrights are contained herein, MRVC grants the Client an authorization to use such MRVC Knowhow and Copyrights contained in the Deliverables in connection with the use of such Deliverables and only for the Client's intended purpose and use as stated herein.

19. MRVC owns all rights, title, and interest, including, without limitation, all rights under all copyright, patent, and other intellectual property laws, in and to the MRVC Knowhow and Copyrights. MRVC may employ, modify, disclose, and otherwise exploit the MRVC Knowhow and Copyrights (including, without limitation, providing services or creating programming or materials for other clients). MRVC does not agree to any terms that may be construed as precluding or limiting in any way its right to a) provide services of any kind or nature whatsoever to any person or entity as MRVC in its sole discretion deems appropriate or b) develop for itself, or for others, materials that are competitive with those produced as a result of the services provided hereunder, irrespective of their similarity to the Deliverables.

Limit of Liability

20. MRVC warrants that it has performed the services hereunder in good faith and a professional appraisal manner. MRVC disclaims all other warranties, either express or implied, including, without limitation, warranties of merchantability and fitness for a particular purpose.

21. Any forecast models of income and expenses in this report are not predictions of the future and are created for the specific use and purpose of the appraisal. No warranty or representation is made that the model will coincide with actual future events. Furthermore, there will usually be differences between the modeled results and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

22. It is understood and agreed that Client and MRVC are independent of the other and that neither is, nor shall be considered to be, an agent, distributor, or representative of the other. Neither party shall act or represent itself, directly or by implication, as an agent of the other or in any manner assume or create any obligation on behalf of, or in the name of, the other. The Client

acknowledges that the full independence and authority of MRVC will be maintained throughout this engagement and that no assurances or guarantees of a value estimate or consulting recommendation have been made or are a condition of this engagement.

23. In providing this service, MRVC establishes and the Client understands and agrees that a) no relationship other than one of a service provider is created between MRV and its staff members and the Client, and b) MRVC assumes no responsibility for or ownership of the risks and rewards of the client business decisions based on, or business results that are consequential to the use of this report.

24. The Client will indemnify and hold harmless MRVC from all claims, liabilities, losses, costs, demands, and reasonable expenses, such as reasonable legal fees, and management and administrative costs, relating to this engagement, except to the extent finally judicially determined to have resulted from the bad faith or intentional misconduct of MRVC.

25. The liability of MRVC is limited to the Client only and shall not exceed in the aggregate the amounts received by MRVC for its services.

26. MRVC is not required to give testimony about this report, or to provide other services to the Client concerning the subject property or assets, without a written agreement between the Client and MRVC for compensation to MRVC.

Statements of Qualifications and Personal Histories

27. Any statements of qualifications, resumes, and personal and/or company histories are presented in summary for marketing purposes and to assist the intended user(s) of the report with understanding the professional competency and experience of MRVC. These statements of qualifications, resumes, and personal and/or company histories are a) not a complete listing of our professional experiences and qualifications and b) not full disclosure of our professional, corporate, and personal interactions and relationships.

State Specific Required Clauses

28. Michigan requires appraisers to be licensed and are regulated by the Michigan Department of Consumer and Industry Services, P.O. Box 30018, Lansing, Michigan 48909. Michigan requires this statement to appear in appraisals, even those in other states.

D. CERTIFICATION

I certify to the best of my knowledge and belief that:

1. the statements of fact contained in this report are true and correct. Commensurate with the intended use of the report, its type, definition, and premise of value, and its scope of services, professional efforts have been made to verify such statements of facts.

2. the reported analyses, opinions, and conclusions contained herein are limited only by the assumptions and conditions reported in this report and are the undersigned's personal, impartial, and unbiased professional analyses, opinions, and conclusions. The undersigned has no present or future interest in the four land parcels and private easements within the Sativa Water System that is the subject of this report, and the undersigned has no personal interest concerning the parties involved. The undersigned has no bias concerning the four land parcels and private easements within the Sativa Water System that is the subject of this report, or to the parties and issues involved.

3. the undersigned's engagement in this report was not contingent upon developing or reporting predetermined results. The undersigned's compensation for this report is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.

4. the undersigned has not performed appraisal services on and has not provided any other type of services for the four land parcels and private easements within the Sativa Water System within the past three years.

5. the reported analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.

6. the reported analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.

7. the use of this report is subject to the requirements of the Appraisal Institute relating to review by their respective duly authorized representatives.

8. as of the date of this report, Joseph J. Calvanico, MAI, FRICS has completed the continuing education program of the Appraisal Institute.

9. Joseph Calvanico did not perform a site tour of the four land parcels and private easements within the Sativa Water System. USPAP does note require a personal inspection by the appraiser.

10. Ryan Lehnau provided assistance to the undersigned in the appraisal of the four land parcels and private easements within the Sativa Water System. His assistance included contributions to the development and reporting of the analysis. Any aspect of their assistance was performed under the supervision of the undersigned. It is reasonable for the undersigned to rely on their assistance, given their adherence to professional appraisal standards and ethics, and their training, experience and capabilities, and the supervision of the undersigned.

Certified by:



Joseph J. Calvanico, MAI, FRICS
New York Certified General Appraiser
License No. 46000050898
License Expires 5/11/2022

E. INTRODUCTION

The appraisal process requires that an appraiser must first establish the purpose, use, and scope of an appraisal. This step includes setting the appraisal context, such as the definition of value, report date, hypothetical and extraordinary conditions, and others. Next, a study of the property and the legal rights as well as the physical qualities should be considered. The market and industry are researched and analyzed as well. Next, the highest and best use of the property is analyzed. Only then are the various analyses, or approaches to value, conducted. There are three traditional approaches in determining the value of real estate: the cost approach; the comparable sales (market) approach, and the income approach.

After conducting the applicable approaches to value, the appraiser concludes with a reconciliation process where the various indications of value are reviewed, and the merits of each approach are analyzed and weighted. A value for the appraised property is concluded in the reconciliation process. When the appraisal assignment calls for it, various techniques, such as allocations, residuals, or summations are made to or with the various elements or components of the concluded values from the three traditional approaches, to determine the overall value or parts of a concluded overall value.

Property Rights Appraised

We have appraised the land interests in the four land parcels and the private easements that comprise the Sativa Water System in Compton, California. The interests include fee simple interests and private easement interests. We have not appraised any easements on public land.

The real property is comprised of two portions: 1) Four well sites owned in fee simple interest, comprised of land and improvements where the company conducts business and management operations and 2) private easements of approximately 3,260 linear feet dedicated to pipelines and water distribution. We assume that the water utility has the right to access, use, maintain, and repair the distribution pipelines, services, valves, and meters (future) to properly operate the system indefinitely.

We are not aware of any leases or any other partial interests associated with the System.

Purpose, Use & Scope of Appraisal

The purpose of this analysis is to provide Suburban Water Systems with an appraisal of the four land parcels and the private easements as of April 20, 2021, for internal management discussions regarding the acquisition of the Sativa Water System. Our report has been prepared for this exclusive purpose and use only. The intended user of our report is Suburban Water Systems.

We understand that the Department of Public Works, Los Angeles County is selling the physical facilities, operational assets, operational liabilities, and water rights associated with the Sativa Water System in Compton.

We have conducted a complete appraisal analysis of the four land parcels and the private easements and have considered the three traditional approaches to value: the cost approach, the comparable sales (market) approach, and the income approach. We researched and gathered market data and considered such factors as location, quality, size, and zoning. Both general data, including supply and demand trends and neighborhood trends, as well as specific data, including site and improvement data, were considered.

Hypothetical Conditions or Extraordinary Assumptions

In appraising the four land parcels and the private easements, we assume there are no significant value-impacting easements (other than those directly addressed in this report), encroachments or other deed restrictions, or limitations upon the use and enjoyment of the four land parcels and the private easements. Except as noted herein, we assume no environmental or engineering issues are negatively affecting the four land parcels and the private easements. We assume that the water utility has the right to access, use, maintain, and repair the distribution pipelines, services, valves, and meters (future) to properly operate the system indefinitely. Our analysis is based upon a desktop appraisal.

The use of these hypothetical conditions and extraordinary assumptions may have affected our appraisal conclusions. If any of the hypothetical conditions and extraordinary assumptions are found to be unsupported, then our appraisal conclusions may need to be revised.

Premise of Value

The premise of value is *going concern.* Going concern value is a value that assumes the water utility company will remain in business indefinitely and continue to be profitable. A company should always be considered a going concern unless there is a good reason to think that it will be going out of business. The appraiser must identify the highest and best use of the land parcels and must assume such highest and best use as the premise of value.

Standard of Value

The standard of value is the identification of the type of value being used in a specific engagement. For this engagement, the standard of value is market value as defined in the 6th edition of *The Dictionary of Real Estate Appraisal* as "the most probable price, as of a specified date, in cash, or terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress."

Effective Date

The Effective Date of this appraisal is April 20, 2021. The 2020-2021 USPAP defines Effective Date as "the date to which an appraiser's analyses, opinions, and conclusions apply; also referred to as date of value."

This is a current effective date. An appraisal can have either a retrospective, current, or prospective effective date.

Marketing and Exposure Time

Marketing time is an estimate of the time it might take to sell a property interest in real estate at the estimated value level during the period immediately after the effective date of the appraisal. Marketing time differs from exposure time, which is always considered to precede the effective date of the appraisal.

Exposure time may be defined as the estimated length of time the property interest being appraised would have been offered on the market before the hypothetical consummation of a sale at fair market value on the effective date of the appraisal. The opinion of the time for reasonable exposure is not intended to be a prediction of the date of sale. Instead, it is an integral part of the analyses conducted during the appraisal assignment. Related information garnered through this process may include the identification of typical buyers and sellers for the type of property involved and typical equity investment levels and/or financing terms.

We expect that the market time and the exposure time to be approximately 12 months, for the value conclusions made in this report.

Deferred Maintenance and Detrimental Conditions

We have assumed no deferred maintenance or detrimental conditions at the four land parcels and the private easements.

Environmental Conditions

It is assumed that there are no environmental issues at the four land parcels and the private easements. Additionally, management has not made us aware of any issues that would negatively affect the value of the four land parcels and private easements.

Property History

The Sativa Water System, originally Sativa Los Angeles County Water District, was formed in 1938 as a special district under the County Water District Act. The Sativa Water System provides retail water service to a 0.27 square mile area in the Willowbrook community of unincorporated Los Angeles County and a portion of the City of Compton.

On February 13, 2019, the Local Agency Formation Commission unanimously decided that the "Sativa Los Angeles County Water District" should cease operations due to mounting allegations of poor maintenance, financial malfeasance, and lack of transparency. The County of Los Angeles was appointed administrator by the Local Agency Formation Commission.

The County of Los Angeles currently owns the title to the four land parcels and the private easements. There are no recorded transactions of the four land parcels and the private easements in the past three years. On September 26, 2019, a request for proposals was published by the Department of Public Works, Los Angeles County for the transfer or sale of the Sativa Water System.

Property Tax Assessment

The scope of work required the appraiser to value the land interests in the four land parcels and the private easements which have no individual tax assessments. Figures G-4, G-5, G-10, and G-13 summarizes the assessment records for the four parcels. Further investigation of the four land tax records for the larger property interests was not performed.

Physical, Functional, and Economic Adequacy

The four land parcels and the private easements are generally assumed to be physically adequate, functionally adequate, and economically adequate for their current and continued use.

F. MARKET AREA DESCRIPTION

City of Compton, California

Compton is a city in southern Los Angeles County, California situated south of downtown Los Angeles. Compton is one of the oldest cities in the county and, on May 11, 1888, was the eighth city in California to incorporate.

Geography

It is known as the "Hub City" due to its geographic centrality in Los Angeles County. Neighborhoods in Compton include Sunny Cove, Leland, Downtown Compton, and Richland Farms. The city is generally a working-class community, with some middle-class neighborhoods and poor neighborhoods.

According to the United States Census Bureau, the City has a total area of 10.1 square miles. 10.0 square miles of it is land and 0.1 square miles of it is water. Compton is bordered by the unincorporated Willowbrook on the north and northwest; the unincorporated West Compton on the west; the City of Carson on the southwest; the unincorporated Rancho Dominguez on the south; the City of Long Beach on the southeast; the City of Paramount and the unincorporated East Compton on the east; and by the City of Lynwood on the northeast.

Demographics

The 2010 United States Census reported that Compton had a population of 96,455. The population density was 9,534 people per square mile.

There were 23,062 households, out of which 13,376 (58.0 percent) had children under the age of 18 living in them, 10,536 (45.7 percent) were opposite-sex married couples living together, 6,373 (27.6 percent) had a female householder with no husband present, 2,354 (10.2 percent) had a male householder with no wife present. There were 1,725 (7.5 percent) unmarried opposite-sex partnerships, and 158 (0.7 percent) same-sex married couples or partnerships. 2,979 households (12.9 percent) were made up of individuals, and 1,224 (5.3 percent) had someone living alone who was 65 years of age or older. The average household size was 4.15. There were 19,263 families (83.5 percent of households), and the average family size was 4.41.

The age distribution of the population was as follows: 31,945 people (33.1 percent) under the age of 18; 11,901 people (12.3 percent) aged 18 to 24; 26,573 people (27.5 percent) aged 25 to 44; 18,838 people (19.5 percent) aged 45 to 64; and 7,198 people (7.5 percent) who were 65 years of age or older. The median age was 28.0 years.

There were 24,523 housing units at an average density of 2,424 per square mile (935.9 per square kilometer), of which 12,726 (55.2 percent) were owner-occupied, and 10,336 (44.8 percent) were occupied by renters. The homeowner vacancy rate was 2.9 percent, and the rental vacancy rate

was 5.9 percent. 53,525 people (55.5 percent of the population) lived in owner-occupied housing units and 42,175 people (43.7 percent) lived in rental housing units.

From 2009 through 2013, Compton had a median household income of $42,953, with 26.3 percent of the population living below the federal poverty line.

Economy

Compton was recently designated as an "Entrepreneurial Hot Spot" by Cognetics, Inc., an independent economic research firm. Compton made the national list for best places to start and grow a business and ranked second in Los Angeles County out of a field of 88 cities. The city's Planning and Economic Development department provides a business assistance program consisting of a comprehensive mix of resources to small business owners and entrepreneurs. The grocery chains Ralphs and Food 4 Less, subsidiaries of Kroger, are headquartered in Compton. Gelson's Market, a subsidiary of Arden Group, Inc., is also based in Compton.

Known as the "Hub City" due to its geographical proximity in the center of the Los Angeles County boundaries, Compton is a large industrial center for transit and distribution, business services, high technology, home and lifestyle products, metals, financial services, and textile manufacturing. The Hub City is part of the Gateway region and has a 77-acre Compton / Woodley Airport that is home to 275 based aircraft and experiences over 66,000 flight operations each year. This air transportation asset is complemented by the Hub City's four major freeways adjacent to the City's boundaries. Interstate 710 runs from the seaports through the eastern boundary; the State Route 91 freeway extends through the southern boundary; Interstate 105 runs slightly along the north of the City; and Interstate 110 along to the west. Additionally, the Interstates 405 and 605 freeways are within two miles of Compton's southern and eastern edges, respectively.

Compton is surrounded by multiple freeways that provide access to destinations throughout the region. The Long Beach and Los Angeles Ports are less than 20 minutes from downtown Compton, providing access to international destinations for customers and suppliers. The Alameda Corridor, a passageway for 25 percent of US waterborne international trade, runs directly through Compton from north to south.

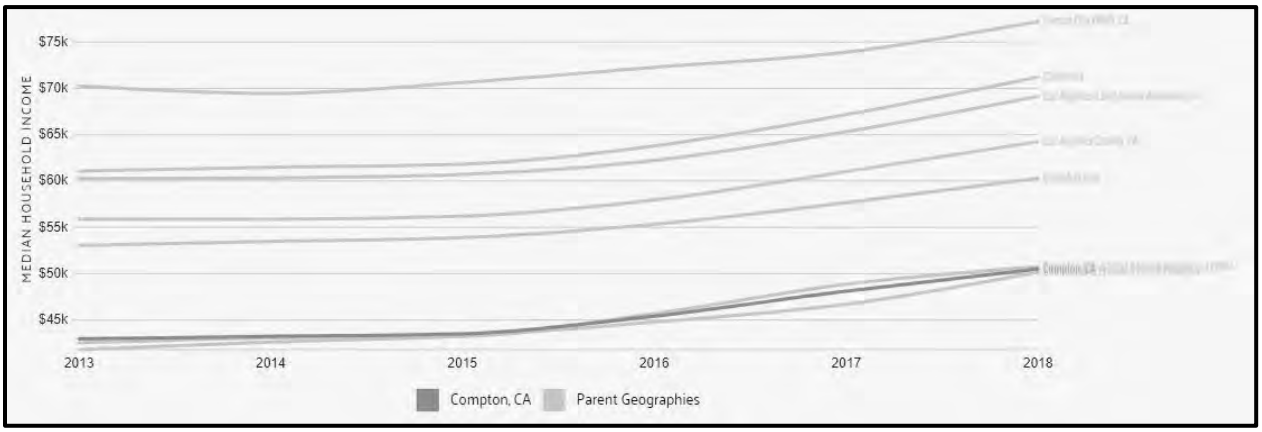
The City of Compton's Parks and Recreation Department operates and maintains a total of 16 playgrounds for a combined 118 acres of active park space. Facilities include community centers, neighborhood parks, walking parks, competition-size swimming pools, regulation size gymnasiums, skate park, the Jackie Robinson Baseball Stadium, nine-hole par golf courses, and the Douglas F. Dollarhide Community Center.

Figure F-1
Unemployment Rate – California vs. the United States



Source: Employment Development Department of the State of California

Figure F-2
Median Household Income – Compton, California



Recent Job Growth – Compton, California

Data from the Census Bureau ACS 5-year estimate shows that from 2017 to 2018, employment in Compton, CA grew at a rate of 1.84 percent, from 38,700 to 39,400 employees.

The most common job groups, by the number of people living in Compton, CA are Office & Administrative Support Occupations (5,658 people), Production Occupations (4,340 people), and Material Moving Occupations (3,409 people).

Additional demographics have been included in Appendix 4: Demographics Report.

G. PROPERTY DESCRIPTION

The subject of this appraisal is four land parcels and certain private easements, which are summarized in Table G-1. The real property is comprised of two portions: Four well sites owned in fee simple interest, comprised of land and improvements where the company conducts business and management operations; and private easements of approximately 3,260 linear feet dedicated to pipelines and water distribution.

Table G-1
Subject Land Parcels

No.	Description	Parcel Number	Address	Area (SF)
1	Land (Well Site No. 2)	6155-017-900	2015 E. Hatchway Street	6,553
2	Land (Well Site No. 3)	6154-010-900	13320 S. Willowbrook Avenue	7,203
3	Land (Well Site No. 4)	6152-019-901	13139 S. Aranbe Avenue	4,934
4	Land (Well Site No. 5)	6155-005-900 / 901	2083 E. Stockwell Street	4,398
5	Private Easements	Length = 3,260 feet	Width = 4 feet	13,040

The water utility has the right to access, use, maintain, and repair the distribution pipelines, services, valves, and meters (future) to properly operate the system indefinitely. This appraisal analysis does not include any machinery or equipment or any improvements (connections, pipelines, etc.) The interests appraised does not reflect the value of the real estate improvements to the subject land interests. Furthermore, this analysis does not include any public easements.

Figure G-1 is a service area map that shows that the System runs through residential land uses primarily the rear two feet of single-family residential neighborhoods. A zoning map of the four land parcels is identified in Figure G-2 and Figure G-3 is a locational map of the parcels.

Land (Well Site No. 2)

Well Site No. 2 is located at 2015 East Hatchway Street, Compton, CA 90222, with a parcel number: 6155-017-900 and block and lot numbers: Tract No 4631 Lots 35 And Lot 36 Block Q. The land under Well Site No. 2 is ±6,541 square feet, generally flat and level, and rectangular shaped. It is zoned R-1 for single-family residential use and development. It is currently a non-conforming use as it is used for government use in the water system. There is a frontage along East Hatchway Street. Improvements: The land on Well Site No. 2 is improved with a small two-story office building. The two-story structure is 1,879 square feet. The improvement is irregular in shape. This appraisal assumes the land to be vacant land, without any improvements. Figure G-6 and G-7 are tax and identification maps for Well Site No. 2.

Figure G-1
Service Area of the Sativa Water System

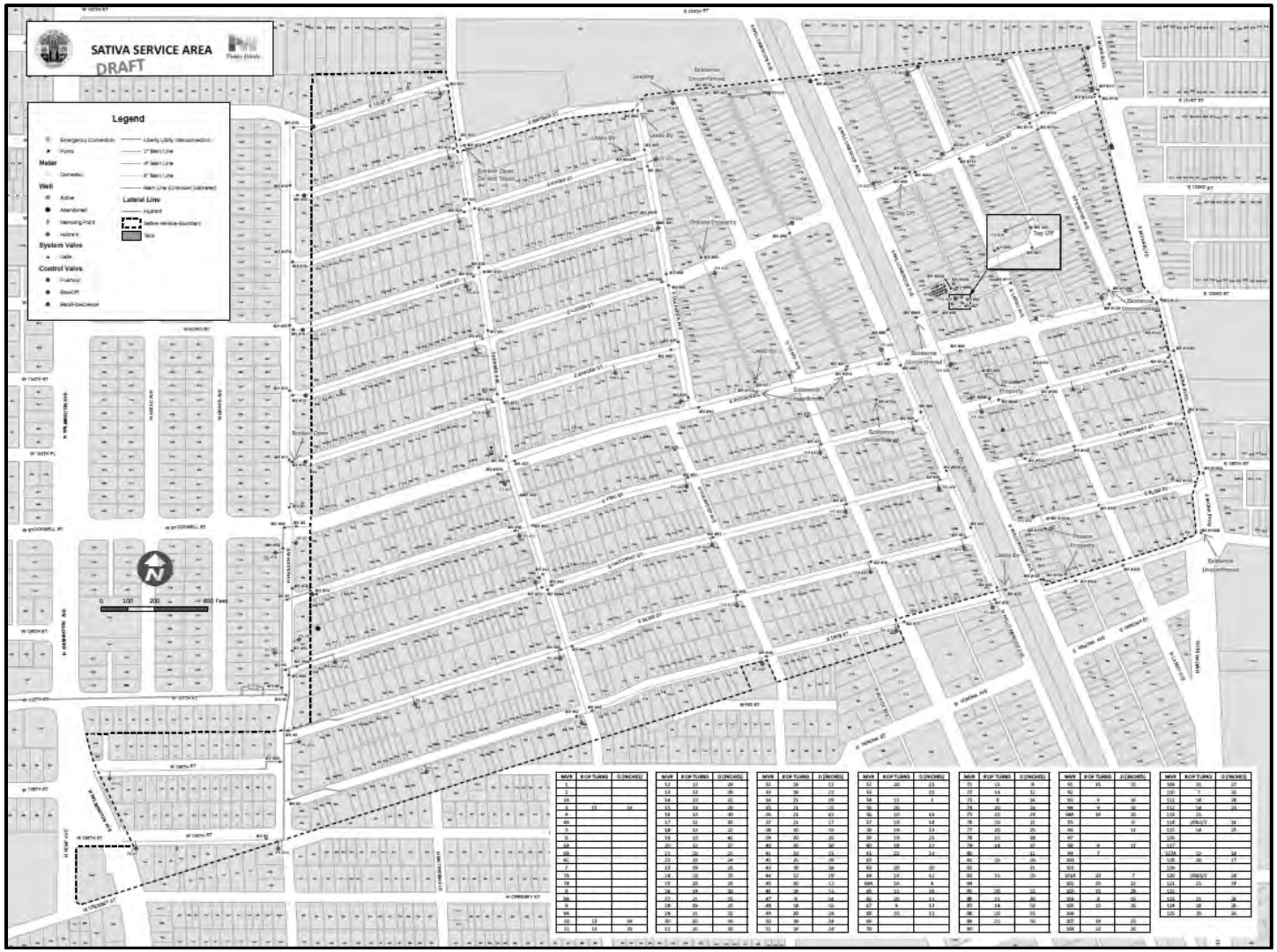
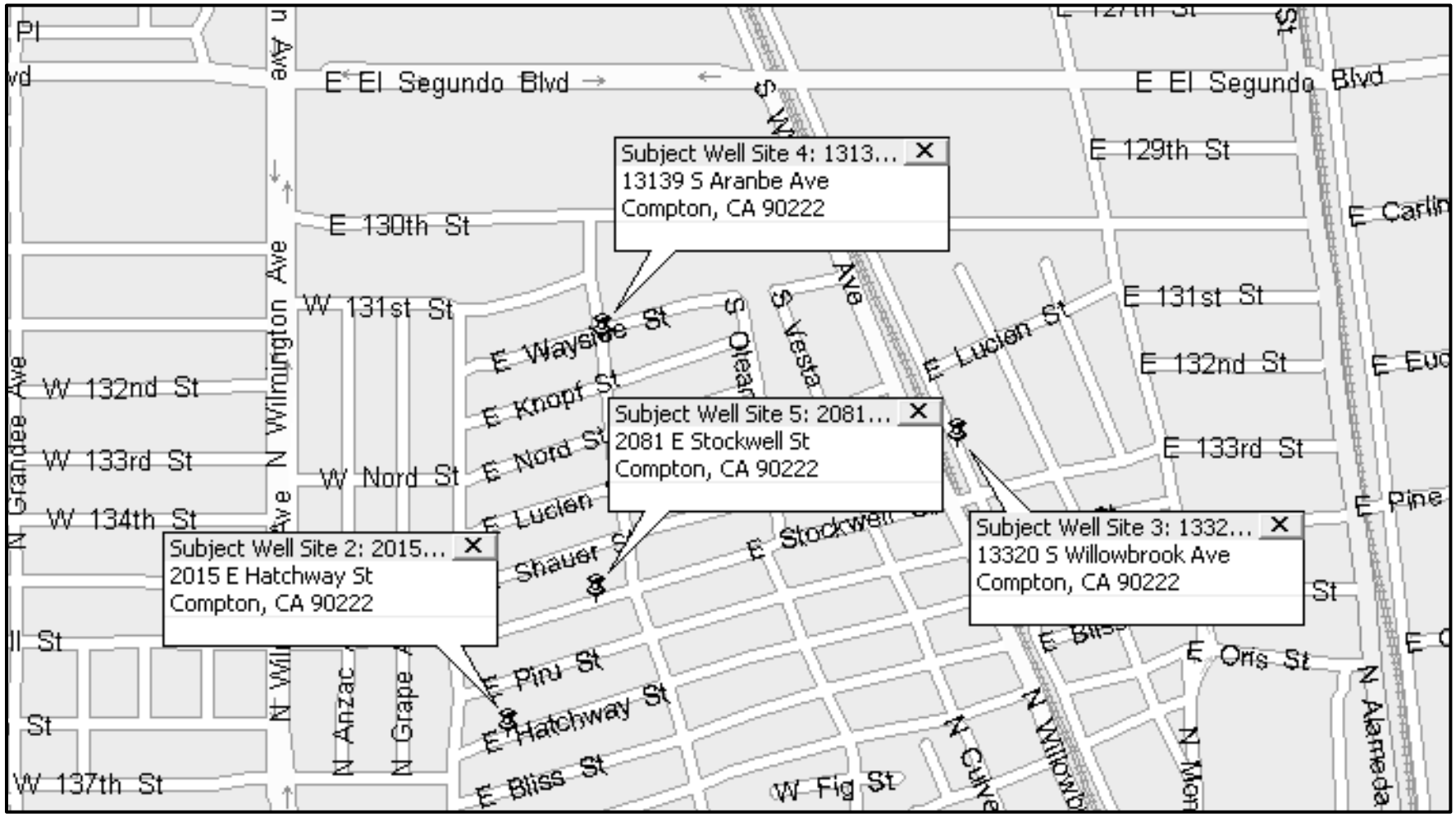


Figure G-2
Zoning Map of Well Sites



Figure G-3
Map of the Subject Land Parcels



Environmental: We are not environmental engineers and have not been provided with an environmental assessment report. Except as noted herein, we assume that no environmental conditions remain on or are negatively affecting Well Site No. 2. ADA issues were not investigated. The land under Well Site No. 2 is physically, functionally, and economically adequate for its current and continued use.

Figure G-4
Well Site No. 2 Tax Assessment

		2021 Roll Preparation		2020 Current Roll	RC	Year		1975 Base Value
Land	$	6,655	$	0	0	0	$	5,200
Improvements	$	0	$	0	0	0	$	0
Total	$	6,655	$	0			$	5,200

Land (Well Site No. 3)

Well Site No. 3 is located at 13320 South Willowbrook Avenue, Compton, CA 90222, with a parcel number: 6154-010-900 and block and lot numbers: Tract Number 4631 Lots 46 and 47 Block D. The land under Well Site No. 4 is ±4,934 square feet, generally flat and level, and rectangular shaped. It is zoned R-1 for single-family residential use and development. This parcel is currently a non-conforming use as it is used for government use in the water system. There is frontage on the North West corner of South Aranbe Street and East Knopf Street. Improvements*:* The land is vacant and there are no improvements. Figure G-8 and G-9 are tax and identification maps for Well Site No. 3.

Environmental: We are not environmental engineers and have not been provided with an environmental assessment report. Except as noted herein, we assume that no environmental conditions remain on and/or are negatively affecting Well Site No. 3. ADA issues were not investigated. The land under Well Site No. 3 is physically, functionally, and economically adequate for its current and continued use.

Figure G-5
Well Site No. 3 Tax Assessment

		2021 Roll Preparation		2020 Current Roll	RC	Year		1975 Base Value
Land	$	7,679	$	0	0	0	$	6,000
Improvements	$	0	$	0	0	0	$	0
Total	$	7,679	$	0			$	6,000

Figure G-6
Well Site No. 2 Tax Maps

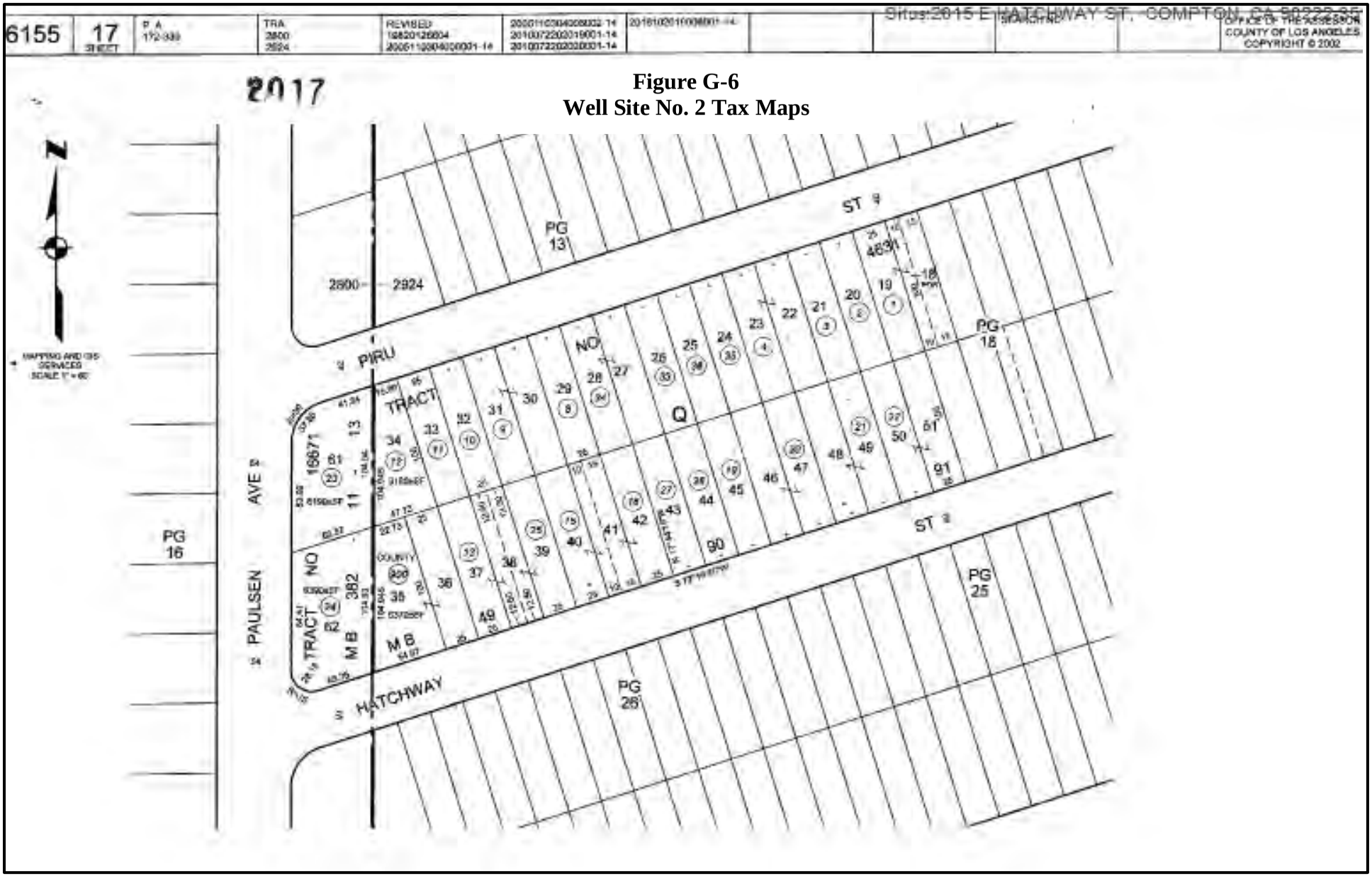


Figure G-7
Bidder's Notebook: Appendix A System Maps (Figure 6 of 9)
Sativa Office / Well Site No. 2 – 2015 East Hatchway Street

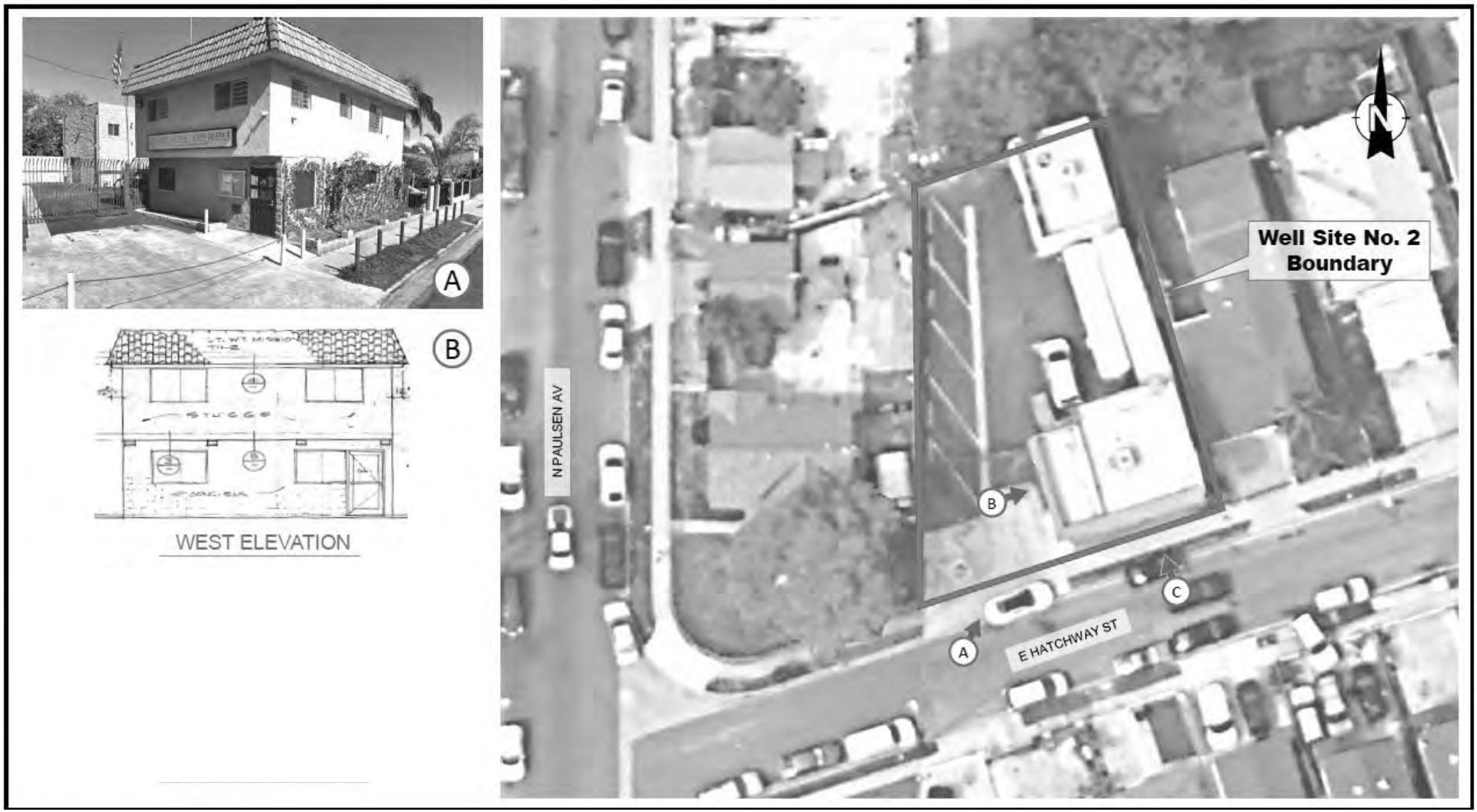


Figure G-8
Well Site No. 3 Tax Maps

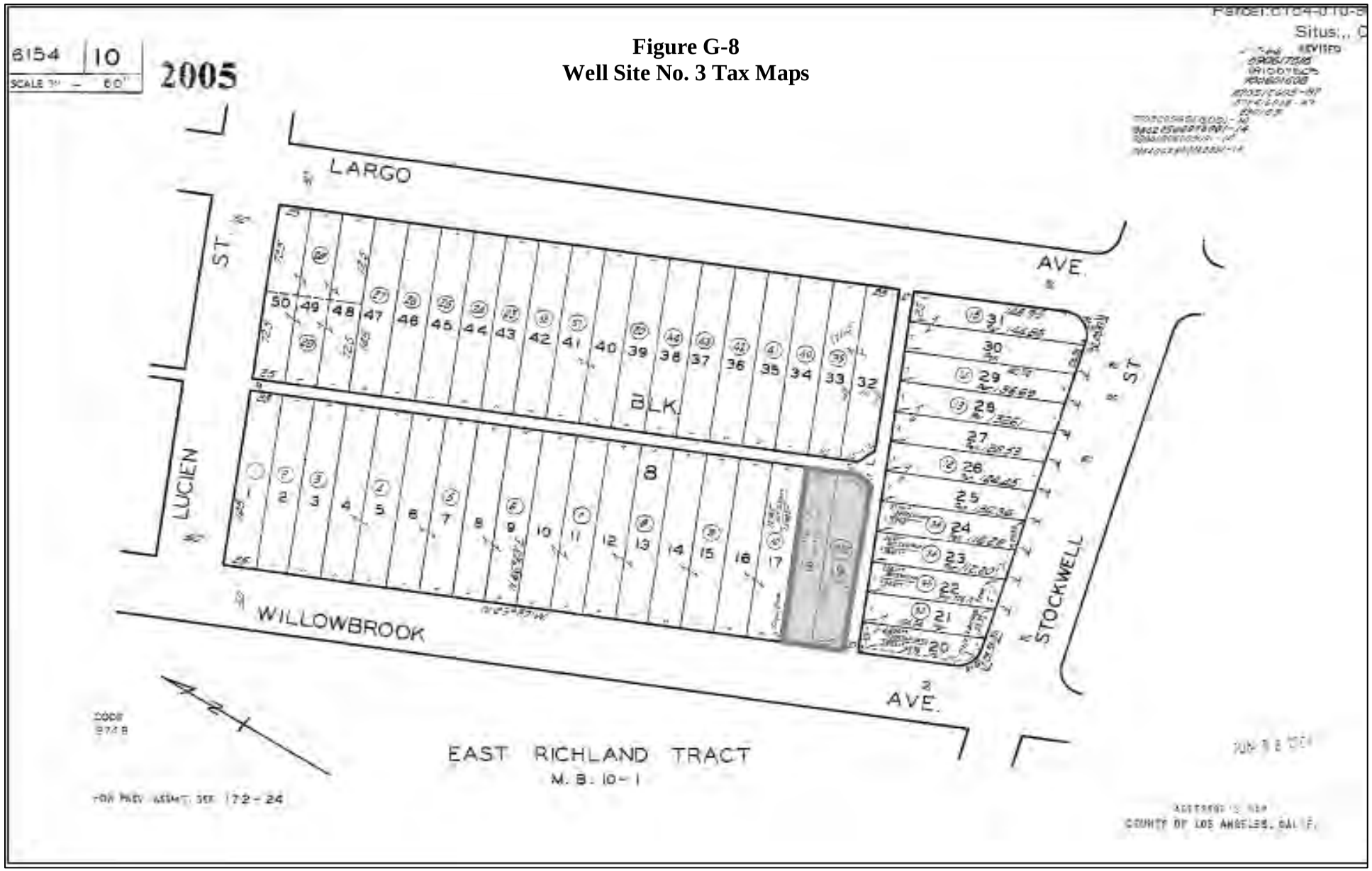
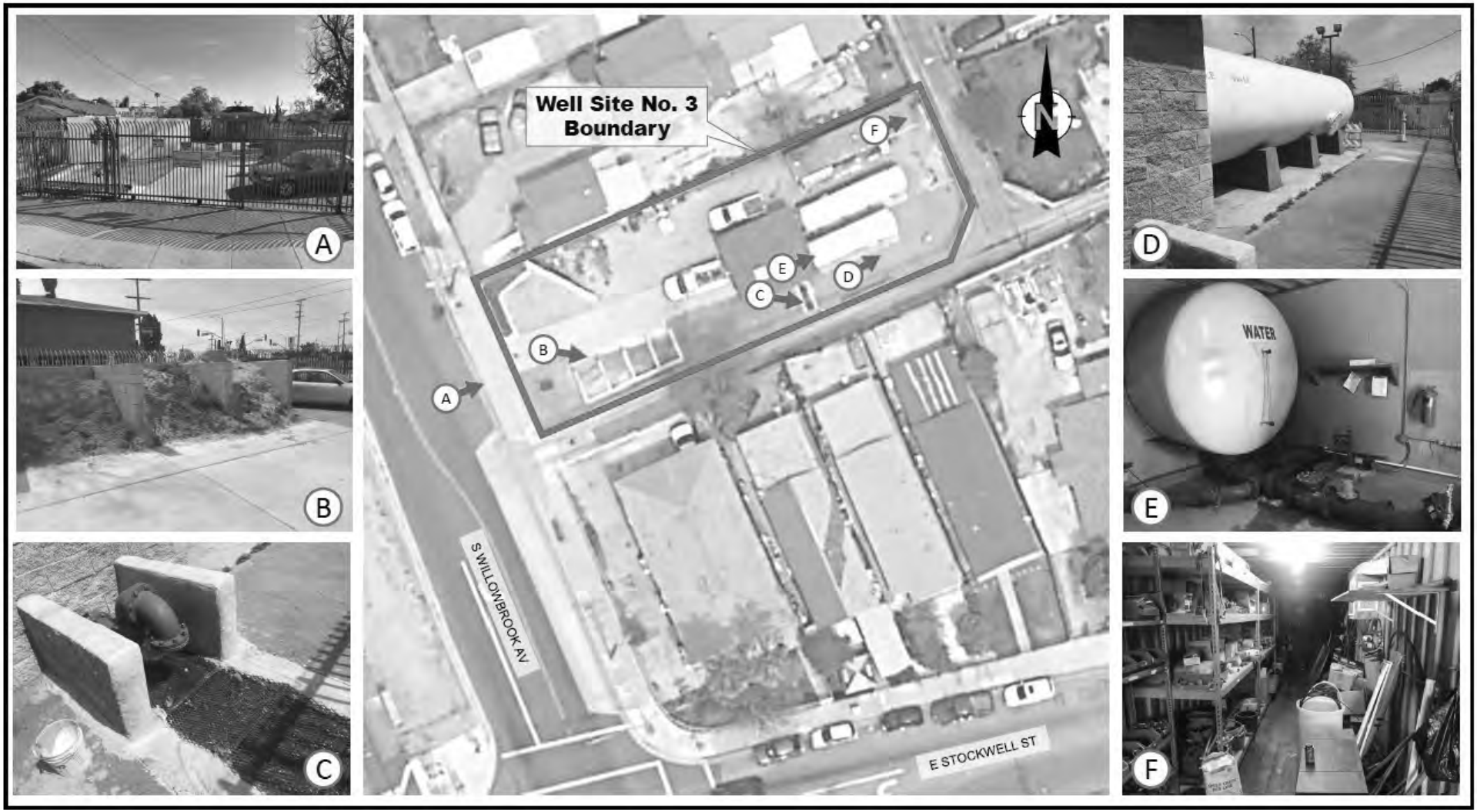


Figure G-9
Bidder's Notebook: Appendix A System Maps (Figure 7 of 9)
Well Site No. 3 – 13320 East Willowbrook Avenue



Land (Well Site No. 4)

Well Site No. 4 is located at 13139 S. Aranbe Avenue, Compton, CA 90222, with a parcel number: 6152-019-901 and block and lot numbers: Tract No 4631 Lots 35 And Lot 36 Block Q.

The land under Well Site No. 4 is ±4,934 square feet, generally flat and level, and rectangular shaped. It is zoned R-1 for Single-family residential use and development. The Subject is currently a non-conforming use as it is used for government use in the water system. There is frontage on the North West corner of South Aranbe Street and East Knopf Street. Figure G-11 and G-12 are tax and identification maps for Well Site No. 4.

Improvements*:* Located on the land of Well Site No. 4 is a small shed. The shed is 922 square feet. The improvement is rectangular in shape. This appraisal assumes the land to be vacant land, without any improvements.

Environmental: We are not environmental engineers and have not been provided with an environmental assessment report. Except as noted herein, we assume that no environmental conditions remain on and/or are negatively affecting Well Site No. 4. ADA issues were not investigated.

The land under Well Site No. 4 is physically, functionally, and economically adequate for its current and continued use.

Figure G-10
Well Site No. 4 Tax Assessment

	2021 Roll Preparation	2020 Current Roll	RC	Year	2009 Base Value
Land	$ 122,400	$ 0	0	0	$ 120,000
Improvements	$ 0	$ 0	0	0	$ 80,000
Total	$ 122,400	$ 0			$ 200,000

Figure G-11
Well Site No. 4 Tax Maps

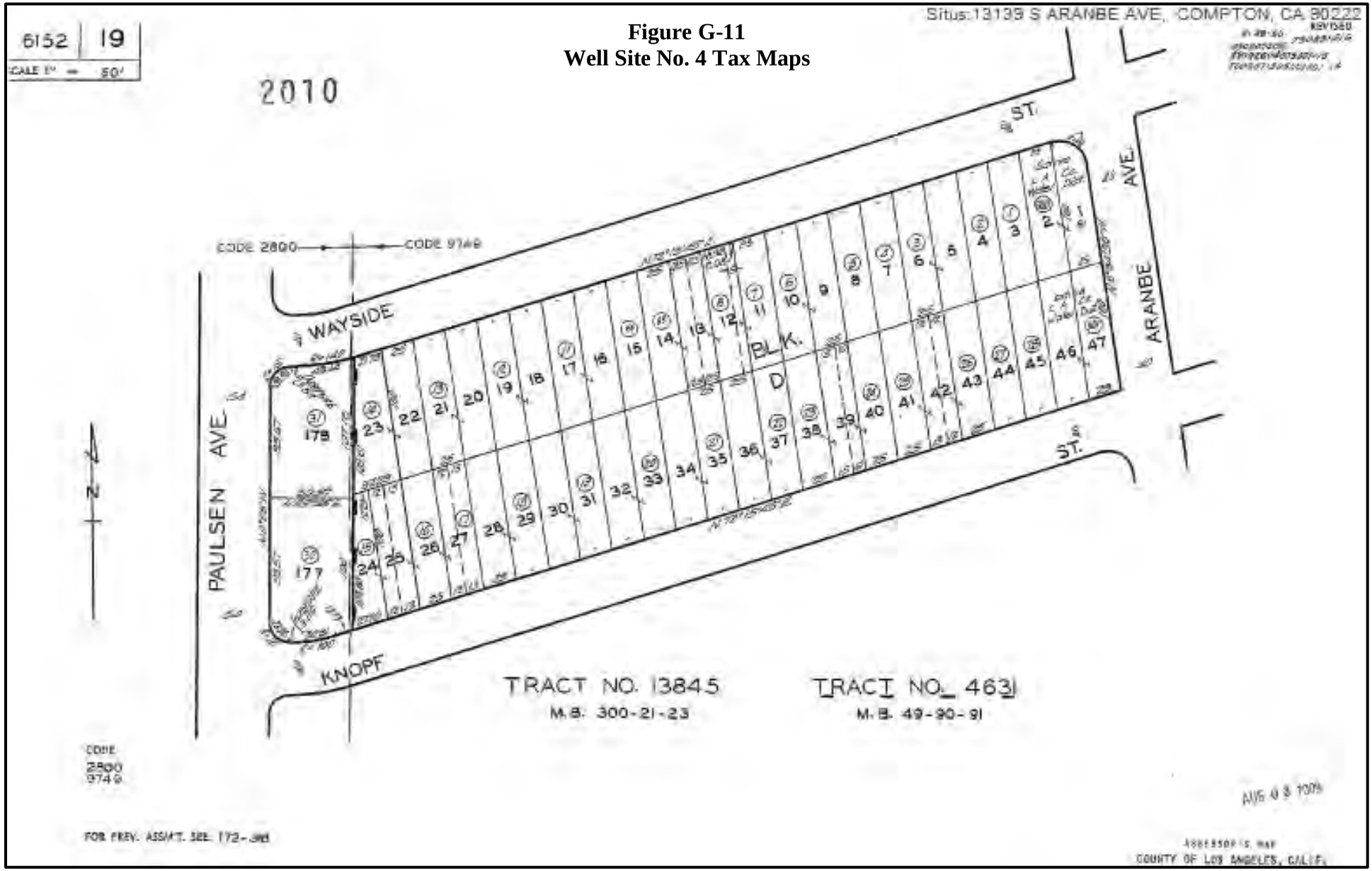
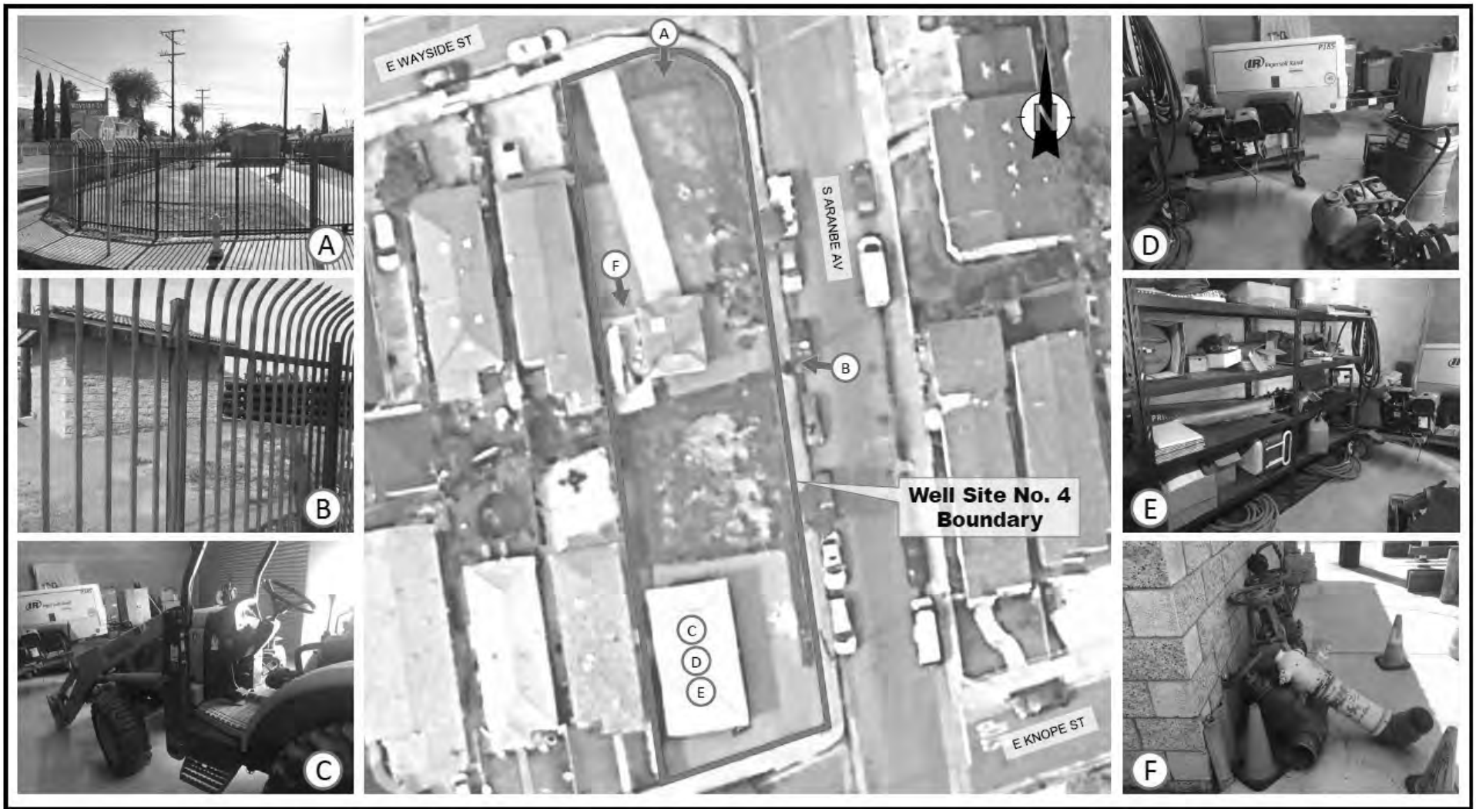


Figure G-12
Bidder's Notebook: Appendix A System Maps (Figure 8 of 9)
Well Site No. 4 – South Aranbe Avenue



Land (Well Site No. 5)

Well Site No. 5 is located at 2081-2083 East Stockwell Street, Compton, CA 90222, with parcel numbers: 6155-005-900 & 6155-005-901 and block and lot numbers: Tract Number 4631 Lot 58 Block M and Tract Number 4631 Lot 59 Block M. The land under Well Site No. 5 is ±4,398 square feet, generally flat and level, and rectangular shaped. It is zoned R-1 for single-family residential use and development. The Subject is currently a non-conforming use as it is used for government use in the water system. There is frontage along South Willowbrook Avenue. Figure G-14 and G-15 are tax and identification maps for Well Site No. 5.

Improvements*:* The land is vacant and there are no improvements. Environmental: We are not environmental engineers and have not been provided with an environmental assessment report. Except as noted herein, we assume that no environmental conditions remain on and/or are negatively affecting Well Site No. 5. ADA issues were not investigated.

The land under Well Site No. 5 is physically, functionally, and economically adequate for its current and continued use.

Figure G-13
Well Site No. 5 Tax Assessment
Parcel 6155-005-900

	2021 Roll Preparation	2020 Current Roll	RC	Year	1992 Base Value
Land	$ 15,606	$ 0	0	0	$ 15,606
Improvements	$ 0	$ 0	0	0	$ 0
Total	$ 15,606	$ 0			$ 15,606

Parcel 6155-005-901

	2021 Roll Preparation	2020 Current Roll	RC	Year	1992 Base Value
Land	$ 15,606	$ 0	0	0	$ 15,606
Improvements	$ 0	$ 0	0	0	$ 0
Total	$ 15,606	$ 0			$ 15,606

Figure G-14
Well Site No. 5 Tax Maps

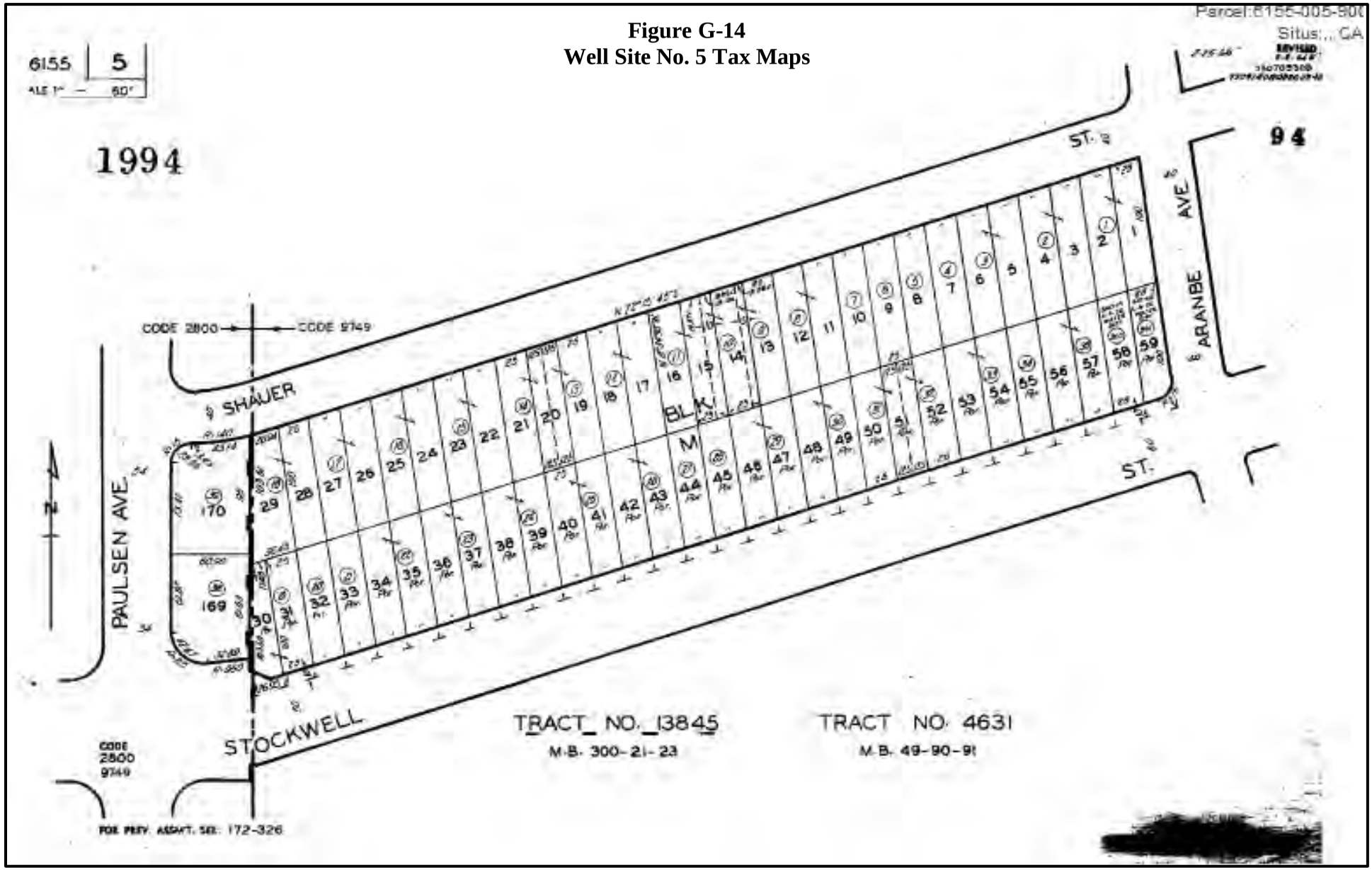


Figure G-15
Bidder's Notebook: Appendix A System Maps (Figure 9 of 9)
Well Site No. 5 – East Stockwell Street & South Aranbe Avenue



Private Easements

The length of the private easements is approximately 3,260 linear feet. The easements were created in situations where the water utility distribution pipe was not installed under the road, it was installed along the rear property lines of private houses that were set back-to-back.

Figure G-16
Partial System Map of Private Easements
(Map Provided by Suburban Water Systems)



H. APPRAISAL METHODOLOGY

The appraisal process is applied to develop a well-supported opinion of a defined value based on an analysis of pertinent general and specific data. An opinion of value can be developed with specific procedures that reflect three distinct methods of data analysis.

The utility and applicability of each approach are dependent upon the characteristics of the subject property or assets, market conditions, and the purpose of the analysis. The following sections provide a brief overview of the theoretical basis of the three traditional approaches to value.

Cost Approach

The cost approach is based on the principle of substitution. This principle affirms that a prudent buyer would pay no more for an asset than the cost to acquire a similar asset of equivalent desirability and utility without undue delay. The cost approach is based on the understanding that market participants relate value to cost. In this approach, the value of the assets is derived by subtracting the amount of depreciation of the reproduction or replacement of the assets. The cost of an asset as of a certain date may be developed as the estimated reproduction cost or replacement cost of the asset. The theoretical base (and classic starting point) for the cost approach is reproduction cost, but replacement cost is commonly utilized because it may be easier to obtain and can reduce the complexity of the depreciation analysis.

Comparable Sales (Market) Approach

The market approach to value is a procedure by which value can be estimated from prices paid in actual market transactions as well as asking prices for similar assets that are available for sale. The procedure is a comparison and correlation between the asset being appraised and other similar assets. Certain factors such as location, date of sale, physical characteristics, and technical and economic conditions relating to the transaction are analyzed for their comparable uniqueness. These transactions, with appropriate adjustments, will assist in determining the market approach value of the assets being appraised.

Income Approach

The income approach is based on the premise that the value of a security or asset is the present value of the future earning capacity that is available for distribution to the subject investors in the security or asset. The underlying principle in this approach is that buyers invest in assets compared to the subject with the expectation of receiving the anticipated future income.

Approaches Applied

Within this appraisal, the three approaches to value were considered in deriving the value of the four land parcels and the private easements. A specific weight was applied to each approach to value as deemed appropriate through a reconciliation process.

We have employed a comparable sales (market) approach in this analysis. An income approach and a cost approach were not employed.

The real property at Sativa Water Systems is comprised of two portions: 1) Four well sites owned in fee simple interest, comprised of land and improvements where the company conducts business and management operations and 2) private easements of approximately 3,260 linear feet for their pipelines and water distribution. Sativa Water Systems has the right to access, use, maintain, and repair these pipelines as necessary for the water system to operate, indefinitely.

To calculate the fee simple value of the four land parcels and the private easements interests included in the System, we have used the comparable sales approach to analyze a rate of value for residential land in Compton, where the Sativa Water System runs through. Adjustments for the private easements are then made accordingly. The adjustments convert the otherwise ordinary land rates of value into values for private easements. This is a typical approach to determine the value of easements.

I. HIGHEST AND BEST USE ANALYSIS

To determine the value of the four land parcels and the private easements, the appraiser must identify the highest and best use of the subject and must assume such highest and best use as the premise of value. Other types of value may assume other uses.

The 2020-2021 Edition of Uniform Standards of Professional Appraisal Practice unequivocally states the imperative of appraising market value only under the assumption of the highest and best use, in Standards Rule 1-3 (b).

> When necessary for credible assignment results in developing a market value opinion, an appraiser must:
>
> (a) identify and analyze the effect on use and value of existing land use regulations, reasonably probable modifications of such land use regulations, economic supply and demand, the physical adaptability of the real estate, and market area trends; and
>
> Comment: An appraiser must avoid making an unsupported assumption or premise about market area trends, effective age, and remaining life.
>
> (b) develop an opinion of the highest and best use of the real estate.
>
> Comment: An appraiser must analyze the relevant legal, physical, and economic factors to the extent necessary to support the appraiser's highest and best use conclusion(s)."

Highest and Best Use

The reasonably probable use of a property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity.[1]

Highest and Best Use of Land or a Site as Though Vacant

Among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property is based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements.

[1] *The Dictionary of Real Estate Appraisal*. 6th edition. (Chicago: Appraisal Institute, 2015), 109. Accessed on May 23, 2021.

The Four Criteria

Four basic criteria are considered and analyzed in determining the highest and best use of a property:

1. Physically possible. What uses are physically possible given the constraints of the size and physical characteristics of the site?

2. Legally permissible. What uses are permitted by zoning or other restrictions (i.e. deed restrictions) on the property?

3. Financially feasible. Of the physically possible and legally permitted uses, which are financially feasible in that they will produce a net return to the property owner?

4. Maximally productive. Of the financially feasible uses, which use will produce the highest net return, or result in the highest present value of the property?

Highest and Best Use of Land or a Site as though Vacant

The highest and best use of land or a site as though vacant is defined as: among all reasonable, alternative uses, the use that yields the highest present land value, after payments are made for labor, capital, and coordination. The use of a property is based on the assumption that the parcel of land is vacant or can be made vacant by demolishing any improvements.

The highest and best use of land or a site as though vacant assumes that a parcel of land is vacant or can be made vacant by demolishing any improvements. Land as though vacant is a fundamental concept of valuation theory and the basis for the cost approach.

Highest and Best Use of Property as Improved

The highest and best use of a property as improved is defined as the use that should be made of a property as it exists.

An existing improvement should be renovated or retained as long as it continues to contribute to the total value of the property, or until the return from a new improvement would more than offset the cost of demolishing the existing building and constructing a new one. The highest and best use of a property as improved pertains to the use that should be made of an improved property in light of its improvements. It is the use that maximizes an investment property's return on a long-term basis.

Highest and Best Use Conclusions

As Vacant

The four land parcels and the private easements are located in a residential neighborhood in Compton, CA. The neighborhood consists predominately of residential single-family homes. The determination of the highest and best use of each parcel is standard appraisal practice, as zoning or likely zoning is legally permissible. They would be physically possible as limitations such as geology, wetlands and unusual topography or parcel shape were taken into consideration. Development into residential use dependent on the zoning would be economically feasible, most profitable, and most probable.

We define highest and best in the traditional way, that reasonably probable use that is physically practical, legally permissible subject to reasonable likelihoods of variances, financially feasible and maximally productive.

The underlying fee simple land and the private easements at the Subject are all located in a residential neighborhood in Compton, CA. The neighborhood consists of primarily of residential single-family homes.

As Improved

Since this appraisal assumes that the four land parcels and the private easements are vacant land, without any improvements, we have not opined on the highest and best use of the four land parcels and the private easements, as it is currently improved.

J. SALES COMPARISON (MARKET) APPROACH

The sales comparison approach is based on the principle of substitution, which states that buyers and sellers will not pay more for or sell for less than, respectively, what other similar properties sell for. The sales comparison approach is the process in which a value estimate is derived by analyzing the sales of similar properties and comparing these properties to the appraised property. Often property characteristics that differ between a subject property and comparable sales properties are analyzed in the sales comparison approach to determine the adjustments to be made to the prices of comparable property. The comparative techniques of analysis applied in the sales comparison approach are fundamental to the valuation process and are used in the other approaches as well.

The sales comparison approach is a set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, then applying appropriate units of comparison and making adjustments to the sale prices of the comparable sales based on the elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered as though vacant; it is the most common and preferred method of land valuation when an adequate supply of comparable sales is available. To apply the sales comparison approach, an appraiser follows a systematic procedure:

1. Research the market to obtain information on sales transactions, listings, and offers to purchase or sell properties that are similar to the appraised property in terms of the value-impacting characteristics such as property type, date of sale, size, location, quality, condition, and property rights.

2. Select relevant units of comparison (e.g., income multipliers or a dollar per acre or per building square foot, dollar per seat, bed, room, or dollar per megawatt-hour) and develop a comparative analysis for each unit.

3. Compare comparable sale properties with the subject property using the elements of comparison and adjust the sale price of each comparable appropriately to the property being appraised or eliminate the sale property as a comparable. There are basic elements of comparison that should always be considered in sales comparison analysis. The first five elements of comparison in the list are considered "***transactional adjustments***," while the latter five are considered "***property adjustments***."

Transactional Adjustments	*Property Adjustments*
• real property rights conveyed	• location
• financing terms	• physical characteristics
• conditions of sale	• economic characteristics
• expenditures made right after purchase	• legal characteristics
• market conditions	• non-realty components of value

4. Reconcile the various value indications produced from the analysis of comparable sales into a single value indication or a range of values. In an imprecise market, subject to varying occupancies and economics, a range of values may be a better conclusion than a single value estimate.

Methodology

The four land parcels and the private easements traverse residential neighborhoods in Compton, California. This means that the water system runs through residential single-family lots. The four well sites are owned in fee simple and the private easements are zoned for this type of use. The sales comparison approach was utilized to calculate the rate of value for residential use.

Additionally, we employed an "across-the-fence" appraisal theory and approach to these utility-owned interests. While these parcels are currently being used for system operations to support wells, tanks, and pipelines, the value associated with each underlying land parcel or interest would be considered an "across-the-fence" value. If this utility were to need to acquire land interests, it would need to pay the going rates of value within the market. This means that if these parcels and interests were ever be put into market use, they would take on the zoning, development, and use, and highest and best use that is found adjacent to these parcels and interests; they would have the use and value found "across-the-fence" on the adjacent properties. As per across-the-fence appraisal theory and practice, we have appraised the subject parcels and interests under the highest and best uses and rates of value found amongst the adjacent properties for each parcel.

To value the land interests, a conclusion for the value of the fee simple land as-if vacant was determined. A sales comparison grid was prepared for residential land. Adjustments were made whenever deemed necessary.

Transaction/Comparable Data Universe

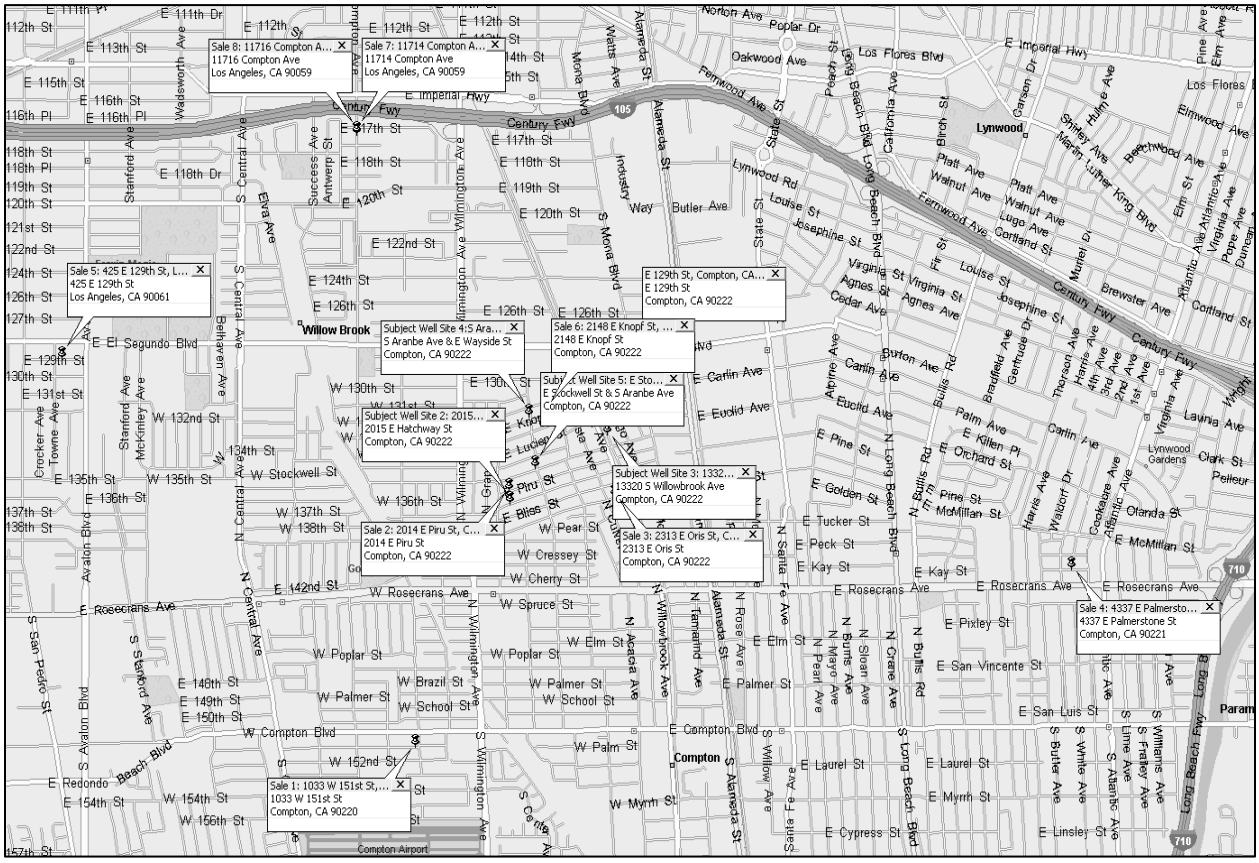
The analysis focused on sales of comparable vacant land sites of single-family residential lots that are ready for single-family development that was announced and closed within the same market as the four land parcels and the private easements. The sales must be arms-length, recent, and similar to the subject in terms of physical and locational characteristics. An important qualification of each comparable sale was the level of supporting data that is publicly available. It is common for a significant number of transactions to be excluded from the sales comparison approach. Common disqualifiers include a lack of supporting data and partial interest differences or being sales that date back to different market periods.

Comparable Sales

The individual comparable sale fact sheets and other sales comparison approach support materials are included within Appendix 2. Transactions chosen for inclusion and comparison in the analysis provided the best opportunity to make adjustments that would be critical to the sales comparison

technique. Although it is difficult to adjust for factors unique to each transaction, a discussion of the various types of adjustments considered for comparable sales analyses is included.

Figure J-1
Map of Comparable Sales



The appraiser estimates the degree of similarity or difference between the subject property and the comparable sales by considering various elements of comparison. These elements are:

- real property rights conveyed
- financing terms
- conditions of sale
- expenditures made right after purchase
- market conditions
- location
- physical characteristics
- economic characteristics
- legal characteristics
- non-realty components of value

Sequence of Adjustments

The sequence in which adjustments are applied to the comparable sales transactions is determined by the market data and the appraiser's analysis of that data. The first five elements of comparison

in the list are considered "transactional adjustments," while the latter five are considered "property adjustments." The transactional adjustments are generally applied in the order listed. The property adjustments are usually applied after the transactional adjustments but in no particular order. The five categories of property adjustments—correspond to the criteria of the highest and best use.

Property Rights Conveyed

A transaction price is always predicated on the property interest conveyed. An assumption that the site is vacant and ready for development and it is held in a fee simple estate is a hypothetical condition. Since this assumption is consistent for the subject as well as the comparable land sales transactions, no adjustments were necessary.

Financing Terms

This adjustment element is commonly known as the cash equivalency adjustment. The transaction price of one property may differ from that of an identical property due to different financing arrangements. For example, the purchaser of a property may have assumed an existing mortgage at a favorable interest rate. In another case, a developer or seller may have arranged a buydown, paying cash to the lender so that a mortgage with a below-market interest rate could be offered. In both cases, the buyers probably paid higher prices for the properties to obtain below-market financing. The general availability of financing and the loan-to-value ratio can be significant factors that influence property value, and the specific financing terms in a transaction can also affect the price. In some situations, financing and conditions of sale are interdependent, and appraisers must be careful not to double-count this influence when making quantitative adjustments. The comparable land sales transactions are assumed to be cash paid to the seller; therefore, no adjustments were necessary.

Conditions of Sale

This adjustment element usually reflects the motivations of the buyer and the seller and is required when a sale is non-arm's length. The definition of market value requires "typical motivations of buyers and sellers" with no pressure on either party to consummate the sale. An adjustment for conditions of sale usually reflects the motivation of either a buyer or a seller who is under undue duress to complete the transaction. In many situations, the conditions of sale significantly affect transaction prices.

For example, a developer may pay a premium for lots needed in a site assemblage. A sale may be transacted at a below-market price if the seller needs cash in a hurry. A foreclosure could also be interpreted as a non-arm's length sale. If the details of the transaction are too difficult to verify, an adjustment for conditions of sale may not be usable but it can still be discussed and may be useful in reconciliation.

All of the comparable sales had the same conditions of sale and no adjustments are necessary.

Expenditures Made Immediately After Purchase

A knowledgeable buyer considers expenditures that will have to be made upon purchase of a property because these costs affect the price the buyer agrees to pay. Such expenditures may include:

- costs to cure deferred maintenance
- costs to demolish and remove a portion of the improvements
- costs for additions or improvements to the property
- costs to petition for a zoning change
- costs to remediate environmental contamination

There were no adjustments made to the comparable land sales transactions for this element.

Market Conditions (Date of Sale or Time Adjustment)

Comparable sales that occurred under market conditions different from those applicable to the subject on the effective date of appraisal require adjustment for any differences that affect their values. An adjustment for market conditions is made if general property values have increased or decreased since the transaction dates.

Although the adjustment for market conditions is often referred to as a "***time***" adjustment, time is not the cause of the adjustment. Market conditions that change over time create the need for an adjustment, not time itself. In other words, increases or decreases in property values in the market over time are the cause of the adjustment and time is the basis of the adjustment. If market conditions have not changed, no adjustment is required even though considerable time may have elapsed.

To calculate the market conditions in the subject area, we analyzed the Zillow Median Home Value Index of Compton. These median home values and percent monthly changes are depicted in Table J-2 and J-3.

The average annual change is approximately 8.94 percent. We have concluded a 9.0 percent annual increase from 2019 to 2021. We calculated the market conditions through April of 2021 and is assumed to continue with the same trends into the future.

Table J-2
Market Conditions Analysis

Year	2017											
Month	January	February	March	April	May	June	July	August	September	October	November	December
Median Home Value	$344,000	$347,000	$350,000	$353,000	$358,000	$362,000	$366,000	$369,000	$372,000	$374,000	$378,000	$382,000
Percent Change Monthly	-	0.87%	0.86%	0.86%	1.42%	1.12%	1.10%	0.82%	0.81%	0.54%	1.07%	1.06%

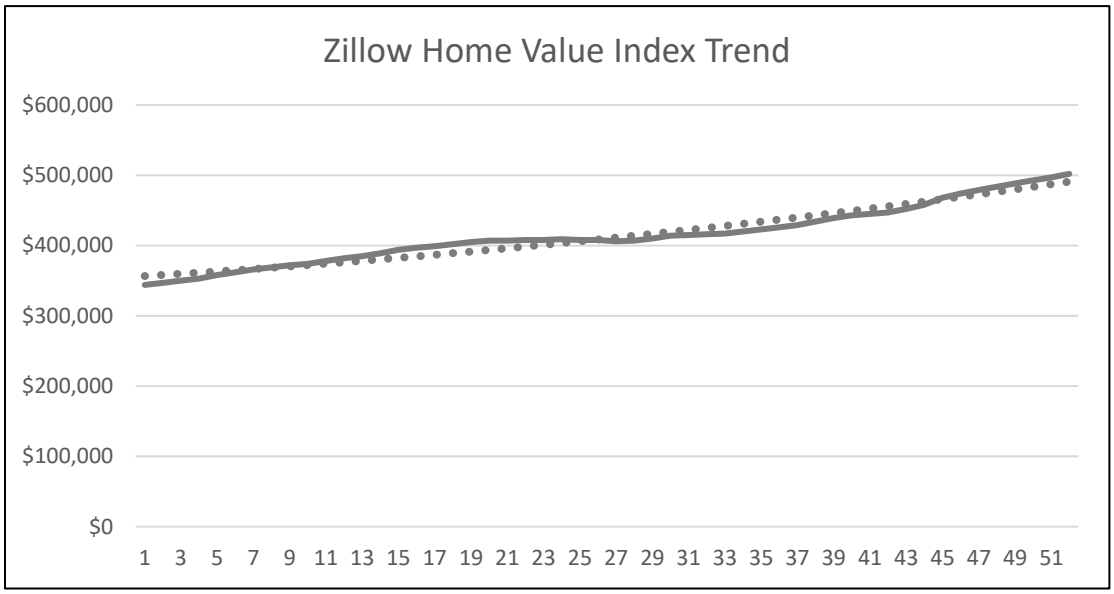
Year	2018											
Month	January	February	March	April	May	June	July	August	September	October	November	December
Median Home Value	$385,000	$389,000	$394,000	$397,000	$399,000	$402,000	$405,000	$407,000	$407,000	$408,000	$408,000	$409,000
Percent Change Monthly	0.79%	1.04%	1.29%	0.76%	0.50%	0.75%	0.75%	0.49%	0.00%	0.25%	0.00%	0.25%

Year	2019											
Month	January	February	March	April	May	June	July	August	September	October	November	December
Median Home Value	$408,000	$408,000	$406,000	$407,000	$410,000	$414,000	$415,000	$416,000	$417,000	$420,000	$423,000	$426,000
Percent Change Monthly	-0.24%	0.00%	-0.49%	0.25%	0.74%	0.98%	0.24%	0.24%	0.24%	0.72%	0.71%	0.71%

Year	2020											
Month	January	February	March	April	May	June	July	August	September	October	November	December
Median Home Value	$429,000	$434,000	$439,000	$443,000	$445,000	$447,000	$452,000	$458,000	$468,000	$474,000	$479,000	$484,000
Percent Change Monthly	0.70%	1.17%	1.15%	0.91%	0.45%	0.45%	1.12%	1.33%	2.18%	1.28%	1.05%	1.04%

Year	2021			
Month	January	February	March	April
Median Home Value	$488,000	$493,000	$497,000	$502,000
Percent Change Monthly	0.83%	1.02%	0.81%	1.01%

Table J-3
Market Conditions – Zillow Median Home Value Trend



Location

An adjustment for location within a market area may be required when the locational characteristics of a comparable property are different from those of the subject property. Excessive locational differences may disqualify a property from use as a comparable sale. The comparable land sales transactions and the four subject land parcels and private easements are in similar locations; therefore, no adjustments were necessary.

Size

Typically, buyers pay premiums for smaller properties relative to larger ones partly because the total investment is lower, and more buyers are competing for the smaller properties. Residential zoning has a minimum lot size requirement of 5,000 under the R-1 zoning ordinance. The comparable sales had similar sizes and no adjustments were necessary.

Zoning/Use

The zoning of a parcel determines how the parcel can legally be used or developed. Some improvements and development would also require additional permits or approvals. The comparable sales were single-family residential lots that were ready for development. No adjustments were necessary for this category.

Utility/Corner/Frontage

The shape of a parcel can affect the overall utility of any development. Having more frontage along the road can be beneficial for some types of properties that would benefit from extra visibility. None of the comparable sales were unique with utility/corner/frontage characteristics, therefore no adjustments were necessary.

Condition

The condition of the four land parcels and the private easements and comparable sales were considered. The comparable sales were improved with single-family residential lots with older single-family homes that would be demolished for redevelopment. Sale 2 and 4 had improvements that needed to be demolished for redevelopment and thus received a negative adjustment, as necessary.

Sales Adjustment Grid

Table J-4 is the sales adjustment grid. The individual comparable sale fact sheets and other sales comparison support data is included within Appendix 2.

Table J-4: Sales Adjustment Grid

	Subject	***Sale One***	***Sale Two***	***Sale Three***	***Sale Four***	***Sale Five***	***Sale Six***	***Sale Seven***	***Sale Eight***
Address:	Residential Land	1033 W 151st St	2014 E Piru St	2313 Oris St	4337 E Palmerstone St	435 E 129t St	2148 E Knopf St	11714 Compton Ave	11716 Compton Ave
Town:	Compton, CA	Compton, CA	Compton, CA	Compton, CA	Compton, CA	Compton, CA	Compton, CA	Compton, CA	Compton, CA
Property Data									
Sale Date:	Apr-2021	Mar-2019	Dec-2019	Dec-2019	Jan-2019	May-2021	Nov-2020	Apr-2021	Apr-2021
Sale Price:		$150,000	$100,000	$185,000	$199,000	$240,000	$160,000	$145,000	$145,000
Property Type	Land	Land	Land	Land	Land	Land	Land	Land	Land
Estate:	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Price Per Lot		***$150,000***	***$100,000***	***$185,000***	***$199,000***	***$240,000***	***$160,000***	***$145,000***	***$145,000***
Per Per SF		***$34***	***$20***	***$33***	***$37***	***$46***	***$65***	***$48***	***$27***
Sequential Adjustments									
Property Rights Conveyed:	-	0%	0%	0%	0%	0%	0%	0%	0%
Terms of Sale/Financing:	-	0%	0%	0%	0%	0%	0%	0%	0%
Conditions of Sale:	-	0%	0%	0%	0%	0%	0%	0%	0%
Market Conditions:	-	19%	12%	12%	20%	0%	4%	0%	0%
Adjusted Price Per Lot		***$177,851***	***$112,255***	***$207,717***	***$239,727***	***$239,053***	***$166,549***	***$144,893***	***$144,893***
Adjsted Price Per SF		***$41***	***$23***	***$37***	***$44***	***$46***	***$67***	***$48***	***$27***
Other Adjustments									
Lot Size (SF)	5,000	4,389	4,930	5,668	5,446	5,201	2,470	3,001	5,446
Wetlands (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total Useable Acres	-	0.10	0.11	0.13	0.13	0.12	0.06	0.07	0.13
Number of Lots	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Size Adjustment	-	0%	0%	0%	0%	0%	0%	0%	0%
Potential Development/Use:		SFH	SFH	SFH	SFH	SFH	SFH	SFH/Mixed Use	SFH/Mixed Use
Zoning:	R-1	C-L	R-1	R-1	R-1	R-1	R-1	SP	SP
Zoning/Use Adjustment	-	0%	0%	0%	0%	0%	0%	0%	0%
Utility/Corner/Frontage:	Average	Average	Average	Average	Average	Average	Average	Average	Average
Utility/Corner/Frontage Adjustment:		0%	0%	0%	0%	0%	0%	0%	0%
Site Location:	Average	Average	Average	Average	Average	Average	Average	Average	Average
Location Adjustment	-	0%	0%	0%	0%	0%	0%	0%	0%
Water/Sewer:	Yes	Public Sewer	Public Sewer	Public Sewer	Public Sewer	Public Sewer	Public Sewer	Public Sewer	Public Sewer
Water/Sewer Adjustment:		0%	0%	0%	0%	0%	0%	0%	0%
Site Condition:	Average	Average	Average-	Average	Average-	Average	Average	Average	Average
Condition Adjustment:	-	0%	3.96%	0%	2.26%	0%	0%	0%	0%
Total Adjustment by Addition:	-	0%	4%	0%	2%	0%	0%	0%	0%
Total Adjustment by Multiplication:	-	0%	4%	0%	2%	0%	0%	0%	0%
Final Adjusted Price Per Lot		***$177,851***	***$116,700***	***$207,717***	***$245,148***	***$239,053***	***$166,549***	***$144,893***	***$144,893***
Final Adjusted Price Per SF		***$41***	***$24***	***$37***	***$45***	***$46***	***$67***	***$48***	***$27***

Sales Comparison Approach Conclusion

The concluded unit price for a typical vacant residential single-family lot is $40 per square foot as detailed in Table J-5. We have analyzed the comparable sales on both a price per lot and price per square foot basis.

Table J-5
Sales Comparison Approach
Adjusted Unit Price Conclusion

	Range		Difference	Average	Median	Average Adjusted $/SF based on Min Lot Size
Unadjusted Price per Lot	*$100,000*	*$240,000*	*$140,000*	*$165,500*	*$155,000*	
Adjusted Price per Lot	*$116,700*	*$245,148*	*$128,448*	*$180,350*	*$172,200*	*$36*
	Range		*Difference*	*Average*	*Median*	Average Adjusted $/Lot Based on Min Lot Size
Unadjusted Price Per SF	*$20*	*$65*	*$44*	*$39*	*$35*	
Adjusted Price Per SF	*$24*	*$67*	*$44*	*$42*	*$43*	*$208,833*

For the four well sites that are owned in fee simple, Well Site No. 2 and No. 3 required a negative size adjustment of 5 percent and 10 percent, respectively. Table J-6 provides a listing of each parcel with size adjustments along with the concluded value for the four land parcels owned in fee simple.

Table J-6
Summary of Sales Comparison Approach
Land Parcels Owned in Fee Simple

Description	*Land Area (SF)*	*Parcel Number*	*Address*	*Size Adjustment (%)*	*Concluded Unit Price / SF*	*Value*
Well Site No. 2	6,553	6155-017-900	2015 E. Hatchway Street	-5%	$ 40.00	$ 249,000
Well Site No. 3	7,203	6154-010-900	13320 S. Willowbrook Ave	-10%	$ 40.00	$ 259,000
Well Site No. 4	4,934	6152-019-901	13139 S. Aranbe Avenue	0%	$ 40.00	$ 197,000
Well Site No. 5	4,398	6155-005-900/901	2083 E. Stockwell Street	0%	$ 40.00	$ 176,000

K. PRIVATE EASEMENTS

The length of the private easements is approximately 3,260 linear feet. The easements were created in situations where the water utility distribution pipe was not installed under the road, it was installed along the rear property lines of houses that were set back-to-back.

Private easements are considered partial interests whereby the landowner does not have the entire bundle of rights associated with the land. In this situation, the water utility company has the right to access, use, maintain, and repair its pipelines as necessary for the successful operation of the water system. The water utility pipelines have minimal impact on the land parcels. Figure K-1 is a partial system map that identifies segments of the private easements.

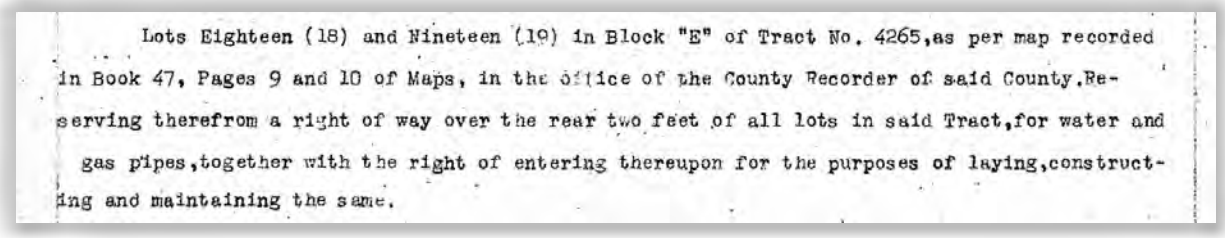
Figure K-1
Partial System Map of Private Easements
(Map Provided by Suburban Water Systems)



Figure K-2 includes sample excerpts from four historical residential deeds with private easements for water utility pipes within the Sativa Water System.

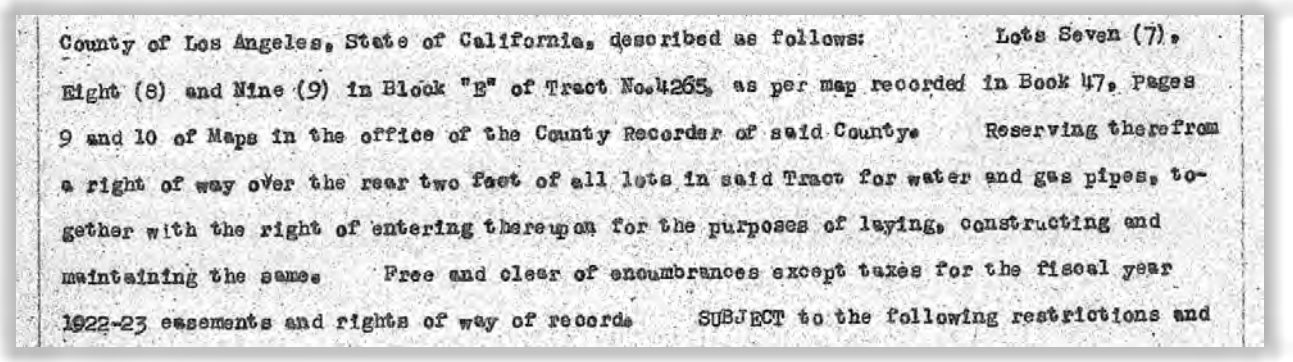
Figure K-2
Excerpt from Historical Deeds Along the System

Tract 4265: Lots 18 and 19 in Block "E" – Easement for water and gas pipes
(Information Provided by Suburban Water Systems)



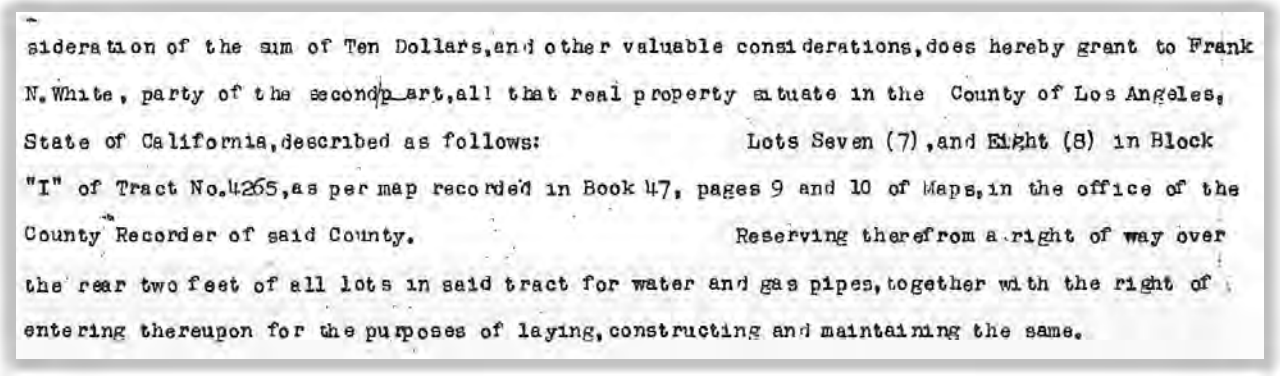
Lots Eighteen (18) and Nineteen (19) in Block "E" of Tract No. 4265,as per map recorded in Book 47, Pages 9 and 10 of Maps, in the office of the County Recorder of said County.Reserving therefrom a right of way over the rear two feet of all lots in said Tract,for water and gas pipes,together with the right of entering thereupon for the purposes of laying,constructing and maintaining the same.

Tract 4265: Lots 7, 8, and 9 in Block "E" – Easement for water and gas pipes
(Information Provided by Suburban Water Systems)



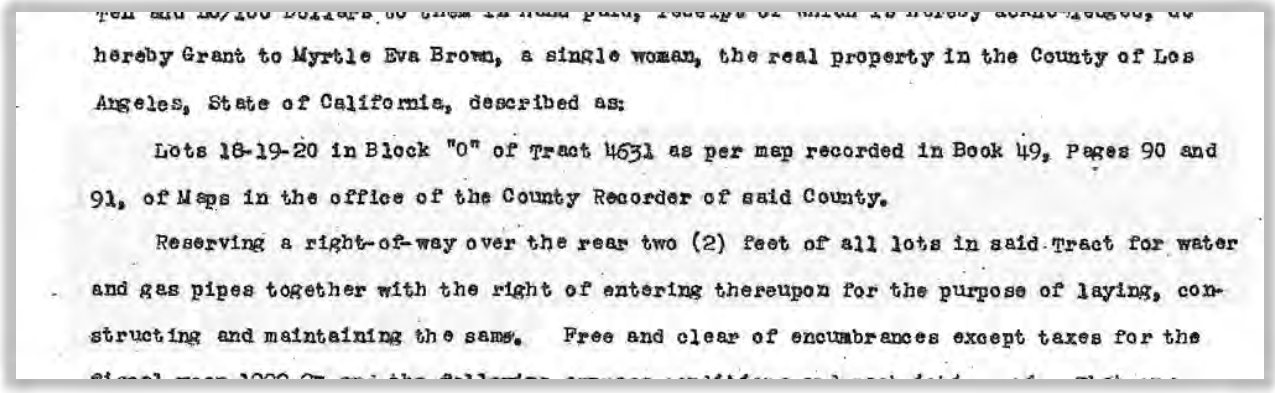
County of Los Angeles, State of California, described as follows: Lots Seven (7), Eight (8) and Nine (9) in Block "E" of Tract No.4265, as per map recorded in Book 47, Pages 9 and 10 of Maps in the office of the County Recorder of said County. Reserving therefrom a right of way over the rear two feet of all lots in said Tract for water and gas pipes, together with the right of entering thereupon for the purposes of laying, constructing and maintaining the same. Free and clear of encumbrances except taxes for the fiscal year 1922-23 easements and rights of way of record. SUBJECT to the following restrictions and

Tract 4265: Lots 7 and 8 in Block "I" – Easement for water and gas pipes
(Information Provided by Suburban Water Systems)



sideration of the sum of Ten Dollars,and other valuable considerations,does hereby grant to Frank N.White, party of the second part,all that real property situate in the County of Los Angeles, State of California,described as follows: Lots Seven (7),and Eight (8) in Block "I" of Tract No.4265,as per map recorded in Book 47, pages 9 and 10 of Maps,in the office of the County Recorder of said County. Reserving therefrom a right of way over the rear two feet of all lots in said tract for water and gas pipes,together with the right of entering thereupon for the purposes of laying,constructing and maintaining the same.

Tract 4631: Lots 18-19-20 in Block "O" – Easement for water and gas pipes
(Information Provided by Suburban Water Systems)



hereby Grant to Myrtle Eva Brown, a single woman, the real property in the County of Los Angeles, State of California, described as:

Lots 18-19-20 in Block "O" of Tract 4631 as per map recorded in Book 49, Pages 90 and 91, of Maps in the office of the County Recorder of said County.

Reserving a right-of-way over the rear two (2) feet of all lots in said Tract for water and gas pipes together with the right of entering thereupon for the purpose of laying, constructing and maintaining the same. Free and clear of encumbrances except taxes for the

Since the lots are situated back-to-back and the easement is the rear two feet of each lot, the overall width of the private easements (two feet + two feet) is four feet. This information was confirmed by the deed excerpts in Figure K-2.

The total lengths of the land interests in the private easements consist of 3,260 linear feet. To determine the area of the easements, we have multiplied the width by the total lengths of the private easements.

$$Area = width\ x\ length = 4\ feet\ x\ 3{,}260\ feet$$

$$Area = 13{,}040\ square\ feet = 0.30\ acres$$

To calculate the value of these interests, we need to first calculate the value of the fee simple underlying land. We have performed a sales comparison approach on vacant residential single-family lots ready for development in order to calculate a rate of value for the underlying land.

In Section J, we concluded a $40 per square foot rate of value for residential single-family lots ready for development. Therefore, multiplying this rate of value by the area of the private easements results in the value of the underlying fee simple land.

$$Fee\ Simple\ Value_{\ (Easement\ Land)} = \$34/sf\ x\ 13{,}040\ feet = \$521{,}600$$

Bundle of Rights

An appraisal provides an opinion of value for a given interest in an asset or real property. Different interests have different rights, and those rights can have significantly different values. Sometimes these interests are referred to as estates. Therefore, the appraiser must clearly and completely report what interest, estate, and rights have been appraised.

Most frequently, real estate appraisals give values in terms of fee simple interests, leased fee interests, or leasehold interests, and business appraisals give either undivided or partial interests. However, there are many interests in a piece of real property, such as:

- Fee Simple Interest/Estate
- Leased Fee Interest/Estate
- Leasehold Interest/Estate
- **Easement**
- Right of Way
- Appurtenant Rights
- Condominium
- Tenancy in Common
- Timeshare
- Water Rights
- Air Rights
- Mineral Rights
- Transferrable Development Rights
- Temporary/Permanent Rights
- Undivided Interest
- Partial Interest
- Controlling/Non-Controlling Interest
- Majority/Minority Interest

Unencumbered fee simple ownership is the ownership most people think of when they think of owning an asset or real property. This is typically how most homeowners own their home. Unencumbered fee simple ownership means the owner owns the full "*bundle of rights*" to the property. The owner can occupy and use the property as the owner wishes. The owner can rent out a portion of the property or rent the entire property, or the owner can sell or subdivide the property. The owner can also build new improvements, modify the existing improvements, or even demolish everything at will.

As an unencumbered fee simple owner, may:

- Possess
- Control
- Enjoy/Use
- Exclude
- Dispose of/Sell
- Lease
- Devise by will
- Encumber
- Build or destroy
- Dedicate, or give away

Private ownership of real property rights is guaranteed by the US Constitution but it is subject to certain restrictions, known as the four powers of government. The four powers of government are:

1. Taxation is the right of the government to raise revenue through assessments on goods, products, and rights.
2. Eminent Domain is the right of the government to take private property for public use upon payment of just compensation.
3. Police Power is the right of the government through which property is regulated to protect public safety, health, morals, and general welfare.
4. Escheat is the right of government that gives the state or a local government (e.g., township or county) titular ownership of a property when its owner dies without a will or any statutory heirs.

Unencumbered fee simple ownership is as pure as it gets, but it is not unlimited. The Government at all levels has rights over even unencumbered fee simple estates, and they regularly exercise this authority. So unencumbered fee simple ownership means only that no part of the bundle of rights inherent in unencumbered fee simple ownership has yet been divided off or separated, sold, given, or otherwise transferred to another party.

The total range of private ownership interests in real property is called the bundle of rights and is known as the "*bundle of rights theory*." Imagine a bundle of sticks in which each "stick" represents a distinct and separate right or interest. The bundle of rights contains all the interests in real property, including the right to use the real estate, sell it, lease it, enter it, and give it away, and each "stick" can be separated from the bundle and traded in the market.

Any easement on the property separates the bundle of rights. If the property owner has an easement on a property, the bundle of rights has then been divided into different levels of interests on the property. Depending on the type of easement and what they entail, the property owner has fewer rights to use the property compared to a fee simple ownership.

Table K-1 identifies how different bundles of rights can be segregated. It also provides an estimated range of the percentage of fee those rights typically entail as well as examples of potential types of easements by category.

Table K-1
Easement Matrix
From an article titled "Easement Valuation"
(by Donald Sherwood, SR/WA)

EASEMENT VALUATION MATRIX

Percentage of Fee	Comments	Potential Types of Easements
90% - 100%	Severe impact on surface use Conveyance of future uses	Overhead electric Flowage easements Railroad ROW Irrigation canals Access roads
75% - 89%	Major impact on surface use Conveyance of future uses	Pipelines Drainage easements Flowage easements
51% - 74%	Some impact on surface use Conveyance of ingress/egress rights	Pipelines Scenic easements
50%	Balanced use by both owner and easement holder	Water or sewer lines Cable line Telecommunications
26% - 49%	Location along a property line, location across non usable land area	Water or sewer line Cable lines
11% - 25%	Subsurface or air rights that have minimal effect on use and utility Location with a setback	Air rights Water or sewer line
0% to 10%	Nominal effect on use and utility	Small subsurface easement

The "Easement Valuation" article by Donald Sherwood, SR/WA is included in Appendix 3 of this report.

Ratio of Value of Private Easements to Value of Fee Simple Land

These private easements would include the right to access, occupy, repair, and maintain these water pipes for the water utility system to operate and serve the community. These water pipes are subsurface, and they do not disturb the primary activity at the larger parcels.

Thus, we have concluded \the interests associated with these water pipes would be 25 percent of the fee of the land. Consequently, the fee simple rights that are not owned by Sativa Water Company are the remaining 75 percent of the fee simple land.

$$Value\ of\ Private\ Easements = \%\ of\ Fee_{\text{Water Pipe}} \text{ x Value of Easement Land}$$

$$Value\ of\ Private\ Easements = 25\%\ x\ \$521{,}600 = \$130{,}400$$

Therefore, the value of the land interests in private easements after rounding is ***$130,000***, as of April 20, 2021.

L. RECONCILIATION AND CONCLUSION

Reconciliation is the final integral quality control assessment of the appraisal process before the final opinion of value. In this stage, the appraiser reexamines the strengths and weaknesses of each value approach, the accuracy of calculations, the credibility and sufficiency of data, among other key factors relative to the appraisal assignment to support a credible opinion of value. There are two considerations one must weigh when applying various approaches to value.

The first consideration is that appraisers should use those approaches commonly utilized by market participants. Appropriateness, accuracy, and quantity of evidence are the criteria with which an appraiser forms a meaningful, defensible final value estimate. These criteria are used to analyze multiple value indications within each approach and to reconcile the indications produced by the different approaches into a final estimate of defined value. For example, if market participants are primarily interested in income-earning potential, the final estimate may be closer to the conclusion from income capitalization than the conclusion from the sales comparison.

The second consideration is that the supply of data within a sub-market, or within a particular time frame, may necessitate the exclusion of approaches commonly employed in the larger market or at different points in time.

Following appropriate appraisal methodology, we have considered the three approaches to value and have relied upon the sales comparison (market) approach, which is the most appropriate for this analysis.

Market Conditions – COVID-19 Effect on Economy

The full economic impact of the COVID-19 pandemic is unknown as it continues to impact many aspects of daily life and the global economy. Economists are upgrading their US growth forecasts as Covid vaccinations accelerate and after Washington enacted a $1.9 trillion relief package, known as the American Rescue Plan Act of 2021. The US Federal Reserve continues to closely monitor the post-stimulus effect on the economy with its goals of maximum employment and a 2 percent inflation.

Goldman Sachs is calling for 2021 US GDP growth of 6.9 percent, the fastest since 1984. For average Americans, this optimism signals a stronger jobs market and better prospects for prosperity after a dreadful 2020. Morgan Stanley expects the US unemployment rate will drop below 5 percent by the end of 2021 and below 4 percent by the end of 2022.

Beyond the government rescue measures, the economic outlook is getting a boost from serious progress in defeating the pandemic. The acceleration in the rollout of vaccines, along with declining rates of deaths and cases, is raising hope that health restrictions depressing the economy could be lifted earlier than expected.

The reader is cautioned and reminded that the conclusions presented in this report apply only as of the effective date indicated. MRV Consulting makes no representation as to the effect on the entity of this event, or any event, after the effective date.

Conclusion

Based on our analysis, methodology, and prevailing market conditions, the value of the fee simple interest in the four land parcels is ***$882,000*** and the value of the land interests in the private easements is ***$130,000***. The effective date of the analysis is April 20, 2021.

APPENDIX 1

PROFESSIONAL QUALIFICATIONS

Qualifications of Joseph James Calvanico, MAI, FRICS

Joseph Calvanico was responsible for the appraisal of the four land parcels and private easements within the Sativa Water System and was a significant contributor to the narrative appraisal report.

With over 35 years of experience, Joseph J. Calvanico is recognized as a real estate and equipment appraisal expert. He has served thousands of clients, both large and small, by providing property tax and property appraisal consulting services.

Mr. Calvanico is experienced in property valuation and taxation work involving many types of property, including commercial and industrial, multi-residential, and machinery and equipment. His work has supported matters related to financial reporting, tax documentation, bankruptcy, disputes, and expert testimony. His areas of expertise include real property appraisals, personal property appraisals, utility appraisals, hospitality valuation, appraisals for bankruptcy cases, as well as property tax management.

Mr. Calvanico is a former Big 4 Accounting Firm partner and has run two national practices for large accounting firms. He has served as an expert witness in federal, state, and local court proceedings and has testified before state legislatures. He is a frequent speaker on the subject of property value and property taxation and has authored over 100 articles on property value related subjects.

Education

- M.S. Real Estate Law, John Marshall Law School
- B.A. Economics, University of Wisconsin-Milwaukee

Designations & Accreditations

- The Appraisal Institute, MAI, Member
- American Society of Appraisers, ASA, Accredited Senior Appraiser
- Institute of Professionals in Taxation, CMI, Member
- Association of Machinery & Equipment Appraisers, CEA, Appraiser
- Royal Institute of Chartered Surveyors, FRICS, Fellow
- Certified General Appraiser:

California (Temporary Licence by Reciprocity)	New York
Illinois	Pennsylvania
Indiana	Texas
Florida	Washington, DC
Maryland	Virginia
Nebraska	

Leadership

- The Appraisal Foundation, Chair Industry Advisory Council
- RICS Midwest Chapter, Vice President of Public Affairs
- iCAP (Iowa Communities Assurance Pool), Board of Directors

Professional History

- Loop Capital Financial Consulting Services, LLC
- Madison Appraisal, LLC
- Navigant Consulting, Inc.
- Crowe Horwath LLP
- Grant Thornton LLP
- General Electric
- KPMG LLP
- Price Waterhouse
- Morton Thiokol / Morton International

Training

- Conservation Easement Valuation Certificate, Appraisal Institute
- Marine Survey & Valuation Credential, American Society of Appraisers
- REIT School Coursework
- Interview and Interrogation Techniques, Reid School

Teaching

- Loyola University School of Law | Guest Lecturer on Property Tax
- Webinar Series on Property Tax | Online Instructor
- Podcast Series on Property Tax | Online Instructor
- Institute for Professionals in Taxation | Lecturer
- McHenry County College | Professor Property Appraisal

Recent Talks:

- Northern California Chapter of Appraisal Institute – Fall 2014

Testimony:

- Utah Legislature | Expert Witness
- Indiana State Tax Commission | Expert Witness
- Federal Bankruptcy Court | Expert Witness
- Local Property Tax Appeal Hearings Nationwide | Expert Witness

Publications:

Author of over 100 articles, including:

- *Economic Obsolescence of Manufacturing Facilities*

- *Useful Lives of Machinery & Equipment Employed in Salt Production*
- *Economic Life of Improvements Associated with Salt Production Modified Expected Value Method*
- *Bounty-Hunting in Property Taxation*
- *Property Tax Trends – The Impact of Environmental Contamination on the Value of Real Estate*
- *Overlooked Standard Could Save Business Taxes on Equipment*
- *Perspectives in State and Local Taxation*
- *The Taxing Predicament of Bank Consolidations*
- *The Changing Role of Bank Branches Saving Property Tax Dollars*
- *The Obsolescence Principle: A Tax-Savings Strategy*
- *Determining Abnormal Obsolescence of Rural Electric Cooperatives for Property Taxation*
- *Gimme Shelter*
- *Economic Obsolescence in the Aircraft Industry Is a Company in Control of Its Fixed Assets? Easement Come, Easement Go*
- *Madison Two Associates v. Maria Pappas*
- *Using the State of the Real Estate Industry for Tax Advantages*
- *The Diamond-Star Decision*
- *Methods for Calculating Obsolescence*
- *Property Tax Issues for Lessees*

Media

- Wall Street Journal | Assessor Survey Story | 2011
- Elkhart Times | Assessor Survey Story | 2011
- Real Estate Publications Group | State of the RE Market | 2011
- Rutland Vermont News | Story on Property Tax Appeal | 2003
- Ames Tribune | Story on Property Tax Appeal | 2000
- Practical Homeowner | Story on Value of Home Renovations | 1991

Involvement

- Infraguard | Treasurer
- Illinois Attorney Registration & Disciplinary Commission | Hearing Board
- MiamiCrime Commission | Board of Directors
- YMCA Camp Duncan | Board of Directors
- MiamiPublic Schools | Principal-for-A-Day Program
- The John Marshall Law School – Center For Real Estate Law, Advisory Board

APPENDIX 2

COMPARABLE SALES

1033 W 151st ST
COMPTON, CA 90220

4,389 Lot Size	$34 $/Lot Size	0.100 Lot Acreage	Land SP $150,000	Sold





Expected on Market	
Area	1140 Compton S of Rosecrans, E of Central,W o
Subdivision	
Zoning	CORL*
Horse Property	
Present Use	
Potential Usage	
MLS#	PW19027912MR
APN	6142-026-016

Directions: East of Central and West of Compton Blvd - adjacent to 1031 W 151st St

Remarks: INVESTORS and DEVELOPERS DREAM - MUST SEE - THIS RARE VACANT RESIDENTIAL LOT can be purchased separately or concurrently with the adjacent home nextdoor at 1031 W 151st Street (PW 19021461). Zoned COML* -Medium Density - Buyer and Buyer's Agent must verify all use and zoning with city of Compton and Los Angeles County. Start fresh with your own house plans, or be the envy of the neighborhood with a huge side yard if purchased in connection with the neighboring single family 3B/1B home nextdoor. Mins away to Grocery Stores, Restaurants, Freeways, Schools, and more! This 4,389 sqft lot has been used as a yard, additional carport parking and urban family garden for many years! This vacant land and the neighboring home for sale are owned by same owner. Lot is approx. 40' X 100' and rectangular in shape. PRICED HOT FOR INTEREST AND QUICK SALE. These unique side-by-side lot s dont come along very often. Submit an offer today! (aka: 1033 W 151st St Compton CA 90220)

Agent Remarks: MULTIPLE CASH OFFERS - Please see PW 19021461 for more details regarding the adjacent home for sale by the same owner. Aka 1033 W 151st St Compton. Buyer to verify any and all building opportunities, zoning or restrictions with City of Compton.None.

Showing Remarks: Drive by. Vacant Lot! 3B/1B Home for sale nextdoor at 1031 W 151st St is available for sale by same owner - sold separately or concurrently.

Concessions Comments: NONE

Land/Lot Info

Land Type	Fee
Addl Parcel	
Lot Dimen	40' x 100'
Lot Descr.	
Lot Location	
View	No
Waterfront	
Telephone	No
TV/Cable	No
Electric Service	
Gas	
Sewer	
Telephone Service	
Price Per Acre	
Land Value	
Land Value %	
Road Frontage	
Lease per Mo/Yr	
Tract Map	
Units per Acre	
Public Street	

Potential/Present Land Use

Cleared	
Staked	
Usable Land %	
Current Geological	
Bonds & Asmt	
Fenced	
Soil Type	
Trees	
Special Zone	
PUD	
Elevation ASL	
Fence Condition	
Possible New Zone	
Streets	
Assessments	
Cert of Compliance	
On File	
Site	
Survey	
Topography	

Contract Info DOM 16

List Date	02-17-2019
List Price	$169,000
Orig List Price	$199,000
Status Date	03-29-2019
Sale Type	Standard
Probate Y/N	
Court Approval	
CSO	2.000%
Listing Type	
Disclosure	
Concessions Amount	$0
Avail for Lease	
Lease Option	
Financing	Cash
Listing Terms	Cash, Cash To New Loan, Conventional
Possession	
Scope Of Service	Full Service
Buyer's Agent Comm	
LBA	
Variable Rate Comm	Yes

Community/Development

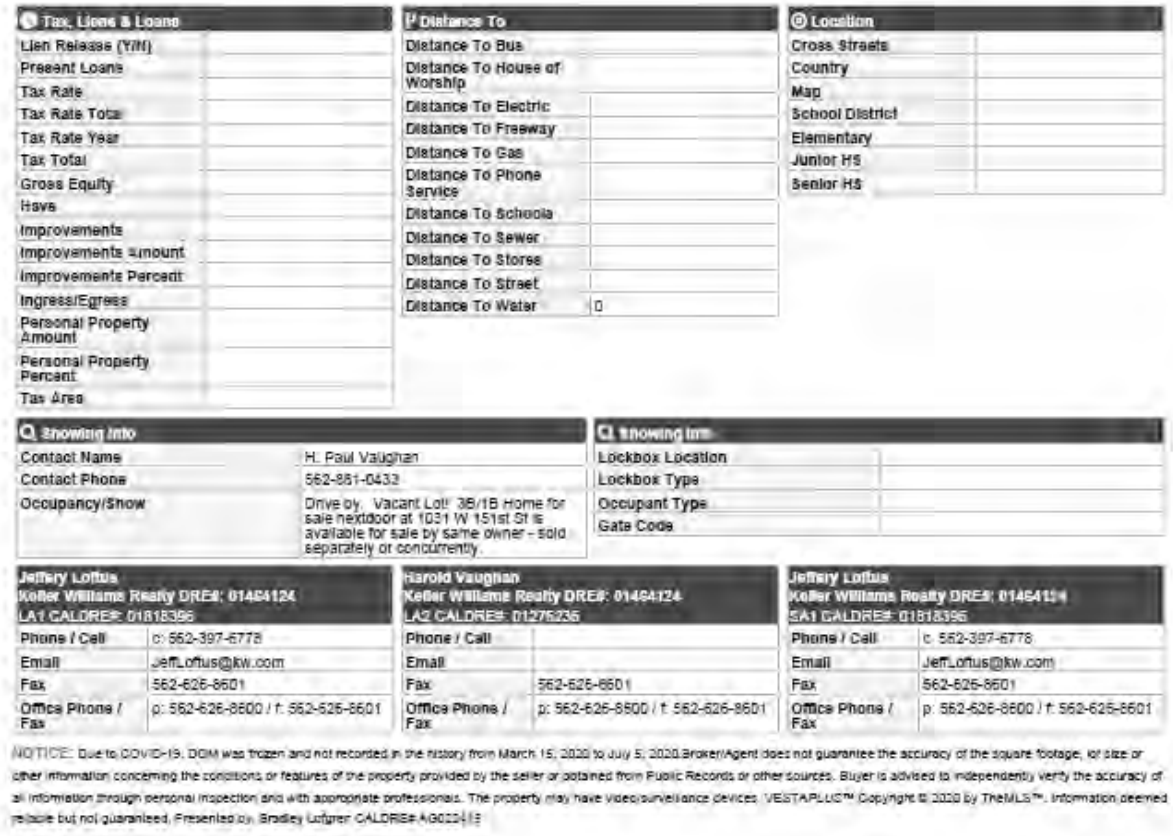
HOA Dues	0.00
Subdivision	
Tract Name	
Builders Name	
Builders Tract Code	
Builders Model Code	
Builders Model Name	
Complex/Assoc Name	
Complex/Assoc Phone	

Water Details

Water Type	
Water Table Depth	
Water Well	
Water District	
Well Depth	
Well Gallons Per Minute	
Well Hole Size	
Well Pump Horsepower	

Sale/Sold Info

Contract Date	03-05-2019
Sold Date	03-29-2019
Sold Price	$150,000
Sold Price/SqFt	
Sale Terms	
SP/LP	88.76%



Tax, Liens & Loans	
Lien Release (Y/N)	
Present Loans	
Tax Rate	
Tax Rate Total	
Tax Rate Year	
Tax Total	
Gross Equity	
Have	
Improvements	
Improvements Amount	
Improvements Percent	
Ingress/Egress	
Personal Property Amount	
Personal Property Percent	
Tax Area	

Distance To	
Distance To Bus	
Distance To House of Worship	
Distance To Electric	
Distance To Freeway	
Distance To Gas	
Distance To Phone Service	
Distance To Schools	
Distance To Sewer	
Distance To Stores	
Distance To Street	
Distance To Water	0

Location	
Cross Streets	
Country	
Map	
School District	
Elementary	
Junior HS	
Senior HS	

Showing Info	
Contact Name	H. Paul Vaughan
Contact Phone	562-881-0433
Occupancy/Show	Drive by. Vacant Lot! 3B/1B Home for sale nextdoor at 1031 W 151st St is available for sale by same owner - sold separately or concurrently.

Showing Info	
Lockbox Location	
Lockbox Type	
Occupant Type	
Gate Code	

Jeffery Loftus Keller Williams Realty DRE#: 01464124 LA1 CALDRE#: 01818396	
Phone / Cell	c: 562-397-6778
Email	JeffLoftus@kw.com
Fax	562-626-8601
Office Phone / Fax	p: 562-626-8600 / f: 562-626-8601

Harold Vaughan Keller Williams Realty DRE#: 01464124 LA2 CALDRE#: 01276235	
Phone / Cell	
Email	
Fax	562-626-8601
Office Phone / Fax	p: 562-626-8600 / f: 562-626-8601

Jeffery Loftus Keller Williams Realty DRE#: 01464124 SA1 CALDRE#: 01818396	
Phone / Cell	c: 562-397-6778
Email	JeffLoftus@kw.com
Fax	562-626-8601
Office Phone / Fax	p: 562-626-8600 / f: 562-626-8601

NOTICE: Due to COVID-19, DOM was frozen and not recorded in the history from March 15, 2020 to July 5, 2020.Broker/Agent does not guarantee the accuracy of the square footage, lot size or other information concerning the conditions or features of the property provided by the seller or obtained from Public Records or other sources. Buyer is advised to independently verify the accuracy of all information through personal inspection and with appropriate professionals. The property may have video/surveillance devices. VESTAPLUS™ Copyright © 2020 by TheMLS™. Information deemed reliable but not guaranteed. Presented by: Bradley Lofgren CALDRE# AG02243[illegible]

1033 W 151st ST COMPTON, CA 90220	4,389 Lot Size	$34 $/Lot Size	0.100 Lot Acreage	Land SP $150,000	Sold











NOTICE: Due to COVID-19, DOM was frozen and not recorded in the history from March 15, 2020 to July 5, 2020.Broker/Agent does not guarantee the accuracy of the square footage, lot size or other information concerning the conditions or features of the property provided by the seller or obtained from Public Records or other sources. Buyer is advised to independently verify the accuracy of all information through personal inspection and with appropriate professionals. The property may have video/surveillance devices. VESTAPLUS™ Copyright © 2020 by TheMLS™. Information deemed reliable but not guaranteed. Presented by: Bradley Lofgren CALDRE# AG022415

2014 E PIRU ST
COMPTON, CA 90222

$ 930/Mo Lot Size	$30 $/Lot Size	Lot Acreage	Land SP $100,000	Sold

NO PICTURE AVAILABLE



Expected on Market	
Area	1138 Compton N of Rosecrans, E of Central
Subdivision	
Zoning	LCR1*
Horse Property	
Present Use	
Potential Usage	
MLS#	19-536962
APN	6165-017-009

Directions: West of Alameda
Remarks: 2014 E Piru St is a house in Compton, CA 90222. This 792 square foot house sits on a 4,930 square foot lot. This property was built in 1953.

Land/Lot Info

Land Type	
Addl Parcel	
Lot Dimen	
Lot Descr	
Lot Location	
View	No
Waterfront	
Telephone	No
TV/Cable	Yes
Electric Service	
Gas	
Sewer	
Telephone Service	
Price Per Acre	
Land Value	
Land Value %	
Road Frontage	
Lease per Mo/Yr	
Tract Map	
Units per Acre	
Public Street	

Potential/Present Land Use

Cleared	
Staked	
Usable Land %	
Current Geological	
Bonds & Asmt	
Fenced	
Soil Type	
Trees	
Special Zone	None
PUD	
Elevation ASL	
Fence Condition	
Possible New Zone	
Streets	
Assessments	
Cert of Compliance	
On File	
Site	
Survey	
Topography	

Contract Info

List Date	03-22-2019
List Price	$170,000
Orig List Price	$170,000
Status Date	12-10-2019
Sale Type	Standard
Probate Y/N	
Court Approval	
CSO	3%
Listing Type	Exclusive Right
Disclosure	As Is
Concessions Amount	
Avail for Lease	
Lease Option	
Financing	
Listing Terms	
Possession	
Scope Of Service	Full Service
Buyer's Agent Comm	
LBA	
Variable Rate Comm	

Community/Development

HOA Dues	0.00
Subdivision	
Tract Name	
Builders Name	
Builders Tract Code	
Builders Model Code	
Builders Model Name	
Complex/Assoc Name	
Complex/Assoc Phone	

Water Details

Water Type	
Water Table Depth	
Water Well	
Water District	
Well Depth	
Well Gallons Per Minute	
Well Hole Size	
Well Pump Horsepower	

Sale/Sold Info

Contract Date	05-01-2019
Sold Date	12-10-2019
Sold Price	$100,000
Sold Price/SqFt	
Sale Terms	
SP/LP	58.82%

Tax, Liens & Loans

Lien Release (Y/N)	
Present Loans	
Tax Rate	
Tax Rate Total	
Tax Rate Year	
Tax Total	
Gross Equity	
Have	
Improvements	
Improvements Amount	
Improvements Percent	
Ingress/Egress	
Personal Property Amount	
Personal Property Percent	
Tax Area	

Distance To

Distance To Bus	
Distance To House of Worship	
Distance To Electric	
Distance To Freeway	
Distance To Gas	
Distance To Phone Service	
Distance To Schools	
Distance To Sewer	
Distance To Stores	
Distance To Street	
Distance To Water	

Location

Cross Streets	
County	
Map	
School District	
Elementary	
Junior HS	
Senior HS	

Showing Info

Contact Name	
Contact Phone	
Occupancy/Show	

Showing Info

Lockbox Location	
Lockbox Type	
Occupant Type	
Gate Code	



William Hayworth Keller Williams Larchmont DRE#: 01870534 LA1 CALDRE#: 01401340	
Phone / Cell	p: 310-678-4808 / c: 310-678-4808
Email	WillEstateGroup@gmail.com
Fax	213-228-3212
Office Phone / Fax	p: 323-762-2600 / f: 323-762-2601

William Hayworth Keller Williams Larchmont DRE#: 01870534 SA1 CALDRE#: 01401340	
Phone / Cell	p: 310-678-4808 / c: 310-678-4808
Email	WillEstateGroup@gmail.com
Fax	213-228-3212
Office Phone / Fax	p: 323-762-2600 / f: 323-762-2601

NOTICE: Due to COVID-19, DOM was frozen and not recorded in the history from March 15, 2020 to July 5, 2020.Broker/Agent does not guarantee the accuracy of the square footage, lot size or other information concerning the conditions or features of the property provided by the seller or obtained from Public Records or other sources. Buyer is advised to independently verify the accuracy of all information through personal inspection and with appropriate professionals. The property may have video surveillance devices. VESTAPLUS™ Copyright © 2020 by TheNLS™. Information deemed reliable but not guaranteed. Presented by: Bradley Lofgren CALDRE# A9022415

2313 Oris St
COMPTON, CA 90222

5,668 Lot Size	$33 $/Lot Size	0.130 Lot Acreage

Land
SP $185,000
Sold





Expected on Market	
Area	1138 Compton N of Rosecrans, E of Central
Subdivision	
Zoning	RES LOT
Horse Property	
Present Use	
Potential Usage	
MLS#	DW19205229MR
APN	6154-015-024

Directions: Willowbrook & Oris
Remarks: Probate listing which will require court confirmation. Great building opportunity in the City of Compton. Buyer to perform their own due diligence to verify if or what the City of Compton will allow. For all building questions, please contact the City of Compton directly. Thank you for your interest and good luck!
Agent Remarks: Probate property which will require court confirmation. Cash only. All building questions, please contact the City of Compton directly. Supra on the property, go direct. Thanks for showing and good luck!
Showing Remarks: Probate property which will require court confirmation. Cash only. All building questions, please contact the City of Compton directly. Supra on the property, go direct. Thanks for showing and good luck!
Concessions Comments: 0

Land/Lot Info

Land Type	Fee
Addl Parcel	
Lot Dimen	
Lot Descr.	
Lot Location	
View	Yes
Waterfront	
Telephone	No
TV/Cable	No
Electric Service	
Gas	
Sewer	
Telephone Service	
Price Per Acre	
Land Value	
Land Value %	
Road Frontage	
Lease per Mo/Yr	
Tract Map	
Units per Acre	
Public Street	

Potential/Present Land Use

Cleared	
Staked	
Usable Land %	
Current Geological	
Bonds & Asmt	
Fenced	
Soil Type	
Trees	
Special Zone	
PUD	
Elevation ASL	
Fence Condition	
Possible New Zone	
Streets	
Assessments	
Cert of Compliance	
On File	
Site	
Survey	
Topography	

Contract Info DOM 28

List Date	08-28-2019
List Price	$195,000
Orig List Price	$195,000
Status Date	12-09-2019
Sale Type	Probate
Probate Y/N	
Court Approval	
CSO	2.500%
Listing Type	Exclusive Right To Sell
Disclosure	
Concessions Amount	$0
Avail for Lease	
Lease Option	
Financing	Cash
Listing Terms	Subject To Court
Possession	
Scope Of Service	Full Service
Buyer's Agent Comm	
LBA	
Variable Rate Comm	No

Community/Development

HOA Dues	0.00
Subdivision	
Tract Name	
Builders Name	
Builders Tract Code	
Builders Model Code	
Builders Model Name	
Complex/Assoc Name	
Complex/Assoc Phone	

Water Details

Water Type	
Water Table Depth	
Water Well	
Water District	
Well Depth	
Well Gallons Per Minute	
Well Hole Size	
Well Pump Horsepower	

Sale/Sold Info

Contract Date	09-25-2019
Sold Date	12-09-2019
Sold Price	$185,000
Sold Price/SqFt	
Sale Terms	
SP/LP	94.87%

Tax, Liens & Loans

Lien Release (Y/N)	
Present Loans	
Tax Rate	
Tax Rate Total	
Tax Rate Year	
Tax Total	
Gross Equity	
Have	
Improvements	
Improvements Amount	
Improvements Percent	
Ingress/Egress	
Personal Property Amount	
Personal Property Percent	
Tax Area	

Distance To

Distance To Bus	
Distance To House of Worship	
Distance To Electric	
Distance To Freeway	
Distance To Gas	
Distance To Phone Service	
Distance To Schools	
Distance To Sewer	
Distance To Stores	
Distance To Street	
Distance To Water	0

Location

Cross Streets	
Country	
Map	
School District	
Elementary	
Junior HS	
Senior HS	

Showing Info	
Contact Name	
Contact Phone	
Occupancy/Show	Probate property which will require court confirmation. Cash only. All building questions, please contact the City of Compton directly. Supra on the property, go direct. Thanks for showing and good luck!

Showing Info	
Lockbox Location	
Lockbox Type	
Occupant Type	
Gate Code	

Roger Beltran Century 21 Allstars DRE#: 01280565 LA1 CALDRE#: 01430687	
Phone / Cell	c: 562-477-4527
Email	Roger@RogerBeltran.com
Fax	562-863-3275
Office Phone / Fax	p: 562-863-2121 / f: 562-863-3275

Roger Beltran Century 21 Allstars DRE#: 01280565 SA1 CALDRE#: 01430687	
Phone / Cell	c: 562-477-4527
Email	Roger@RogerBeltran.com
Fax	562-863-3275
Office Phone / Fax	p: 562-863-2121 / f: 562-863-3275

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2313 Oris St COMPTON, CA 90222	5,668 Lot Size	$33 $/Lot Size	0.130 Lot Acreage	Land SP $185,000	Sold













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4337 E Palmerstone ST
COMPTON, CA 90221

5,445 Lot Size	$37 $/Lot Size	0.120 Lot Acreage	Land SP $199,000	Sold





Expected on Market	
Area	1138 Compton N of Rosecrans, E of Central
Subdivision	
Zoning	LCR1YY
Horse Property	
Present Use	
Potential Usage	
MLS#	SB18262432MR
APN	6195-003-019

Directions: South of McMillan St, North of Rosecrans, West of Atlantic Ave, East of Harris Ave.
Remarks: Bank owned. Last sold for 365k in 2006. Fire damaged/roofless teardown on really nice quiet 2 block long street. In unincorporated county area, not City of Compton, so no city report :) The county is slow, but easy to work with. 50 X 110, zoned R1. Good East Compton area bordering Paramount. 71 Walkscore: walkable to Foster Elementary, Whaley Middle School and Nerl Catholic School. 2 minutes to 710 and 105.
Agent Remarks: Questions? Call office 310-379-8800. Submit offers to Offers@nordline.com.
Showing Remarks: Go direct.

Land/Lot Info

Land Type	Fee
Addl Parcel	
Lot Dimen	50 x 110
Lot Descr.	
Lot Location	
View	Yes
Waterfront	
Telephone	No
TV/Cable	No
Electric Service	
Gas	
Sewer	
Telephone Service	
Price Per Acre	
Land Value	
Land Value %	
Road Frontage	
Lease per Mo/Yr	
Tract Map	
Units per Acre	
Public Street	

Potential/Present Land Use

Cleared	Yes
Staked	
Usable Land %	
Current Geological	
Bonds & Asmt	
Fenced	
Soil Type	Flat
Trees	
Special Zone	
PUD	
Elevation ASL	
Fence Condition	
Possible New Zone	Res
Streets	
Assessments	
Cert of Compliance	
On File	
Site	
Survey	Buyer Pays, Corners Marked
Topography	

Contract Info DOM 2

List Date	11-30-2018
List Price	$199,000
Orig List Price	$199,000
Status Date	01-11-2019
Sale Type	Real Estate Owned
Probate Y/N	
Court Approval	
CSO	3.000%
Listing Type	Exclusive Right To Sell
Disclosure	
Concessions Amount	
Avail for Lease	
Lease Option	
Financing	Cash
Listing Terms	Cash, Cash To New Loan
Possession	
Scope Of Service	Full Service
Buyer's Agent Comm	
LBA	
Variable Rate Comm	No

Community/Development

HOA Dues	
Subdivision	
Tract Name	
Builders Name	
Builders Tract Code	
Builders Model Code	
Builders Model Name	
Complex/Assoc Name	
Complex/Assoc Phone	

Water Details

Water Type	
Water Table Depth	
Water Well	
Water District	
Well Depth	
Well Gallons Per Minute	
Well Hole Size	
Well Pump Horsepower	

Sale/Sold Info

Contract Date	12-02-2018
Sold Date	01-11-2019
Sold Price	$199,000
Sold Price/SqFt	
Sale Terms	
SP/LP	100.00%

Tax, Liens & Loans

Lien Release (Y/N)	
Present Loans	0.00
Tax Rate	
Tax Rate Total	
Tax Rate Year	
Tax Total	
Gross Equity	199000.00
Have	R1 lot
Improvements	Utilities onsite, driveway cut out.
Improvements Amount	
Improvements Percent	
Ingress/Egress	Street
Personal Property Amount	
Personal Property Percent	
Tax Area	

Distance To

Distance To Bus	Near
Distance To House of Worship	Near
Distance To Electric	On site
Distance To Freeway	Near
Distance To Gas	On site
Distance To Phone Service	
Distance To Schools	Near
Distance To Sewer	On site
Distance To Stores	Near
Distance To Street	Near
Distance To Water	On site

Location

Cross Streets	
Country	
Map	
School District	
Elementary	
Junior HS	
Senior HS	

Showing Info	
Contact Name	Nordine Realtors Inc.
Contact Phone	310-379-6800
Occupancy/Show	Go direct

Showing Info	
Lockbox Location	
Lockbox Type	
Occupant Type	
Gate Code	

Lee Nordine Nordine Realtors, Inc. DRE#: 01315157 LA | CALDRE#: 00961679	
Phone / Cell	p: 310-379-6800
Email	celenidron@gmail.com
Fax	
Office Phone / Fax	p: 424-206-9270 / f: 310-379-5220

Daniel Partelpin DANCO Inc. DRE#: 01163647 SA | CALDRE#: 01325368	
Phone / Cell	p: 310-842-8234 / c: 310-362-0679
Email	dancohousing@aol.com
Fax	310-838-2136
Office Phone / Fax	p: 310-842-8234 / f: 310-838-2136

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4337 E Palmerstone ST COMPTON, CA 90221	5,446 Lot Size	$37 $/Lot Size	0.120 Lot Acreage	Land SP $199,000	Sold

















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5/17/2021 Matrix

425 E 129th St, Compton 90061 STATUS: **Closed** LIST/CLOSE: **$199,000 /$240,000**

W of Avalon S of Segundo





ACRES: **0.1194**
$ PER ACRE: **$2,010,050**
LOT(src): **5,202/0.1194 (A)**
AREA: **RQ - Compton West of Central**
GROSS EQUITY:
PRESENT LOANS AMOUNT:
HAVE:
DOM: **4**
SLC: **Standard**
PARCEL #: **6130009031**
LISTING ID: **SR21073056**
LIST $ ORIG.: **$199,000**

Recent: 05/06/2021 : SOLD : P->S

Use PEAD in Glide During COVID-19

DESCRIPTION

Investors and builders delight. Lot in the City of Compton featuring 5,204 SqFt. It is ready for Investors to build on. Lot with plenty of options of what to build. Located West of Central South of 105. Next door property, 429 E 129th is also for sale.

EXCLUSIONS: INCLUSIONS:

SUBDIVISION: /
COUNTY: **Los Angeles**
55+: **No**
PROBATE AUTHORITY:
FENCING: **Excellent Condition**
VIEW: **None**
SEWER:
UTILITIES:
ELECTRIC:
LOT FEATURES: **2-5 Units/Acre**
WATERFRONT:

LAND

COMMON INTEREST: **None**
LAND LEASE:
TAX LOT: **60**
TAX BLOCK:
TAX TRACT #: **8944**
LOT SIZE DIM:
ASSESSMENTS: **None**
PARCEL #: **6130009031**
ADDITIONAL PARCEL(s): **No**
ZONING: **LCR1**
ZONING DESC.:
TAX PARCEL LTR:
TAX MAP NUMBER:
CURRENT USE:
POSSIBLE USE:
SPECIAL ASSESSMENTS:
CLEARED:
INGRESS/EGRESS:
SOIL TYPE:
TOPOGRAPHY
WATER BODY NAME:
WELL REPORT:
WELL PUMP MOTOR HP:
ELEVATION:
SURVEY:
CURRENT GEO REPORT:
NEW CONSTRUCTION YN: **No**

COMMUNITY

HOA FEE: **$0**
HOA FEE 2:
HOA FEE 3:
HOA MANAGEMENT NAME:
HOA MANAGEMENT NAME 2:
HOA MANAGEMENT NAME 3:
HOA NAME:
HOA NAME 2:
HOA NAME 3:
HOA PHONE:
HOA PHONE 2:
HOA PHONE 3:
COMMUNITY FEATURES: **Curbs**

INFRASTRUCTURE

IMPROVEMENTS:
WATER WELL:
WELL DEPTH:
WATER TABLE DEPTH:
WELL GALLONS PER MIN.:
WELL HOLE SIZE:

ANALYSIS/TAX

IMPROVEMENTS TTL $/%:
PERSONAL PROPERTY $/%:
LAND VALUE $/%:
USABLE LAND %:
TAX RATE:
TAX YEAR:
TAX RATE TOTAL:
TAX AREA:

DISTANCE TO

BUS:
CHURCH:
ELECTRIC:
FREEWAY:
GAS:
PHONE SERVICE:
SCHOOLS:
SEWER:
SHOPPING:
STREET:
WATER: **Unknown**

LISTING

B.A. COMPENSATION: **2.5%**
BAC REMARKS:
DUAL/VARI. COMP?: **Yes**
CURRENT FINANCING:
LISTING TERMS: **Cash**
LIST AGMT: **Exclusive Right To Sell**
CONTINGENCY LIST: **Standard Contract Contingencies**
CONTINGENCY:
PRIVATE REMARKS:
LIST SERVICE: **Full Service**
AD NUMBER:
DISCLOSURES:
INTERNET, AVM?/COMM?: **Yes/Yes**
INTERNET?/ADDRESS?: **Yes/Yes**

DATES

LISTING DATE: **04/07/21**
START SHOWING DATE: **04/09/21**
ON MARKET DATE: **04/09/21**
PRICE CHG TIMESTAMP:
STATUS CHG TIMESTAMP: **05/06/21**
MOD TIMESTAMP: **05/06/21**
EXPIRED DATE: **10/09/21**
PURCH CONTRACT DATE: **04/13/21**
CLOSE DATE: **05/06/21**

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5/17/2021 Matrix

SHOWING INFORMATION

SHOW CONTACT TYPE: **Agent**
SHOW CONTACT NAME:
SHOW CONTACT PHONE:
OWNER'S NAME:

SHOWING INSTRUCTIONS: **Easy to Show. Email info@YourRealtorRana.com to schedule a showing appointment.**
DIRECTIONS: **W of Avalon S of Segundo**

AGENT / OFFICE

LA: **(SR207064568) Rana Khanjani**
CoLA:
LO: **(SR0014702) Sync Brokerage, Inc.**
LO PHONE: **818-770-3660**
CoLO:
CoLO PHONE:
LA STATE LIC.: **02021891**
CoLA STATE LIC.
LO STATE LIC.: **02031490**
LO FAX: **818-770-3665**
CoLO STATE LIC.:
CoLO FAX:
OFFERS EMAIL:
rana@syncbrokerage.com

CONTACT PRIORITY

rana@syncbrokerage.com
1.LA CELL: **818-723-9071**

COMPARABLE INFORMATION

CLOSE PRICE: **$240,000**
LIST PRICE: **$199,000**
LIST $ ORIGINAL: **$199,000**
PURCH CONTRACT DATE: **04/13/21**
DOM/CDOM: **4/4**
BA: **(SR207064568) Rana Khanjani**
BO: **Sync Brokerage, Inc.**
BA STATE LIC.: **02021891**
BO State License: **02031490**
CoBA: **()**
CoBO:
CoBA STATE LIC.:
CoBO State License:
BUYER FINANCING: **Cash**
CONCESSIONS $: **$0**
CONCESSION CMTS: **N/A**
COE DATE: **05/06/21**



AGENT FULL: Land LISTING ID: SR21073056

Printed by Michael Snodgress, State Lic: 3001271 on 05/17/2021 7:33:17 PM

Search Criteria
Listing Id is SR21073056
Property Type is 'Land'
Selected 1 of 1 result.

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5/17/2021 Matrix

2148 E Knopf St, Compton 90222 STATUS: **Closed** LIST/CLOSE: **$210,000 /$160,000**

BETWEEN WILMINGTON AND OLEANDER





ACRES: **0.0567**
$ PER ACRE: **$2,821,869**
LOT(src): **2,471/0.0567 (A)**
AREA: **RN - Compton N of Rosecrans, E of Central**
GROSS EQUITY:
PRESENT LOANS AMOUNT:
HAVE:
DOM: **27**
SLC: **Standard**
PARCEL #: **6152015005**
LISTING ID: **DW20190104**
LIST $ ORIG.: **$210,000**

Listing has Supplements
Use PEAD in Glide During COVID-19

DESCRIPTION

LOT IS LOCATED IN THE NON-INCORPORATED AREA OF COMPTON. CALL THE COUNTY OF LOS ANGELES FOR MORE ZONING INFORMATION. BUYER TO DO OWN DUE DILIGENCE ON BUILDBILITY OF LOT.

EXCLUSIONS: INCLUSIONS:

SUBDIVISION: /
COUNTY: **Los Angeles**
55+: **No**
PROBATE AUTHORITY:
FENCING: **Chain Link**
VIEW: **None**
SEWER: **Unknown**
UTILITIES: **None**
ELECTRIC:
LOT FEATURES: **0-1 Unit/Acre, Rectangular Lot, Level**
WATERFRONT:

LAND

COMMON INTEREST: **None**
LAND LEASE: **No**
TAX LOT: **7**
TAX BLOCK: **F**
TAX TRACT #: **4631**
LOT SIZE DIM:
ASSESSMENTS: **Unknown**
PARCEL #: **6152015005**
ADDITIONAL PARCEL(s): **No**
ZONING: **LCR1***
ZONING DESC.:
TAX PARCEL LTR:
TAX MAP NUMBER:
CURRENT USE: **Unimproved**
POSSIBLE USE: **Residential**
SPECIAL ASSESSMENTS:
CLEARED:
INGRESS/EGRESS:
SOIL TYPE:
TOPOGRAPHY
WATER BODY NAME:
WELL REPORT:
WELL PUMP MOTOR HP:
ELEVATION:
SURVEY: **Buyer Pays**
CURRENT GEO REPORT:
NEW CONSTRUCTION YN: **No**

COMMUNITY

HOA FEE: **$0**
HOA FEE 2:
HOA FEE 3:
HOA MANAGEMENT NAME:
HOA MANAGEMENT NAME 2:
HOA MANAGEMENT NAME 3:
HOA NAME:
HOA NAME 2:
HOA NAME 3:
HOA PHONE:
HOA PHONE 2:
HOA PHONE 3:
COMMUNITY FEATURES: **Urban**

INFRASTRUCTURE

IMPROVEMENTS:
WATER WELL:
WELL DEPTH:
WATER TABLE DEPTH:
WELL GALLONS PER MIN.:
WELL HOLE SIZE:

ANALYSIS/TAX

IMPROVEMENTS TTL $/%:
PERSONAL PROPERTY $/%:
LAND VALUE $/%:
USABLE LAND %:
TAX RATE:
TAX YEAR:
TAX RATE TOTAL:
TAX AREA:

DISTANCE TO

BUS:
CHURCH:
ELECTRIC:
FREEWAY:
GAS:
PHONE SERVICE:
SCHOOLS:
SEWER:
SHOPPING:
STREET:
WATER: **NOT KNOW**

LISTING

B.A. COMPENSATION: **3%**
BAC REMARKS:
DUAL/VARI. COMP?: **Yes**
CURRENT FINANCING: **None**
LISTING TERMS: **Cash**
LIST AGMT: **Exclusive Right To Sell**
CONTINGENCY LIST: **Standard Contract Contingencies**
CONTINGENCY: **Each to pay own expenses**
PRIVATE REMARKS:
LIST SERVICE: **Full Service**
AD NUMBER:
DISCLOSURES: **Unincorporated**
INTERNET, AVM?/COMM?: **Yes/Yes**
INTERNET?/ADDRESS?: **Yes/Yes**

DATES

LISTING DATE: **09/11/20**
START SHOWING DATE:
ON MARKET DATE: **09/11/20**
PRICE CHG TIMESTAMP: **09/11/20**
STATUS CHG TIMESTAMP: **11/06/20**
MOD TIMESTAMP: **11/06/20**
EXPIRED DATE: **12/31/20**
PURCH CONTRACT DATE: **10/08/20**
CLOSE DATE: **11/05/20**

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5/17/2021 Matrix

SHOWING INFORMATION

SHOW CONTACT TYPE: **None**
SHOW CONTACT NAME:
SHOW CONTACT PHONE:
OWNER'S NAME:

SHOWING INSTRUCTIONS: **GO DIRECT TO PROPERTY.**
DIRECTIONS: **BETWEEN WILMINGTON AND OLEANDER**

AGENT / OFFICE

LA: **(YVAZQCAR) Carmen Vazquez**
CoLA:
LO: **(YCJE) Century 21 Jervis & Associates**
LO PHONE: **562-862-2226Ext:0**
CoLO:
CoLO PHONE:

LA STATE LIC.: **01384128**
CoLA STATE LIC.
LO STATE LIC.: **01182091**
LO FAX:
CoLO STATE LIC.:
CoLO FAX:
OFFERS EMAIL:
c21vazquez2002@gmail.com

CONTACT PRIORITY

c21vazquez2002@gmail.com
1.LA EMAIL: **c21vazquez2002@gmail.com**
2.LA TEXT: **562-577-8852**
3.LA FAX:

COMPARABLE INFORMATION

CLOSE PRICE: **$160,000**
LIST PRICE: **$210,000**
LIST $ ORIGINAL: **$210,000**
PURCH CONTRACT DATE: **10/08/20**
DOM/CDOM: **27/27**

BA: **(YRODJOSE) Jose Rodriguez Jr**
BO: **Century 21 Home & Investment**
BA STATE LIC.: **01767233**
BO State License:

CoBA: **()**
CoBO:
CoBA STATE LIC.:
CoBO State License:

BUYER FINANCING: **Cash**
CONCESSIONS $: **$0**
CONCESSION CMTS: **None**
COE DATE: **11/05/20**



AGENT FULL: Land LISTING ID: DW20190104

Printed by Michael Snodgress, State Lic: 3001271 on 05/17/2021 7:43:58 PM

Search Criteria
Listing Id is DW20190104
Property Type is 'Land'
Selected 1 of 1 result.

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5/17/2021 Matrix

11714 Compton Av, Los Angeles 90059 STATUS: **Closed** LIST/CLOSE: **$160,000 /$145,000**

freeway 105





ACRES: **0.0689**
$ PER ACRE: **$2,104,499**
LOT(src): **3,000/0.0689 (A)**
AREA: **WATT - Watts**
GROSS EQUITY:
PRESENT LOANS AMOUNT:
HAVE:
DOM: **73**
SLC: **Standard**
PARCEL #: **6149011905**
LISTING ID: **DW21010615**
LIST $ ORIG.: **$200,000**

Use PEAD in Glide During COVID-19

DESCRIPTION

Flat LAND for sale in Los Angeles, mixed-use commercial residential, area of Los Angeles County, 25' x 120', great for contractors or builders, all utilities on the street, an adjacent lot for sale also to be sold together. similar terms. water meter in the sidewalk, sewer line in the premises , old home was demolished long time ago. Willowbrook area

EXCLUSIONS: INCLUSIONS:

SUBDIVISION: /
COUNTY: **Los Angeles**
55+: **No**
PROBATE AUTHORITY:

FENCING: **Chain Link, Wrought Iron**
VIEW: **None**

SEWER:
UTILITIES:
ELECTRIC:

LOT FEATURES: **Rectangular Lot**
WATERFRONT:

LAND

COMMON INTEREST: **None**
LAND LEASE: **No**
TAX LOT: **32**
TAX BLOCK: **10**
TAX TRACT #: **5018**
LOT SIZE DIM:
ASSESSMENTS:
PARCEL #: **6149011905**
ADDITIONAL PARCEL(s): **No**

ZONING: **LCR2YY**
ZONING DESC.:
TAX PARCEL LTR:
TAX MAP NUMBER:
CURRENT USE:
POSSIBLE USE:
SPECIAL ASSESSMENTS:

CLEARED:
INGRESS/EGRESS:
SOIL TYPE:
TOPOGRAPHY: **flat**
WATER BODY NAME:
WELL REPORT:

WELL PUMP MOTOR HP:
ELEVATION:
SURVEY: **Survey Done**
CURRENT GEO REPORT: **No**
NEW CONSTRUCTION YN: **No**

COMMUNITY

HOA FEE: **$0**
HOA FEE 2:
HOA FEE 3:
HOA MANAGEMENT NAME:
HOA MANAGEMENT NAME 2:
HOA MANAGEMENT NAME 3:

HOA NAME:
HOA NAME 2:
HOA NAME 3:

HOA PHONE:
HOA PHONE 2:
HOA PHONE 3:

COMMUNITY FEATURES: **Sidewalks, Suburban**

INFRASTRUCTURE

IMPROVEMENTS: **none**
WATER WELL:
WELL DEPTH:
WATER TABLE DEPTH:
WELL GALLONS PER MIN.:
WELL HOLE SIZE:

ANALYSIS/TAX

IMPROVEMENTS TTL $/%:
PERSONAL PROPERTY $/%:
LAND VALUE $/%:
USABLE LAND %: **100**
TAX RATE:
TAX YEAR:
TAX RATE TOTAL:
TAX AREA:

DISTANCE TO

BUS:
CHURCH:
ELECTRIC:
FREEWAY:
GAS: **on the street**
PHONE SERVICE:

SCHOOLS:
SEWER: **on the premises**
SHOPPING:
STREET:
WATER: **on the sidewalk**

LISTING

B.A. COMPENSATION: **2%**
BAC REMARKS:
DUAL/VARI. COMP?: **No**
CURRENT FINANCING: **None**
LISTING TERMS: **Cash to New Loan**
LIST AGMT: **Exclusive Right To Sell**
CONTINGENCY LIST:

LIST SERVICE: **Full Service**
AD NUMBER:
DISCLOSURES: **Unincorporated**
INTERNET, AVM?/COMM?: **Yes/Yes**
INTERNET?/ADDRESS?: **Yes/Yes**

DATES

LISTING DATE: **01/16/21**
START SHOWING DATE:
ON MARKET DATE: **01/17/21**
PRICE CHG TIMESTAMP: **03/22/21**
STATUS CHG TIMESTAMP: **04/23/21**
MOD TIMESTAMP: **04/23/21**
EXPIRED DATE: **04/30/21**
PURCH CONTRACT DATE: **03/31/21**
CLOSE DATE: **04/23/21**

CONTINGENCY:
PRIVATE REMARKS: mixed-use zoning commercial residential,BUYER TO MAKE HIS OWN INVESTIGATION WITH REGIONAL PLANNING,TO KNOW

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5/17/2021 Matrix

WHAT CAN BE BUILT,FOR SALE ALSO ADJACENT LOT NEXT DOOR,TO BE SOLD TOGETHER APN 6149-011-904 AND 6149-011-905

SHOWING INFORMATION

SHOW CONTACT TYPE: **See Remarks**
SHOW CONTACT NAME:
SHOW CONTACT PHONE:
OWNER'S NAME:

SHOWING INSTRUCTIONS: **go direct, drive-by**
DIRECTIONS: **freeway 105**

AGENT / OFFICE

LA: **(YGONZSAL) Salvador Gonzalez**
CoLA:
LO: **(YFFH) First Family Homes**
LO PHONE: **562-862-7373Ext:0**
CoLO:
CoLO PHONE:

LA STATE LIC.: **01007673**
CoLA STATE LIC.
LO STATE LIC.: **01526567**
LO FAX: **562-862-7797**
CoLO STATE LIC.:
CoLO FAX:
OFFERS EMAIL:
REALESTATEBYSALG@HOTMAIL.CO

CONTACT PRIORITY

REALESTATEBYSALG@HOTMAIL.COM
1.LA CELL: **213-712-1897**
2.LA CELL: **213-712-1897**
3.LA PAGER:
4.LA FAX: **562-862-7797**
5.LA VOICEMAIL: **213-712-1897**
6.LA EMAIL:
REALESTATEBYSALG@HOTMAIL.COM

COMPARABLE INFORMATION

CLOSE PRICE: **$145,000**
LIST PRICE: **$160,000**
LIST $ ORIGINAL: **$200,000**
PURCH CONTRACT DATE: **03/31/21**
DOM/CDOM: **73/73**

BA: **(YGONZSAL) Salvador Gonzalez**
BO: **First Family Homes**
BA STATE LIC.: **01007673**
BO State License: **01526567**

CoBA: **()**
CoBO:
CoBA STATE LIC.:
CoBO State License:

BUYER FINANCING: **Cash**
CONCESSIONS $: **$0**
CONCESSION CMTS: **NONE**
COE DATE: **04/23/21**



AGENT FULL: Land LISTING ID: DW21010615

Printed by Michael Snodgress, State Lic: 3001271 on 05/17/2021 7:41:45 PM

Search Criteria
Listing Id is DW21010615
Property Type is 'Land'
Selected 1 of 1 result.

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5/17/2021 Matrix

PURCH CONTRACT DATE: **03/31/21**
CLOSE DATE: **04/23/21**

CONTINGENCY: **none**
PRIVATE REMARKS: LOS ANGELES COUNTY Willowbrook AREA, BUYER TO DO HIS OWN INVESTIGATION, WHAT CAN BE BUILT.FOR SALE Adjacent LOT NEXT DOOR,TO BE SOLD TOGETHER. APN 6149-011-904 and 6149-011-905

SHOWING INFORMATION

SHOW CONTACT TYPE: **See Remarks**
SHOW CONTACT NAME:
SHOW CONTACT PHONE:
OWNER'S NAME: **AGUIRRE**

SHOWING INSTRUCTIONS: **go direct, drive-by**
DIRECTIONS: **freeway 105/ 117TH STREET**

AGENT / OFFICE

LA: **(YGONZSAL) Salvador Gonzalez**
CoLA:
LO: **(YFFH) First Family Homes**
LO PHONE: **562-862-7373Ext:0**
CoLO:
CoLO PHONE:
LA STATE LIC.: **01007673**
CoLA STATE LIC.
LO STATE LIC.: **01526567**
LO FAX: **562-862-7797**
CoLO STATE LIC.:
CoLO FAX:
OFFERS EMAIL: REALESTATEBYSALG@HOTMAIL.CO

CONTACT PRIORITY

REALESTATEBYSALG@HOTMAIL.COM
1.LA CELL: **213-712-1897**
2.LA CELL: **213-712-1897**
3.LA PAGER:
4.LA FAX: **562-862-7797**
5.LA VOICEMAIL: **213-712-1897**
6.LA EMAIL:
REALESTATEBYSALG@HOTMAIL.COM

COMPARABLE INFORMATION

CLOSE PRICE: **$145,000**
LIST PRICE: **$160,000**
LIST $ ORIGINAL: **$200,000**
PURCH CONTRACT DATE: **03/31/21**
DOM/CDOM: **74/74**

BA: **(YGONZSAL) Salvador Gonzalez**
BO: **First Family Homes**
BA STATE LIC.: **01007673**
BO State License: **01526567**

CoBA: **()**
CoBO:
CoBA STATE LIC.:
CoBO State License:

BUYER FINANCING: **Cash**
CONCESSIONS $: **$0**
CONCESSION CMTS: **NONE**
COE DATE: **04/23/21**



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5/17/2021 Matrix

11716 Compton Ave, Los Angeles 90059 STATUS: **Closed**

LIST/CLOSE: **$160,000 /$145,000** ↓

freeway 105/ 117TH STREET





ACRES: **0.0689**
$ PER ACRE: **$2,104,499**
LOT(src): **3,000/0.0689 (A)**
AREA: **WATT - Watts**
GROSS EQUITY:
PRESENT LOANS AMOUNT:
HAVE:
DOM: **74**
SLC: **Standard**
PARCEL #: **6149011904**
LISTING ID: **DW21010288**
LIST $ ORIG.: **$200,000**

Use PEAD in Glide During COVID-19

DESCRIPTION

Flat lot, LAND 25' x 100' for sale in South Los Angeles, buyer to do his due diligence, about the zoning, property located in the L.A. county Willowbrook area, south of freeway 105. Next to Martin Luther King Hospital. a lot of new construction and development in this area. Great for contractors, builders, investors ALSO Adjacent lot For Sale,to be sold together, apn 6149-011-0905 sewer and water meter in the sidewalk. OLD BUILDING DEMOLISHED A LONG TIME AGO.

EXCLUSIONS:

INCLUSIONS:

SUBDIVISION: /
COUNTY: **Los Angeles**
55+: **No**
PROBATE AUTHORITY:

FENCING: **Chain Link, Wrought Iron**
VIEW: **None**

SEWER: **Public Sewer**
UTILITIES: **Cable Available, Electricity Available, Natural Gas Available, Phone Available, Sewer Available, Water Available**
ELECTRIC:

LOT FEATURES: **0-1 Unit/Acre, Level with Street, Rectangular Lot**
WATERFRONT:

LAND

COMMON INTEREST: **None**
LAND LEASE: **No**
TAX LOT: **33**
TAX BLOCK: **10**
TAX TRACT #: **5018**
LOT SIZE DIM: **30x100**
ASSESSMENTS:
PARCEL #: **6149011904**
ADDITIONAL PARCEL(s): **No**

ZONING: **LCR2YY**
ZONING DESC.:
TAX PARCEL LTR:
TAX MAP NUMBER:
CURRENT USE:
POSSIBLE USE: **See Remarks**
SPECIAL ASSESSMENTS:

CLEARED:
INGRESS/EGRESS: **available**
SOIL TYPE:
TOPOGRAPHY **flat**
WATER BODY NAME:
WELL REPORT:

WELL PUMP MOTOR HP:
ELEVATION:
SURVEY:
CURRENT GEO REPORT: **No**
NEW CONSTRUCTION YN: **No**

COMMUNITY

HOA FEE: **$0**
HOA FEE 2:
HOA FEE 3:
HOA MANAGEMENT NAME:
HOA MANAGEMENT NAME 2:
HOA MANAGEMENT NAME 3:

HOA NAME:
HOA NAME 2:
HOA NAME 3:

HOA PHONE:
HOA PHONE 2:
HOA PHONE 3:

COMMUNITY FEATURES: **Street Lights**

INFRASTRUCTURE

IMPROVEMENTS:
WATER WELL:
WELL DEPTH:
WATER TABLE DEPTH:
WELL GALLONS PER MIN.:
WELL HOLE SIZE:

ANALYSIS/TAX

IMPROVEMENTS TTL $/%:
PERSONAL PROPERTY $/%:
LAND VALUE $/%:
USABLE LAND %:
TAX RATE:
TAX YEAR:
TAX RATE TOTAL:
TAX AREA:

DISTANCE TO

BUS:
CHURCH:
ELECTRIC:
FREEWAY:
GAS:
PHONE SERVICE:

SCHOOLS:
SEWER:
SHOPPING:
STREET:
WATER: **sidewalk**

LISTING

B.A. COMPENSATION: **2%**
BAC REMARKS:
DUAL/VARI. COMP?: **No**
CURRENT FINANCING:
LISTING TERMS: **1031 Exchange, Cash**
LIST AGMT: **Exclusive Right To Sell**
CONTINGENCY LIST:

LIST SERVICE: **Full Service**
AD NUMBER:
DISCLOSURES:
INTERNET, AVM?/COMM?: **Yes/Yes**
INTERNET?/ADDRESS?: **Yes/Yes**

DATES

LISTING DATE: **01/16/21**
START SHOWING DATE:
ON MARKET DATE: **01/16/21**
PRICE CHG TIMESTAMP: **03/22/21**
STATUS CHG TIMESTAMP: **04/23/21**
MOD TIMESTAMP: **04/23/21**
EXPIRED DATE: **04/30/21**

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AGENT FULL: Land LISTING ID: DW21010288 Printed by Michael Snodgress, State Lic: 3001271 on 05/17/2021 7:38:44 PM

Search Criteria
Listing Id is DW21010288
Property Type is 'Land'
Selected 1 of 1 result.

APPENDIX 3

EASEMENT VALUATION ARTICLE

Easement Valuation

With the ever-expanding Barnett Shale gas field in North Central Texas, the valuation of easements places an increasing demand on appraisers to correctly evaluate pipeline easements and their impact on market value. This treatise is not limited to gas pipelines but is an attempt to provide some thought on how to value easements in general. The valuation of easements requires knowledge of a wide variety of market factors and a look at the rights included in the easement document.

BY DONALD SHERWOOD, SR/WA

First, what is an easement? According to the Dictionary of Real Estate Appraisal, an easement is the "conveyance of certain property rights, but not ownership, to a parcel of real estate." By definition, the ownership of real estate is endowed with a bundle of rights. The concept of bundle of rights maintains that like a bundle of sticks, real property ownership may be wholly intact (fee simple estate) or may be conveyed in part to a third party.

In real property ownership, one has the inherent right to use the property, to sell it, to lease it, to enter upon it, to give it away or the right to refuse to do any of these things. For example, the creation of a lease conveys to the tenant a portion of one's rights for the specific term and space occupied by the tenant according to the terms of the lease. During the lease period, the tenant may have a measurable interest in the property (leasehold estate). The creation of an easement is somewhat similar in that we are dealing with concepts of time and space. By definition, the creation of an easement conveys a portion of the total bundle of rights to a third party. The challenge before the appraiser is the measurement in terms of dollars of the market value of the rights conveyed.

With respect to time, easements may be either permanent or temporary in nature, with either specific or indefinite time frames. One of the most common temporary easements is a temporary construction easement (TCE). This type of easement is generally used to facilitate construction of a project and either terminates at the end of construction or at the end of a specific use period. For example, a 25-foot-wide permanent easement may not provide ample space for construction. An additional 15 feet may be needed for the actual construction and would be acquired as a temporary construction easement.

CLASSES OF EASEMENT

In terms of space, three broad classes of easements exist and include subsurface, surface and overhead easements. Subsurface easements may be required for the construction of water and sewer lines, gas pipelines, communication lines, or tunnels. During construction, surface disturbance may occur and some above ground appurtenances may be present, however the bulk of the project remains below the surface and is unseen. Common surface

easements may allow for drainage, flowage, railroads and highways. These types of easements severely impact the surface area. Typical overhead easements include electrical transmission lines and avigation easements. Some easements may involve two or even all three of these types of space. For example, overhead transmission lines require surface areas for the placement of the towers and some subsurface areas may be needed for the underground footings required. Thus, while generally classified as one of these three broad classes of easements, most easements involve multi-space occupancy.

The task before the appraiser is to evaluate the "rights conveyed" by the creation of the easement and to properly measure these rights. The principles and techniques applied to appraising property for partial acquisitions apply to the valuation of an easement. Under the federal rule, the value of the easement will be based on the difference between the value of the whole property before (or without) the easement and the value of the property with the easement in place.

In this example, the $60,000 of total compensation includes the value of the easement and any damages that may result due to the placement of the easement.

Value of Whole Property Before	
120 acres @ $10,000 per acre	$1,200,000
Value of Whole Property After	
120 acres @ $9,500 per acre	$1,140,000
(Encumbered with 10 acres in easement)	
Total Compensation	$ 60,000

Under the state rule, the appraiser will be required to estimate the value of the easement plus damages to the remainder, if any. For example:

Value of Whole Property	
120 acres @ $10,000 per acre	$1,200,000
Value of the Part Acquired	
10 acres in easement @ $10,000 per acre @ 50%	$50,000
Value of the Remainder Before the Acquisition	
$1,200,000 - $50,000	$1,150,000
Value of the Remainder After the Acquisition	
$1,200,000 @ $9,500 per acre	$1,140,000
(Encumbered with 10 acres in easement)	
Damages	$10,000
Total Compensation	$60,000

"... the mere presence of an easement is not generally the deciding factor in a purchasing decision."

Where do these figures come from? The answer: the market! The appraiser's task is to see what effect, if any, an easement has on the sale of property encumbered with similar easements. In the case of residential property, most urban properties within platted single family subdivisions are likely encumbered with common utility easements. In most situations, these easements extend along the property boundary and have little effect, if any, on the sale of the home. Thus, the market tells us that the easement has little value, if any. Why? The presence of the easement does not affect the use or utility of the property. The easement does not place any undue burden or hardship on the ownership.

Using the illustration below, assume that the 120-acre ownership will be encumbered with 10 acres in permanent easement; however a "gap" exists between the easement and the north property line. The use and utility of this "severed" area is limited given its narrow shape and size. The following is an illustration of this example.



The total effect of this easement can be measured by looking at actual market sales unencumbered with similar easements. Finding encumbered sales can be an extensive exercise requiring lots of time and manpower. While it is highly unlikely that the market will produce an exact situation, it may be possible to find sales encumbered with an easement and compared to a sale unencumbered. This is often referred to as "matched pair sale analysis."

In our local market, we have investigated sales encumbered with gas pipelines and compared them to similar sales encumbered. By nature, the real estate market is a very imperfect market and no two sales are identical. However, by gathering a sufficient number of matched pairs, general trends may emerge that give some market evidence of the effect easements have on value. Our analysis indicates the following trends as outlined below:

PAIRED ANALYSIS SUMMARY

Sales	Dates	Land Sizes (Acres)	Pipeline Size	Price Differential
A-1	9/27/01	5.78	None	-2.4%
A-2	4/30/01	5.73	16"	
B-1	5/29/02	38.427	None	+1.3%
B-2	7/18/02	25.5	16"	
C-1	9/4/01	16.39	None	+44.0%
C-2	12/6/01	15.68	12"	
D-1	8/13/01	101.27	None	-2.1%
D-2	7/12/01	97.92	18"	
E-1	8/26/02	5.0	None	-27.6%
E-2	5/30/02	5.0	20"	
F-1	7/31/02	12.551	None	+6.4%
F-2	8/27/02	14.56	10"	
G-1	6/11//01	29.87	None	-6.5%
G-2	3/8/01	48.318	20"	
H-1	5/29/02	9.81	None	-9.1%
H-2	5/24/01	10.0	16"	
I-1	9/20/00	7.31	None	-1.9%
I-2	2/12/01	10.79	16"	
J-1	1/18/01	112.723	None	+0.1%
J-2	2/1/00	139.09	10"	
K-1	12/14/01	12.665	None	+8.1%
K-2	12/30/02	27.29	24"	
L-1	10/23/02	10.0	None	-5.7%
L-2	11/6/02	15.0	10"	
M-1	7/10/03	14.34	None	0%
M-2	5/20/03	20.48	10"	

Often the market is unclear as to the effect an easement will have on value. Market participants (buyers, sellers, brokers, other appraisers) may offer insight into their personal opinions as to the effect an easement may have on value. In the absence of market data, some appraisers use market surveys of buyers, sellers and brokers to support their opinions. For example, a broker may offer an opinion that a particular property is discounted 5% due to the presence of the easement. This would, at first blush, seem to have a minimal effect on the value. However, some appraisers take such information and apply it inappropriately. Basically, this error results in an overstatement of the effect of the easement may have on value. Using the same example cited above, the appraiser incorrectly assesses the impact as 5% damages to the value of the remainder property plus the value of the easement. The results are as follows:

Value of Whole Property 120 acres @ $10,000 per acre	$1,200,000
Value of the Part Acquired 10 acres in Easement @ $10,000 per acre @ 50%	$50,000
Value of the Remainder Before the Acquisition $1,200,000 - $50,000	$1,150,000
Value of the Remainder After the Acquisition	$1,092,500
Damages	$57,500
Total Compensation	$107,500

What the broker stated was that the property would command 5% less than the property's unencumbered value. Assuming the unencumbered value was $1,200,000, then the total damages would be 5% or $60,000, resulting in a remainder after value of $1,140,000. The $60,000 includes both the value of the easement plus any damages. What the appraiser has done in the above calculations is provided double compensation, $50,000 for the easement plus $57,500 in damages. As you can imagine, this error is compounded when the estimate of damages rises to 10% or 20%, as opposed to the 5% estimate.

When investigating a new easement, some important questions should be addressed by the appraiser. It is imperative that the appraiser understand the nature of both the legal and physical rights that are being sought. Some questions may include:

- What is the proposed use?
- Where is the easement located? Can it be moved?
- Is the easement located in a setback area or along a property line?
- What will be the construction? (open cut versus bored)
- Who will maintain the property during construction?
- Will the easement be surveyed and monumented?
- May either party alter the construction or grade after completion?
- Will the landowner have to obtain permission to use the easement area?
- Can the landowner cross the easement with roads, utilities, etc.?
- Who pays property taxes and insurance?
- Will the easement cause a loss in view, security, etc.?
- Will the easement provide any benefit to the owner?

These issues are often found within the easement document but may require discussions with the condemnor. In terms of legal encumbrance, it is important to recognize that the easement will impact the ownership title and may affect both current and/or future uses.

One key question is "will the easement affect the use and/or utility of the property that results in a change in highest and best use?" Also, the easement may include accessory rights such as the ability to access the easement and ability to expand the use within the easement (add additional pipes). From a physical standpoint, it should be recognized that most of our activity occurs on the surface. Thus, impacting the surface area tends to affect value to a greater degree compared to a subsurface easement where there is little or no impact on surface use. The appraiser thus needs to know how the easement is intended to be used and how it will be constructed.

EASEMENT VALUATION MATRIX

Percentage of Fee	Comments	Potential Types of Easements
90% – 100%	Severe impact on surface use Conveyance of future uses	Overhead electric Flowage easements Railroad ROW Irrigation canals Access roads
75% – 89%	Major impact on surface use Conveyance of future uses	Pipelines Drainage easements Flowage easements
51% – 74%	Some impact on surface use Conveyance of ingress/egress rights	Pipelines Scenic easements
50%	Balanced use by both owner and easement holder	Water or sewer lines Cable line Telecommunications
26% – 49%	Location along a property line, location across non usable land area	Water or sewer line Cable lines
11% – 25%	Subsurface or air rights that have minimal effect on use and utility Location with a setback	Air rights Water or sewer line
0% to 10%	Nominal effect on use and utility	Small subsurface easement

"... will the easement affect the use and/or utility of the property that results in a change in highest and best use?"

Damages or the percentage of rights acquired are often difficult to measure due to the imperfections in the real estate market and due to the fact that the presence of an easement represents only one of many factors affecting the buying decision.

While some buyers may react negatively toward a particular easement, others may view the same property with total disregard toward the easement. Other factors such as location or the presence of some amenity may overshadow the presence of the easement resulting in little dscount, if any.

The Easement Valuation Matrix (left) is used as a general guide in looking at the effect an easement may have on the total bundle of rights. This chart should not be considered an exclusive list as to the type of easements and their effect on the total bundle of rights but should be used only as a guide to general effects on the total fee ownership.

IN SUMMARY

My experience in the valuation of real property leads me to the conclusion that mere presence of an easement is not generally the deciding factor in a purchasing decision. While I recognize that an easement can cause severe harm to a property, each property and situation should be evaluated on an individual basis.

In general, if the market recognizes the presence of an easement as a major adjustment factor, it is likely that market participants would more readily address these concerns when appraisers verify market data.

This is not to say that damages do not occur in the market due to the presence of an easement. Each situation must be reviewed on an individual basis and evaluated using market evidence as opposed to speculation and guesswork. ■

APPENDIX 4

DEMOGRAPHICS REPORT

esri

2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 5 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.22825

	2000	2010	2000-2010 Annual Rate
Population	94,061	98,621	0.47%
Households	21,700	22,605	0.41%
Housing Units	23,187	24,197	0.43%

Population by Race	Number	Percent
Total	98,620	100.0%
Population Reporting One Race	95,446	96.8%
White	27,705	28.1%
Black	28,222	28.6%
American Indian	719	0.7%
Asian	305	0.3%
Pacific Islander	290	0.3%
Some Other Race	38,205	38.7%
Population Reporting Two or More Races	3,174	3.2%
Total Hispanic Population	68,425	69.4%

Population by Sex		
Male	47,277	47.9%
Female	51,344	52.1%

Population by Age		
Total	98,619	100.0%
Age 0 - 4	9,425	9.6%
Age 5 - 9	8,903	9.0%
Age 10 - 14	9,130	9.3%
Age 15 - 19	9,648	9.8%
Age 20 - 24	8,713	8.8%
Age 25 - 29	7,547	7.7%
Age 30 - 34	7,214	7.3%
Age 35 - 39	6,754	6.8%
Age 40 - 44	6,539	6.6%
Age 45 - 49	6,032	6.1%
Age 50 - 54	5,421	5.5%
Age 55 - 59	4,222	4.3%
Age 60 - 64	2,829	2.9%
Age 65 - 69	1,953	2.0%
Age 70 - 74	1,521	1.5%
Age 75 - 79	1,111	1.1%
Age 80 - 84	886	0.9%
Age 85+	772	0.8%
Age 18+	65,339	66.3%
Age 65+	6,243	6.3%

Data Note: Hispanic population can be of any race. Census 2010 medians are computed from reported data distributions.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri converted Census 2000 data into 2010 geography.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 5 minute radius

Prepared by Esri
Latitude: 33.91141
Longitude: -118.23825

Households by Type		
Total	22,605	100.0%
Households with 1 Person	2,926	12.9%
Households with 2+ People	19,679	87.1%
Family Households	18,925	83.7%
Husband-wife Families	10,068	44.5%
With Own Children	6,347	28.1%
Other Family (No Spouse Present)	8,857	39.2%
With Own Children	4,558	20.2%
Nonfamily Households	754	3.3%
All Households with Children	13,650	60.4%
Multigenerational Households	3,902	17.3%
Unmarried Partner Households	2,038	9.0%
Male-female	1,889	8.4%
Same-sex	149	0.7%
Average Household Size	4.25	
Family Households by Size		
Total	18,925	100.0%
2 People	3,008	15.9%
3 People	3,431	18.1%
4 People	3,629	19.2%
5 People	3,157	16.7%
6 People	2,056	10.9%
7+ People	3,644	19.3%
Average Family Size	4.49	
Nonfamily Households by Size		
Total	3,680	100.0%
1 Person	2,926	79.5%
2 People	497	13.5%
3 People	107	2.9%
4 People	48	1.3%
5 People	34	0.9%
6 People	27	0.7%
7+ People	41	1.1%
Average Nonfamily Size	1.40	
Population by Relationship and Household Type		
Total	98,621	100.0%
In Households	96,016	97.4%
In Family Households	90,857	92.1%
Householder	18,982	19.2%
Spouse	10,086	10.2%
Child	43,346	44.0%
Other relative	12,551	12.7%
Nonrelative	5,891	6.0%
In Nonfamily Households	5,159	5.2%
In Group Quarters	2,605	2.6%
Institutionalized Population	1,995	2.0%
Noninstitutionalized Population	610	0.6%

Data Note: Households with children include any households with people under age 18, related or not. **Multigenerational households** are families with 3 or more parent-child relationships. **Unmarried partner households** are usually classified as nonfamily households unless there is another member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Esri estimated block group data, which is used to estimate polygons or non-standard geography. **Average family size** excludes nonrelatives.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 5 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.23825

Family Households by Age of Householder		
Total	18,925	100.0%
Householder Age 15 - 44	9,233	48.8%
Householder Age 45 - 54	4,555	24.1%
Householder Age 55 - 64	2,722	14.4%
Householder Age 65 - 74	1,337	7.1%
Householder Age 75+	1,078	5.7%
Nonfamily Households by Age of Householder		
Total	3,682	100.0%
Householder Age 15 - 44	865	23.5%
Householder Age 45 - 54	740	20.1%
Householder Age 55 - 64	804	21.8%
Householder Age 65 - 74	588	16.0%
Householder Age 75+	685	18.6%
Households by Race of Householder		
Total	22,605	100.0%
Householder is White Alone	5,109	22.6%
Householder is Black Alone	9,403	41.6%
Householder is American Indian Alone	153	0.7%
Householder is Asian Alone	75	0.3%
Householder is Pacific Islander Alone	55	0.2%
Householder is Some Other Race Alone	7,097	31.4%
Householder is Two or More Races	713	3.2%
Households with Hispanic Householder	12,776	56.5%
Husband-wife Families by Race of Householder		
Total	10,067	100.0%
Householder is White Alone	3,172	31.5%
Householder is Black Alone	2,173	21.6%
Householder is American Indian Alone	70	0.7%
Householder is Asian Alone	33	0.3%
Householder is Pacific Islander Alone	30	0.3%
Householder is Some Other Race Alone	4,215	41.9%
Householder is Two or More Races	374	3.7%
Husband-wife Families with Hispanic Householder	7,765	77.1%
Other Families (No Spouse) by Race of Householder		
Total	8,857	100.0%
Householder is White Alone	1,549	17.5%
Householder is Black Alone	4,490	50.7%
Householder is American Indian Alone	66	0.7%
Householder is Asian Alone	24	0.3%
Householder is Pacific Islander Alone	19	0.2%
Householder is Some Other Race Alone	2,453	27.7%
Householder is Two or More Races	256	2.9%
Other Families with Hispanic Householder	4,210	47.5%
Nonfamily Households by Race of Householder		
Total	3,680	100.0%
Householder is White Alone	388	10.5%
Householder is Black Alone	2,740	74.5%
Householder is American Indian Alone	17	0.5%
Householder is Asian Alone	18	0.5%
Householder is Pacific Islander Alone	6	0.2%
Householder is Some Other Race Alone	429	11.7%
Householder is Two or More Races	82	2.2%
Nonfamily Households with Hispanic Householder	801	21.8%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 5 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.22825

Total Housing Units by Occupancy		
Total	24,232	100.0%
Occupied Housing Units	22,605	93.3%
Vacant Housing Units		
For Rent	723	3.0%
Rented, not Occupied	37	0.2%
For Sale Only	333	1.4%
Sold, not Occupied	56	0.2%
For Seasonal/Recreational/Occasional Use	21	0.1%
For Migrant Workers	0	0.0%
Other Vacant	457	1.9%
Total Vacancy Rate	6.6%	
Households by Tenure and Mortgage Status		
Total	22,605	100.0%
Owner Occupied	10,759	47.6%
Owned with a Mortgage/Loan	8,975	39.7%
Owned Free and Clear	1,784	7.9%
Average Household Size	4.40	
Renter Occupied	11,846	52.4%
Average Household Size	4.11	
Owner-occupied Housing Units by Race of Householder		
Total	10,761	100.0%
Householder is White Alone	2,502	23.3%
Householder is Black Alone	4,790	44.5%
Householder is American Indian Alone	69	0.6%
Householder is Asian Alone	34	0.3%
Householder is Pacific Islander Alone	17	0.2%
Householder is Some Other Race Alone	3,023	28.1%
Householder is Two or More Races	326	3.0%
Owner-occupied Housing Units with Hispanic Householder	5,774	53.7%
Renter-occupied Housing Units by Race of Householder		
Total	11,845	100.0%
Householder is White Alone	2,608	22.0%
Householder is Black Alone	4,613	38.9%
Householder is American Indian Alone	84	0.7%
Householder is Asian Alone	41	0.3%
Householder is Pacific Islander Alone	38	0.3%
Householder is Some Other Race Alone	4,074	34.4%
Householder is Two or More Races	387	3.3%
Renter-occupied Housing Units with Hispanic Householder	7,002	59.1%
Average Household Size by Race/Hispanic Origin of Householder		
Householder is White Alone	5.15	
Householder is Black Alone	2.89	
Householder is American Indian Alone	4.98	
Householder is Asian Alone	3.49	
Householder is Pacific Islander Alone	4.89	
Householder is Some Other Race Alone	5.32	
Householder is Two or More Races	4.92	
Householder is Hispanic	5.28	

Source: U.S. Census Bureau, Census 2010 Summary File 1.

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 15 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.22825

	2000	2010	2000-2010 Annual Rate
Population	1,051,331	1,081,672	0.28%
Households	279,167	285,376	0.22%
Housing Units	294,785	301,814	0.24%

Population by Race	Number	Percent
Total	1,081,673	100.0%
Population Reporting One Race	1,039,206	96.1%
White	362,844	33.5%
Black	234,025	21.6%
American Indian	8,196	0.8%
Asian	49,893	4.6%
Pacific Islander	6,521	0.6%
Some Other Race	377,727	34.9%
Population Reporting Two or More Races	42,467	3.9%
Total Hispanic Population	738,783	68.3%
Population by Sex		
Male	525,653	48.6%
Female	556,019	51.4%
Population by Age		
Total	1,081,671	100.0%
Age 0 - 4	93,346	8.6%
Age 5 - 9	90,069	8.3%
Age 10 - 14	94,276	8.7%
Age 15 - 19	99,446	9.2%
Age 20 - 24	89,002	8.2%
Age 25 - 29	83,432	7.7%
Age 30 - 34	78,012	7.2%
Age 35 - 39	76,124	7.0%
Age 40 - 44	73,822	6.8%
Age 45 - 49	69,091	6.4%
Age 50 - 54	62,813	5.8%
Age 55 - 59	50,281	4.6%
Age 60 - 64	38,160	3.5%
Age 65 - 69	27,760	2.6%
Age 70 - 74	20,750	1.9%
Age 75 - 79	15,175	1.4%
Age 80 - 84	10,667	1.0%
Age 85+	9,447	0.9%
Age 18+	743,799	68.8%
Age 65+	83,799	7.7%

Data Note: Hispanic population can be of any race. Census 2010 medians are computed from reported data distributions.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri converted Census 2000 data into 2010 geography.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 15 minute radius

Prepared by Esri
Latitude: 33.91141
Longitude: -118.23825

Households by Type		
Total	285,376	100.0%
Households with 1 Person	44,384	15.6%
Households with 2+ People	240,992	84.4%
Family Households	228,513	80.1%
Husband-wife Families	130,756	45.8%
With Own Children	75,606	26.5%
Other Family (No Spouse Present)	97,758	34.3%
With Own Children	50,706	17.8%
Nonfamily Households	12,479	4.4%
All Households with Children	153,487	53.8%
Multigenerational Households	40,397	14.2%
Unmarried Partner Households	23,971	8.4%
Male-female	22,063	7.7%
Same-sex	1,908	0.7%
Average Household Size	3.76	
Family Households by Size		
Total	228,514	100.0%
2 People	45,180	19.8%
3 People	45,922	20.1%
4 People	47,543	20.8%
5 People	36,980	16.2%
6 People	22,080	9.7%
7+ People	30,809	13.5%
Average Family Size	4.11	
Nonfamily Households by Size		
Total	56,862	100.0%
1 Person	44,384	78.1%
2 People	9,194	16.2%
3 People	1,615	2.8%
4 People	750	1.3%
5 People	413	0.7%
6 People	246	0.4%
7+ People	260	0.5%
Average Nonfamily Size	1.34	
Population by Relationship and Household Type		
Total	1,081,672	100.0%
In Households	1,072,033	99.1%
In Family Households	995,646	92.0%
Householder	228,356	21.1%
Spouse	130,642	12.1%
Child	456,417	42.2%
Other relative	124,771	11.5%
Nonrelative	55,459	5.1%
In Nonfamily Households	76,387	7.1%
In Group Quarters	9,639	0.9%
Institutionalized Population	4,731	0.4%
Noninstitutionalized Population	4,909	0.5%

Data Note: Households with children include any households with people under age 18, related or not. **Multigenerational households** are families with 3 or more parent-child relationships. **Unmarried partner households** are usually classified as nonfamily households unless there is another member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Esri estimated block group data, which is used to estimate polygons or non-standard geography. **Average family size** excludes nonrelatives.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 15 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.23825

Family Households by Age of Householder		
Total	228,514	100.0%
Householder Age 15 - 44	108,590	47.5%
Householder Age 45 - 54	55,118	24.1%
Householder Age 55 - 64	34,926	15.3%
Householder Age 65 - 74	18,069	7.9%
Householder Age 75+	11,811	5.2%
Nonfamily Households by Age of Householder		
Total	56,862	100.0%
Householder Age 15 - 44	16,733	29.4%
Householder Age 45 - 54	11,029	19.4%
Householder Age 55 - 64	11,631	20.5%
Householder Age 65 - 74	8,824	15.5%
Householder Age 75+	8,645	15.2%
Households by Race of Householder		
Total	285,375	100.0%
Householder is White Alone	89,362	31.3%
Householder is Black Alone	84,083	29.5%
Householder is American Indian Alone	2,153	0.8%
Householder is Asian Alone	16,818	5.9%
Householder is Pacific Islander Alone	1,356	0.5%
Householder is Some Other Race Alone	81,260	28.5%
Householder is Two or More Races	10,343	3.6%
Households with Hispanic Householder	160,773	56.3%
Husband-wife Families by Race of Householder		
Total	130,756	100.0%
Householder is White Alone	48,724	37.3%
Householder is Black Alone	20,760	15.9%
Householder is American Indian Alone	996	0.8%
Householder is Asian Alone	8,806	6.7%
Householder is Pacific Islander Alone	763	0.6%
Householder is Some Other Race Alone	45,574	34.9%
Householder is Two or More Races	5,133	3.9%
Husband-wife Families with Hispanic Householder	92,316	70.6%
Other Families (No Spouse) by Race of Householder		
Total	97,758	100.0%
Householder is White Alone	24,549	25.1%
Householder is Black Alone	37,033	37.9%
Householder is American Indian Alone	746	0.8%
Householder is Asian Alone	3,403	3.5%
Householder is Pacific Islander Alone	440	0.5%
Householder is Some Other Race Alone	28,038	28.7%
Householder is Two or More Races	3,549	3.6%
Other Families with Hispanic Householder	52,109	53.3%
Nonfamily Households by Race of Householder		
Total	56,863	100.0%
Householder is White Alone	16,089	28.3%
Householder is Black Alone	26,290	46.2%
Householder is American Indian Alone	411	0.7%
Householder is Asian Alone	4,608	8.1%
Householder is Pacific Islander Alone	154	0.3%
Householder is Some Other Race Alone	7,649	13.5%
Householder is Two or More Races	1,662	2.9%
Nonfamily Households with Hispanic Householder	16,347	28.7%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 15 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.22825

Total Housing Units by Occupancy		
Total	301,731	100.0%
Occupied Housing Units	285,376	94.6%
Vacant Housing Units		
For Rent	8,729	2.9%
Rented, not Occupied	401	0.1%
For Sale Only	2,791	0.9%
Sold, not Occupied	497	0.2%
For Seasonal/Recreational/Occasional Use	423	0.1%
For Migrant Workers	3	0.0%
Other Vacant	3,511	1.2%
Total Vacancy Rate	5.4%	
Households by Tenure and Mortgage Status		
Total	285,376	100.0%
Owner Occupied	127,776	44.8%
Owned with a Mortgage/Loan	104,183	36.5%
Owned Free and Clear	23,592	8.3%
Average Household Size	3.97	
Renter Occupied	157,600	55.2%
Average Household Size	3.58	
Owner-occupied Housing Units by Race of Householder		
Total	127,776	100.0%
Householder is White Alone	44,135	34.5%
Householder is Black Alone	36,870	28.9%
Householder is American Indian Alone	889	0.7%
Householder is Asian Alone	9,512	7.4%
Householder is Pacific Islander Alone	466	0.4%
Householder is Some Other Race Alone	31,469	24.6%
Householder is Two or More Races	4,435	3.5%
Owner-occupied Housing Units with Hispanic Householder	66,726	52.2%
Renter-occupied Housing Units by Race of Householder		
Total	157,601	100.0%
Householder is White Alone	45,227	28.7%
Householder is Black Alone	47,214	30.0%
Householder is American Indian Alone	1,264	0.8%
Householder is Asian Alone	7,306	4.6%
Householder is Pacific Islander Alone	890	0.6%
Householder is Some Other Race Alone	49,791	31.6%
Householder is Two or More Races	5,909	3.7%
Renter-occupied Housing Units with Hispanic Householder	94,046	59.7%
Average Household Size by Race/Hispanic Origin of Householder		
Householder is White Alone	3.97	
Householder is Black Alone	2.74	
Householder is American Indian Alone	3.90	
Householder is Asian Alone	2.94	
Householder is Pacific Islander Alone	4.85	
Householder is Some Other Race Alone	4.67	
Householder is Two or More Races	4.16	
Householder is Hispanic	4.56	

Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021



2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 30 minute radius

Prepared by Esri
Latitude: 33.91141
Longitude: -118.22825

	2000	2010	2000-2010 Annual Rate
Population	4,342,023	4,431,741	0.20%
Households	1,329,545	1,363,301	0.25%
Housing Units	1,392,370	1,443,979	0.36%
Population by Race		**Number**	**Percent**
Total		4,431,741	100.0%
Population Reporting One Race		4,233,473	95.5%
White		1,880,287	42.4%
Black		589,966	13.3%
American Indian		37,033	0.8%
Asian		506,439	11.4%
Pacific Islander		20,154	0.5%
Some Other Race		1,199,594	27.1%
Population Reporting Two or More Races		198,268	4.5%
Total Hispanic Population		2,519,053	56.8%
Population by Sex			
Male		2,179,934	49.2%
Female		2,251,807	50.8%
Population by Age			
Total		4,431,742	100.0%
Age 0 - 4		323,430	7.3%
Age 5 - 9		313,184	7.1%
Age 10 - 14		331,988	7.5%
Age 15 - 19		364,946	8.2%
Age 20 - 24		351,707	7.9%
Age 25 - 29		338,601	7.6%
Age 30 - 34		320,346	7.2%
Age 35 - 39		318,406	7.2%
Age 40 - 44		315,682	7.1%
Age 45 - 49		305,442	6.9%
Age 50 - 54		283,996	6.4%
Age 55 - 59		234,184	5.3%
Age 60 - 64		186,425	4.2%
Age 65 - 69		134,740	3.0%
Age 70 - 74		102,976	2.3%
Age 75 - 79		81,581	1.8%
Age 80 - 84		63,126	1.4%
Age 85+		60,981	1.4%
Age 18+		3,247,085	73.3%
Age 65+		443,404	10.0%

Data Note: Hispanic population can be of any race. Census 2010 medians are computed from reported data distributions.
Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri converted Census 2000 data into 2010 geography.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 30 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.22825

Households by Type		
Total	1,363,301	100.0%
Households with 1 Person	298,542	21.9%
Households with 2+ People	1,064,759	78.1%
Family Households	972,663	71.3%
Husband-wife Families	612,174	44.9%
With Own Children	316,025	23.2%
Other Family (No Spouse Present)	360,489	26.4%
With Own Children	174,837	12.8%
Nonfamily Households	92,096	6.8%
All Households with Children	579,778	42.5%
Multigenerational Households	133,300	9.8%
Unmarried Partner Households	103,137	7.6%
Male-female	91,572	6.7%
Same-sex	11,565	0.8%
Average Household Size	3.20	
Family Households by Size		
Total	972,665	100.0%
2 People	256,299	26.4%
3 People	211,705	21.8%
4 People	207,285	21.3%
5 People	135,081	13.9%
6 People	73,960	7.6%
7+ People	88,335	9.1%
Average Family Size	3.75	
Nonfamily Households by Size		
Total	390,639	100.0%
1 Person	298,542	76.4%
2 People	69,689	17.8%
3 People	12,524	3.2%
4 People	5,388	1.4%
5 People	2,273	0.6%
6 People	1,108	0.3%
7+ People	1,115	0.3%
Average Nonfamily Size	1.34	
Population by Relationship and Household Type		
Total	4,431,741	100.0%
In Households	4,357,441	98.3%
In Family Households	3,832,362	86.5%
Householder	972,632	21.9%
Spouse	612,156	13.8%
Child	1,638,175	37.0%
Other relative	422,638	9.5%
Nonrelative	186,760	4.2%
In Nonfamily Households	525,079	11.8%
In Group Quarters	74,300	1.7%
Institutionalized Population	30,456	0.7%
Noninstitutionalized Population	43,844	1.0%

Data Note: Households with children include any households with people under age 18, related or not. **Multigenerational households** are families with 3 or more parent-child relationships. **Unmarried partner households** are usually classified as nonfamily households unless there is another member of the household related to the householder. Multigenerational and unmarried partner households are reported only to the tract level. Esri estimated block group data, which is used to estimate polygons or non-standard geography. **Average family size** excludes nonrelatives.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

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2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 30 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.23835

Family Households by Age of Householder		
Total	972,662	100.0%
Householder Age 15 - 44	426,293	43.8%
Householder Age 45 - 54	237,057	24.4%
Householder Age 55 - 64	159,739	16.4%
Householder Age 65 - 74	84,990	8.7%
Householder Age 75+	64,583	6.6%
Nonfamily Households by Age of Householder		
Total	390,638	100.0%
Householder Age 15 - 44	139,783	35.8%
Householder Age 45 - 54	69,046	17.7%
Householder Age 55 - 64	69,667	17.8%
Householder Age 65 - 74	51,072	13.1%
Householder Age 75+	61,070	15.6%
Households by Race of Householder		
Total	1,363,302	100.0%
Householder is White Alone	617,666	45.3%
Householder is Black Alone	227,517	16.7%
Householder is American Indian Alone	10,817	0.8%
Householder is Asian Alone	171,197	12.6%
Householder is Pacific Islander Alone	4,757	0.3%
Householder is Some Other Race Alone	280,869	20.6%
Householder is Two or More Races	50,479	3.7%
Households with Hispanic Householder	603,903	44.3%
Husband-wife Families by Race of Householder		
Total	612,174	100.0%
Householder is White Alone	291,370	47.6%
Householder is Black Alone	53,061	8.7%
Householder is American Indian Alone	4,515	0.7%
Householder is Asian Alone	92,597	15.1%
Householder is Pacific Islander Alone	2,542	0.4%
Householder is Some Other Race Alone	145,942	23.8%
Householder is Two or More Races	22,147	3.6%
Husband-wife Families with Hispanic Householder	317,640	51.9%
Other Families (No Spouse) by Race of Householder		
Total	360,490	100.0%
Householder is White Alone	127,939	35.5%
Householder is Black Alone	87,098	24.2%
Householder is American Indian Alone	3,462	1.0%
Householder is Asian Alone	29,907	8.3%
Householder is Pacific Islander Alone	1,408	0.4%
Householder is Some Other Race Alone	95,849	26.6%
Householder is Two or More Races	14,827	4.1%
Other Families with Hispanic Householder	191,660	53.2%
Nonfamily Households by Race of Householder		
Total	390,638	100.0%
Householder is White Alone	198,357	50.8%
Householder is Black Alone	87,358	22.4%
Householder is American Indian Alone	2,841	0.7%
Householder is Asian Alone	48,693	12.5%
Householder is Pacific Islander Alone	806	0.2%
Householder is Some Other Race Alone	39,078	10.0%
Householder is Two or More Races	13,505	3.5%
Nonfamily Households with Hispanic Householder	94,603	24.2%

Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

esri

2010 Census Profile

13320 S Willowbrook Ave, Compton, California,
Drive Time: 30 minute radius

Prepared by Esri
Latitude: 33.91143
Longitude: -118.23835

Total Housing Units by Occupancy		
Total	1,443,827	100.0%
Occupied Housing Units	1,363,301	94.4%
Vacant Housing Units		
For Rent	43,774	3.0%
Rented, not Occupied	2,020	0.1%
For Sale Only	10,320	0.7%
Sold, not Occupied	2,309	0.2%
For Seasonal/Recreational/Occasional Use	5,078	0.4%
For Migrant Workers	23	0.0%
Other Vacant	17,002	1.2%
Total Vacancy Rate	5.6%	
Households by Tenure and Mortgage Status		
Total	1,363,301	100.0%
Owner Occupied	610,868	44.8%
Owned with a Mortgage/Loan	477,255	35.0%
Owned Free and Clear	133,613	9.8%
Average Household Size	3.32	
Renter Occupied	752,433	55.2%
Average Household Size	3.10	
Owner-occupied Housing Units by Race of Householder		
Total	610,869	100.0%
Householder is White Alone	325,434	53.3%
Householder is Black Alone	83,248	13.6%
Householder is American Indian Alone	3,969	0.6%
Householder is Asian Alone	85,774	14.0%
Householder is Pacific Islander Alone	1,705	0.3%
Householder is Some Other Race Alone	91,909	15.0%
Householder is Two or More Races	18,830	3.1%
Owner-occupied Housing Units with Hispanic Householder	227,028	37.2%
Renter-occupied Housing Units by Race of Householder		
Total	752,434	100.0%
Householder is White Alone	292,233	38.8%
Householder is Black Alone	144,269	19.2%
Householder is American Indian Alone	6,848	0.9%
Householder is Asian Alone	85,423	11.4%
Householder is Pacific Islander Alone	3,052	0.4%
Householder is Some Other Race Alone	188,960	25.1%
Householder is Two or More Races	31,649	4.2%
Renter-occupied Housing Units with Hispanic Householder	376,875	50.1%
Average Household Size by Race/Hispanic Origin of Householder		
Householder is White Alone	3.01	
Householder is Black Alone	2.51	
Householder is American Indian Alone	3.52	
Householder is Asian Alone	2.89	
Householder is Pacific Islander Alone	4.26	
Householder is Some Other Race Alone	4.27	
Householder is Two or More Races	3.47	
Householder is Hispanic	4.09	

Source: U.S. Census Bureau, Census 2010 Summary File 1.

May 20, 2021

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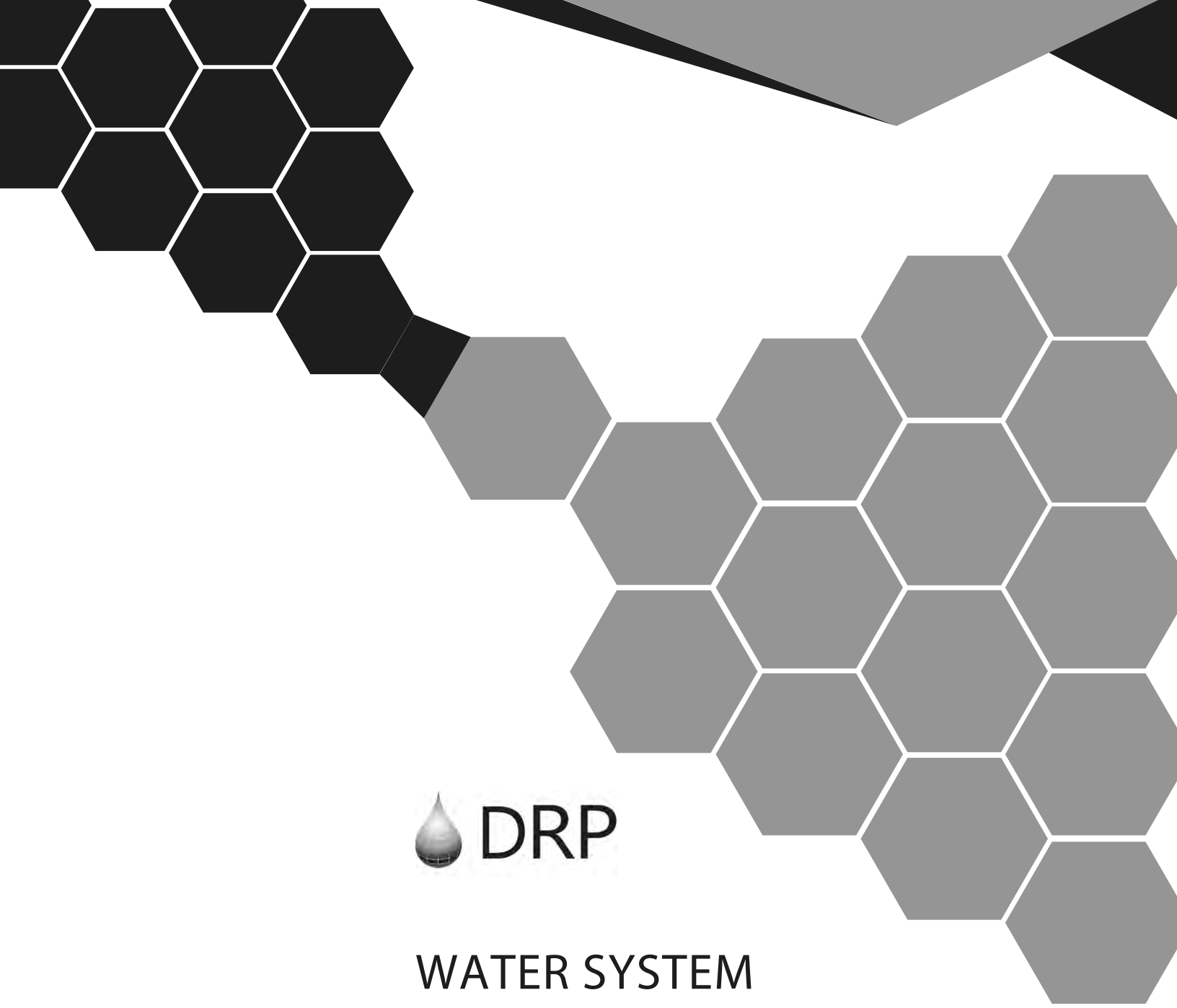
Attachment 6

DRP System Appraisal



DRP

WATER SYSTEM APPRAISAL

COUNTY OF LOS ANGELES - SATIVA WATER SYSTEM

September 5, 2019

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Appendix 1 – Market Sales Comparison

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Executive Summary:

DRP Engineering, Inc. (DRP), per the Agreement with the Los Angeles County Public Works (Public Works), has made a review and analysis of data supporting an opinion of the fair market value of the Sativa Water System (Sativa), formerly the Los Angeles County Water District (District). Based upon our investigation of Sativa using industry standard valuation methods, it is our opinion that the fair market value of this water system, as of June 30, 2019, will range from $1,500,000 to $4,500,000. The estimated value of the water rights is about $6,000,000, for a total value of $7,500,000 to $10,500,000.

The industry standard methods of valuation considered in the formation of the opinion of fair market value of Sativa included:

- Capitalization of earnings (income approach),
- Reproduction cost new less depreciation (cost approach), and
- Comparable sales (market approach).

LIMITATIONS AND CONSIDERATIONS OF THIS APPRAISAL

The opinion of value considers all infrastructure assets and operating rights of Sativa used in its water system operations, and not the value of related current and long-term liabilities of the District that would be transferred in a sale. In addition, these industry standard methods of appraisal cannot account for business decisions and variable valuations of assets by prospective bidders. It is important to note that these considerations may significantly affect the total expected bid amount proposed. The following summarize some potential examples:

- A bidder may focus primarily on the rate base (i.e. the number of potential customers and how much water they will purchase) in terms of net revenue over a certain period of time (maybe 20 to 30 years), and then subtract the expected capital improvements required during that timeframe. This calculation may yield a much smaller bid (possibly similar to income approach), especially considering additional liabilities and loans that Sativa holds.
- Different bidders will likely take different views of water rates. A bidder may consider holding water rates steady or keeping increases low. This would reduce the potential rate base revenue available for capital improvements, yielding a lower bid. The converse is also true (raising rates and increasing bid), but may not provide the County with a preferred outcome.
- Bidders will likely view and value the proposed improvements made by the Public Works differently. Bidders with nearby systems, may choose to not use the Sativa wells after pipeline improvements are made and supply the system through their own infrastructure. As such, their valuation of the well improvements could be much lower, thus affecting the overall valuation of the system.
- The primary asset of Sativa is the water rights. However, there are indications that the market for water rights may currently be a bit "soft". In addition, capital improvement needs in addition to loans and other liabilities may artificially decrease the valuation of these water rights by prospective bidders.
- The unknown nature of the Sativa condition may result in more conservative valuations of Sativa's assets.

Overall, there are many ways in which prospective bidders can consider Sativa's assets and liabilities. Much of the final amounts will rely on their consideration of water rates, required level of future capital improvements, ability to leverage their current assets, and valuation of water rights. The result could be a large variation in

overall price proposals. Generally, the DRP Team estimates that these considerations could result in valuations of the system assets as low as near zero and reduce the water rights valuation to less than $5,000,000.

CAPITALIZATION OF EARNINGS (INCOME APPROACH)

Under the income approach, the prospective future stream of earnings available to a regulated buyer without the ability to escalate the rate base (or one with that ability without the incentive to do so) was capitalized at a rate consistent with the rate of return available on other comparable investments. The results of this valuation approach indicated a fair market value of about $1,882,000. However, in view of the substantial asset value of the water rights not currently in the Sativa balance sheet assets, and large utility buyers having the ability to escalate the succeeding rate base with resulting higher earnings (both at this time unknowns), DRP considers this the weakest approach to value of the three and not a good indicator of potential selling price.

REPRODUCTION COST NEW LESS DEPRECIATION (COST APPROACH)

The reproduction cost new less depreciation (RCNLD) method of valuation, also known as the cost approach, is based on an estimate of the current cost of construction for the physical facilities of the water system, less the estimated actual depreciation to account for the facilities being less than new. Additionally, separate amounts are added for the current market value of other assets such as land and water rights. The RCNLD of the Sativa system facilities, using two methodologies, including land and water rights ranges from $10,200,000 to $10,400,000. In considering the RCNLD, it is important to note that the comparable sales analysis indicates that a regulated buyer would normally not pay total RCNLD for a system.

COMPARABLE SALES (MARKET APPROACH)

Under the market approach, an investigation was made of the sales of other properties similar to that being valued and the results extrapolated to the subject property. For any real estate or income producing property (including a water utility), the strongest evidence of selling price fulfilling the definition of fair market value is the market approach. The six recent water utility sales analyzed in this appraisal indicate a selling price for the Sativa system of $2,000,000. Including estimates for the planned Capital Improvements and the water rights, the estimate is about $9,694,000.

Our research reveals that there have been six California water utility sales since 2013 sufficiently large enough to be comparable to the Sativa system (i.e., systems with a rate base range under the seller's ownership of about $600,000 to $9.6 million). Purchase price premiums paid over the seller's rate base component of facilities transferred have ranged from 19 to 253 percent. Four of the sales were California Public Utilities Commission (CPUC) regulated, both before and after sale, and two were privatization sales by municipal sellers (both of these latter sales by municipalities are pending approval by the CPUC).

The pending Bellflower System sale is considered the strongest comparison with Sativa being located in the same groundwater basin, having a similar number of connections, and system's current condition (close in age needing substantial infrastructure replacements). Both systems also have significant adjudicated water rights values.

WATER RIGHTS VALUATION

For Central Basin water rights, it is DRP's opinion that a sale price of $12,500 per acre-foot is reasonable. This price opinion is supported by an offer by Liberty Utilities in 2018 to purchase the City of Bellflower municipal system. This bid included an additional offer to separately acquire 680 acre-feet of groundwater rights in 2019 for a price of $12,527 per acre-foot. This price was validated using an avoided cost estimate. The current total value estimated for 474 acre-feet of Sativa water rights is approximately $5,925,000. It should be noted that

there are some indications that the current market for water rights in Central Basin is slowing, which may affect this value.

A potential issue regarding this valuation is the regulatory treatment of water rights value contained in the RCNLD analysis submitted in support of the purchase price. A recent California Public Utilities (CPUC) decision rejected value consideration of water rights in a managed, non-adjudicated groundwater basin as part of the RCNLD. Considerable weight is given to the pending Bellflower system sale as a comparable sale. While note expected to affect the Sativa sale, if the forthcoming CPUC decision on this sale rejects Central Basin water rights value as part of the RCNLD basis for price support, the impact to the opinion of fair market value expressed above may be substantial.

SUMMARY OF ESTIMATES

Table 1 provides a summary of the results of all the methods of valuation employed.

Table 1 - Summary of Sativa Valuation

Methods of Valuation	Valuation
1. Capitalization of Earnings	
($160,000 at a rate of 8.5%)	$1,882,000
2. Reproduction Cost New Less Depreciation (RCNLD)	
Indexing Escalation Methodology w/o Water Rights	$2,687,000
With Estimated Capital Improvements (a)	$4,455,825
With Water Rights	**$10,380,825**
Current Unit Price Methodology w/o Water Rights	$4,271,350
With Water Rights	**$10,196,350**
3. Comparative Sales	
Based on OCNLD with 6% Premium	$2,000,000
With Estimated Capital Improvements (a)	$3,768,825
With Water Rights	**$9,693,825**
Water Rights Valuation (474 AF at $12,500/AF)	**$5,925,000**
(a) Does not include Mn Treatment Costs	

Section 1 - Introduction

DRP Engineering, Inc. (DRP), per the Agreement with the Los Angeles County Public Works (Public Works), has made a review and analysis of data supporting an opinion of the fair market value of the Sativa Water System (Sativa). It is our understanding that this valuation analysis may be used in negotiations for potential sale of the system. Based upon our investigation of Sativa using industry standard valuation methods, it is our opinion that the fair market value of this water system, as of June 30, 2019, will range from $1,500,000 to $4,500,000. The estimated value of the water rights is about $6,000,000, for a total value of $7,500,000 to $10,500,000 Note the limitations and considerations discussed in the executive summary. The following sections discuss in greater detail the basis for this opinion.

DETERMINATION OF FAIR MARKET VALUE

As used in this report, fair market value is defined as the, "…highest price on the date of valuation that would be agreed to by a seller willing to sell but under no particular need or necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available" (CCP 1263.320 (a)).

This opinion of Sativa's value assumes the market value of the utility plant assets, easements, business franchise rights, going concern value, and materials and supplies. However, the opinion does not include working funds, current assets, and any other investment and fund accounts of the Sativa. Further, current and accrued liabilities, deferred revenues and long-term liabilities are not included. In summary, the opinion of value considers all assets and operating rights of the Sativa used in its water system operations, and not the value of related current assets and liabilities of the District that would be transferred in a sale.

DATE OF VALUE

The opinion of fair market value expressed in this report is based upon a date of valuation of June 30, 2019, i.e., the facilities and intangible assets being valued are those, which existed as of June 30, 2019. This date was chosen because of the availability of financial statements plus asset records.

SCOPE OF INVESTIGATION

Studies and preparation undertaken in connection with this appraisal include the following:

1. Review of accounting records representing annual plant asset additions and depreciation, current trial balance sheet and income and expense statement, and other relevant financial records provided by the Public Works; and recent independent Auditors Financial Statements.
2. Review of Sativa Annual Reports to the State Water Resources Control Board, Division of Drinking Water (SWRCB) for years 2014 through 2018 as submitted by Sativa; Consumer Confidence Reports to customers prepared by Sativa for years 2014 through 2017; recent water qualify data and an interview of Mr. Russ Bryden, Assistant Interim Administrator, in order to gain an understanding on the current status of operations, water quality and resources, system condition, ratepayer satisfaction and growth, and related issues.
3. Field visit to the service area of Sativa in order to view aboveground system components and service area characteristics with assistance from Mr. Jose Molina, system operator, and Mr. Bryden.
4. Review of records maintained by the SWRCB in its Glendale office including engineering reports to support potable water supply permit and amendments, sanitary survey inspection reports, and other records supplied by the Board.
5. Review of Sativa Water Master Plan prepared by CivilTec Engineering, Inc.; fire hydrant tests; modeling study report; water quality action plan prepared by the Water Replenishment District of Southern California (WRDSC) on behalf of Sativa; real estate parcel records; and other asset evaluation records.
6. Review of DRP Water System Evaluation Report prepared with assistance from Stetson Engineers, Inc.
7. Review and analysis of water rights sale and lease records obtained from the WRDSC, administrator of the Central Basin Watermaster, in order to derive an opinion of Central Basin groundwater rights. This task

also included conversations with individuals familiar with this market and research on municipal council meeting agenda attachments to obtain data.

8. Estimation of the rate base that would be expected to be allowed by the California Public Utilities Commission (CPUC) in determining the amount of investment returns, which would be allowed on these facilities under private ownership.
9. Performance of a capitalization of earnings study for purchasers subject to CPUC regulation.
10. Investigation of sales of those systems identified to be comparable to this system, including a review of data and proceeding records contained in the files of the CPUC for selected sales.
11. Derivation of the reproduction cost new less depreciation (RCNLD) estimate for the water system assets utilizing District asset records escalated by use of either the Handy-Whitman Index of Municipal Water System Construction, or US Department of Labor Consumer or Producer Price Indexes; and anticipated depreciation accruals based on experience obtained by DRP in preparing many RCNLD studies of similar properties.

QUALIFYING CONDITIONS

The opinion of value expressed in this report is subject to the following qualifying conditions:

1. The valuation assumes good and clear title to the property and facilities being valued. Further, it is assumed that a purchase of the system would be on an all-cash basis. Any assumption of the two existing long-term debts as part of the sale financing, or payoff by the seller with sale proceeds would not be expected to change the opinion of fair market value.
2. The facilities included in the appraisal are dedicated to the provision of water service to Sativa ratepayers, and their acquisition by a regulated purchaser (other than a public agency or mutual water company) would be under the regulatory jurisdiction of the CPUC. It is also assumed that a purchaser, either a public agency, mutual water company or private investor, would be able to obtain a permit from the SWRCB in order to operate the water system.
3. The information and data reported in connection with this appraisal have been obtained from sources, which are deemed reliable and, after review, are believed to be substantially correct.
4. DRP has no present or prospective direct or indirect financial interest connected with any of the parties involved with this utility, and its employment in preparing this appraisal report is not in any manner contingent on finding of any specified or implied values, or otherwise contingent on anything other than the preparation of this opinion.
5. This report and supporting analyses are limited to the derivation of an opinion of fair market value of the system. No analyses or opinions are expressed with regard to what a detailed due diligence investigation might reveal such as condition of title, status of facility easements, risk of hazardous waste exposure or contamination, conformance with operating regulations and laws, facility construction violations and similar issues.
6. A potential issue regarding this valuation is the regulatory treatment of water rights value contained in the RCNLD analysis submitted in support of the purchase price. A recent CPUC decision rejected any value consideration of water rights in a managed, non-adjudicated groundwater basin as part of the RCNLD. The pending sale price (discussed below) of the City of Bellflower system contains an allocated portion to Central Basin water rights. This appraisal analysis includes an estimated fair market value of the system including substantial value of these adjudicated rights (which have an active sale market separate from land or system attachment). Considerable weight is given to the pending Bellflower system sale as a comparable sale. While not expected, Iif the forthcoming CPUC decision on this sale rejects Central Basin

water rights value as part of the RCNLD basis for price support, the impact to the opinion of fair market value expressed below may be substantial.

MEHTODS OF APPRAISAL

The methods of valuation considered in the formation of the opinion of fair market value of Sativa included capitalization of earnings (income approach), reproduction cost new less depreciation (cost approach), and comparable sales (market approach).

UTILITY REGULATION

The primary regulatory agency that exerts jurisdiction over the Sativa system operations is the SWRCB. Also essential to consider in this valuation as a regulatory agency is the CPUC, which exerts regulation over potential investor owned utility purchasers of the Sativa.

California Public Utilities Commission (CPUC)

The CPUC has jurisdiction over privately owned water utilities in the state including regulation of rates, financial practices and operating adequacy. Currently, as a publicly owned system, Sativa is not under the jurisdiction of the CPUC. However, CPUC policy regarding the acquisition of water systems by regulated investor owned water companies should be considered when estimating the potential fair market value of the Sativa. Relevant CPUC policy is discussed below.

State Water Resources Control Board (SWRCB)

The Sativa system is also under the regulatory jurisdiction of the Glendale office of the SWRCB. The agency provided many regulatory files in response to a data request for our review.

Section 2 – Description of the System

Sativa was formed in 1938 as a special district under the County Water District Act (Water Code 3000 et seq.). Sativa provides retail water service to an approximately one-half square mile area in the Willowbrook community of unincorporated Los Angeles County and a portion of the City of Compton. The Sativa service area consists of essentially all single-family residential land use and is almost totally built out. There are currently a recorded 1,642 residential and one commercial service connections serving a population of about 6,800 people.

Service is provided through approximately 49,000 feet of distribution mains in one pressure zone, almost all of 4- to 6-inch diameter asbestos cement delivered from two Central Basin groundwater wells. Sativa owns 474 acre-feet of allowed pumping allocation in the Central Basin required for groundwater production. Minimal storage is contained in four 10,000-gallon hydropneumatic tanks (3 operational). The system also contains 58 fire hydrants of 4- and 6-inch size. Sativa is operated from one two-story block office building and owns a variety of office and maintenance equipment plus vehicles. A detailed inventory and system evaluation report has been prepared by DRP to accompany this valuation report to further describe the system and needed improvements.

Customers of Sativa historically have observed episodes of “brown water” coming out of their faucets. Water quality sampling has indicated there have been secondary water quality violations related to the discoloration of

the water and the presence of manganese. There have been numerous occurrences of brown water events with associated ratepayer complaints. With the exception of the physical characteristics, the water quality in the Sativa system has been in compliance with water quality standards. Total dissolved solids reported in past recent testing have averaged 370 mg/l or less (compared to the first tier standard of 500 mg/l). Hardness has been detected at 210 to 250 mg/l. No violations of trace organic or inorganic chemicals have occurred.

In addition, Sativa has been cited by the State Water Resources Control Board – Division of Drinking Water (DDW) for not having adequate water pressure and flow required for firefighting. Also mandated for correction is the insufficient storage and production capacity to meet emergencies and peak hourly flow. DDW has expressed concerns regarding Sativa's ability to maintain its pipes and related infrastructure. To ensure that customers of Sativa have access to safe and clean water, the State of California passed legislation for Public Works to take over administration and operation of Sativa until a new, long-term water provider is identified. In addition, the Local Agency Formation Commission of Los Angeles (LAFCO) has completed the formal process of dissolving Sativa.

Sativa has recently secured funds from the State Revolving Fund to rehabilitate the well casings, replace well mechanical (downhole and top side) and electrical systems, convert the gas chlorination systems to hypochlorite tablet, and install a SCADA system for Wells 3 and 5. Funding for this work will come from an Integrated Regional Management grant. The total estimated cost for these improvements in approximately $1,700,000. It is believed that any infrastructure improvements accompanied by grant forgiveness at the time of system sale will result in an equal increase in fair market value. In addition, Public Works has applied for a grant to install a Manganese Treatment System at Well 5. Additional detail regarding these improvements at provided in subsequent documents prepared for the RFP.

The Sativa system also has two long-term loans in approximate amount of $2.9 million. One of these debts is owed to the County of Los Angeles for an estimated amount of $1,400,000; the other is a private bond in the approximate amount of $1,620,000. Note that approximately 570,000 of these bond funds are unused. Other debts and agreements are detailed fully in the Bidder's Notebook prepared as part of the RFP.. This appraisal opinion is given without consideration of any loan payoff or assumption.

Section 3 – Comparable Sales

A comparable sale is a sale of property, the price of which will shed light on the value of the property being appraised. Although, there is never a completely "comparable sale", based on knowledge and experience gained in appraising water utility facilities, it can be stated generally that market sales of water systems follow the same economic principles of supply and demand as other market transactions. This can provide a basis for making an estimate of the fair market value of water system facilities being valued. In appraisal practice there are several characteristics of a transaction, which are typically considered in evaluating whether a transaction is a "comparable sale".

Characteristics of Comparable Sales

Among the characteristics considered for selecting comparable sales are:

- The character and use of the property in relation to that being appraised;

- The size of the property involved in the particular transaction in relation to the size of that being appraised;
- The geographic proximity of the property to that being appraised; and
- The date of the transaction in relation to the date of value for the property being appraised.

All of the sales considered as being comparable were sales of water system facilities, which following transfer were under the regulatory jurisdiction of the CPUC. All of the utility properties sold deliver water for domestic and associated commercial use through distribution systems consisting of pipelines and appurtenant equipment. After sale, the facilities were all governed by the rules of the CPUC (research indicated that no recent large California water system sale occurred to a public agency not under the jurisdiction of the CPUC). Most importantly, the rate setting procedures and the determination of return on invested capital would be similar for all of these properties for the purchasers. Further, in the case of a potential public agency purchaser not under CPUC supervision, such a buyer would be in the same market with potential regulated purchasers and would likely develop insights on current water system values from the same recent market transactions (not unlike the market completion occurring between Central Basin water rights transfers involving both public agencies and regulated utilities). Consequently, it is concluded that for all of the sales we have considered, the character and use of the property following sale are sufficiently similar to that of the property being appraised that the sales can be considered as comparable.

From the standpoint of size, adjustments have been made for the differences between various sales by expressing the sales price as a percentage of rate base (or depreciated original cost in the case of municipal systems including Sativa), or RCNLD under the seller's ownership, rather than making a primary comparison of actual dollar amounts paid. Further, only sales of facilities having rate bases of sufficient magnitude were considered. For this appraisal, a sale range was considered for utilities having rate bases in the range of approximately $600,000 to $9.6 million. Hence, it is considered that from the standpoint of size, the sales we have utilized are comparable.

All of the comparable sales considered are utilities within the State of California and following sale were under the regulatory jurisdiction of the same regulatory agencies. The CPUC utilizes the same procedures and criteria for setting rates and for determination of allowable rates of return throughout the state. Further, for all selected system transfers, either under private or public ownership, water quality and operational regulations are applied by the SWRCB. Accordingly, any sale taking place within the State of California can be considered as sufficiently close in location to the property being valued to be a comparable sale.

The last characteristic to be considered is the date when a sale took place in relation to the date of value applicable to this analysis. In order to sufficiently analyze the utility market for system facilities of comparable size, we have reviewed sales occurring from 2013 through the date of this report. However, the price paid for a system was not used alone in this approach to value but also a review of the price paid as percentages of the rate base and RCNLD were used to determine value. Therefore, it is considered that the earlier sales are sufficiently close in time to the date of value of this analysis to provide meaningful data for comparison purposes. Before analyzing comparable sales it is necessary first to derive a potential imputed rate base (OCNLD) for the Sativa system, which is utilized as a comparable sale parameter.

ESTIMATED RATE BASE

The operations of an investor owned water utility in California including earnings are required to be regulated by the CPUC if charges are applied to water deliveries. The Sativa system is currently not under CPUC jurisdiction in view of its operation as a publicly owned water system. However, it is likely that the majority of potential purchasers will be under CPUC regulation. Under the policies of the CPUC, a utility's earnings are designed to yield a fair rate of return on the capital invested in the facilities by the owners of the utility. This invested capital is referred to as rate base.

The rate base, which may be expected to be allowed for facilities owned by an investor-owned utility by the CPUC is normally made up of the following elements:

1. The historic capital costs of the facilities comprising the utility plant which remain in service;
2. A deduction for the accumulated depreciation applicable to the foregoing facilities computed in accordance with the policies of the CPUC;
3. Deductions for that portion of the utility plant financed by means other than investment by the utility owner. These deductions include contributions in aid of construction, or "CIAC" (on the basis of the depreciated value of the facilities represented by these contributions) and unreimbursed advances for construction remaining on the books at the time of computation of the rate base;
4. Deductions for any portions of the depreciated costs which represent an imprudent expenditure of funds, including money used for facilities not used or useful in supplying the water system demands or for over design of the system;
5. Allowances for working cash and for materials and supplies;
6. An allowance for the given rate making unit's pro rata share of common plant (such as a utility's general offices) in the case of larger water companies owning multiple water systems.

Several of the above items, including investment by others and common plant, although they would typically make up a part of the rate base, do not relate to the property being valued in this report.

Estimated Existing Rate Base of Sativa Water System

In order to perform a comparable sales analysis for the Sativa system potentially to be acquired by a purchaser under the regulation of the CPUC, it was necessary to first establish an estimated current imputed rate base for the system facilities potentially to be purchased at the date of value (June 30, 2019). Table 2 presents our assessment of the potential utility plant component of rate base (representing that portion of the rate base being considered for sale) in the amount of $1,883,805 for the water system facilities as of June 30, 2019. The sources for this rate base estimate include the following:

- The utility plant account balances reported in the Sativa draft balance sheet as of April 30, 2019;
- Report of Independent Auditors for the year ended June 30, 2017;
- Depreciation worksheets as of fiscal 2016-17; and
- An analysis by DRP of estimated depreciation in accordance with CPUC guidelines.

A new rate base would be recognized by the CPUC in a sale approval proceeding equivalent to the purchase price paid for the system. However, the current rate base before escalation is a parameter that a buyer would take into account in determining the price of the system to offer.

Theoretically, a large Class A or B regulated utility buyer (over 10,000 and between 2,000 and 10,000 connections, respectively) could request from the CPUC a stepped up rate base based on a purchase price above the existing rate base in accordance with CPUC policy. This possibility is discussed below following the presentation of recent comparable sales.

TABLE 2 - POTENTIAL ESTIMATED UTILITY PLANT COMPONENT OF RATE BASE SATIVA WATER SYSTEM (APRIL 30, 2019)

Account No.	Description	Amount ($)
303	Land	154,511
304	Structures	329,549
307-311	Wells and Pumping Equipment	1,095,649
317	Other Source Plant (Paulsen Conn.)	159,306
331	Water Mains	775,928
333	Services	53,920
335	Hydrants	6,722
340	Furniture & Office Equipment	83,422
341	Transportation Equipment	77,315
339	Other Maintenance Equipment	179,390
	Subtotal, Utility Plant in Service	**$2,915,712**
108	Depreciation Reserve	(1,246,902)
	Subtotal, Depreciated Utility Plant	**$1,668,810**
151	Plus, Materials and Supplies	43,734
105	Plus, Deferred Capital Charges	171,261
	Utility Plant Component of Rate Base	**$1,883,805**

Public Water System Investment And Consolidation Act Of 1997 (SB 1268)

In 1997, the Public Water System Investment and Consolidation Act (Act) was signed into law (codified in Section 2720 of the Public Utilities Code). There are three major elements to this legislation, only one of which is pertinent to this study. That element addresses sales of water utility property to regulated buyers of water systems and the associated recognition of rate base by the CPUC. This appraisal study takes into account the results of this legislation, as discussed below.

COMPARABLE UTILITY SALES

The specific utility sales considered in this analysis are those meeting the following criteria (in addition to the earlier criteria stated):

- Sales representing arm's length transactions;
- Sales which were limited to utility property (i.e., the sale did not include significant other non-utility property);
- Sales which did not involve any other special circumstances which would cast a doubt on their validity as an indication of what would happen in a normal market transaction;
- Sales of complete water systems (either a complete water company or a separate operating system of a company).

Utility Sales To Regulated Buyers

Our research reveals that there have been six California water utility sales since 2013 sufficiently large enough to be comparable to the Sativa system (i.e., systems with a rate base range under the seller's ownership of about $600,000 to $9.6 million). Purchase price premiums paid over the prospective rate base component of facilities transferred have ranged from 19 to 253 percent. As shown in Table 3, four of the sales were CPUC regulated, both before and after sale, and two were privatization sales by municipal sellers. The last three sales (Hillview, Perris and Bellflower are still pending approval by the CPUC).

TABLE 3 - SUMMARY OF DATA ON SALES OF CALIFORNIA WATER SYSTEMS

System	Purchaser	Year	Rate Base Component of Facilities Transferred	Purchase Price	Percent Premium
Sales to Regulated Buyers					
Rural Water Company	Golden State Water Co.	2013	590,000	1,700,000 (a)	188
Meadowbrook Water Company	Cal-Am Water Co.	2014	1,904,000	3,902,000	105
Rio Plaza Water Company	Cal-Am Water Co.	2016	509,000 (b)	1,796,000 (a)	253
Hillview Water Company	Cal-Am Water Co.	2017	2,690,000 (c)	7,470,000	178
City of Perris Municipal WS	Liberty Util. Corp.	2017	9,635,000 (e)	11,500,000	19
Bellflower Municipal WS	Cal-Am Water Co.	2018	6,837,000 (e)	17,000,000(a)	149

(a) Includes allocation to water rights value.
(b) Imputed rate base from 2017 test year and income based on rate of margin.
(c) Imputed rate base from 2015 test year and income based on rate of margin.
(e) Estimated only.

Rural Water Company

The first sale in Table 2 is the agreement for the sale of the assets of Rural Water Company (Rural) to Golden State Water Company (GSWC), a subsidiary of American States Water Company, executed on June 12, 2013. The application for CPUC approval was filed on October 10, 2013; followed by a settlement agreement in July 2014. The CPUC approved the settlement agreement and sale in 2016 (D.15-06-049). The settlement agreement was uncontested. Rural Water Company serves about 950 customers in, or near Arroyo Grande, San Luis Obispo

County. Annual revenues are about $917,000. Rural also included a sewer utility serving the same customers. The sale did not include the sewer utility.

GSWC is the second largest regulated water utility in California, and the third largest in the U.S. by market capitalization. GSWC proposed to add Rural to its Santa Maria service area, composed of five non-contiguous systems, the nearest of which is only six miles away. Service includes customers located in all or portions of the cities of Santa Maria and San Luis Obispo, and in the wider areas of Santa Barbara and San Luis Obispo counties. This service area serves about 13,500 customers before combining with Rural.

The seller of Rural was Charles Baker, the sole stockholder, who had been operating the system since 1988. On account of his age (80s) and health, he made the decision to sell the system. The system has 11 active wells with a combined capacity of 1,318 gpm, 5 storage tanks with a combined storage capacity of 1.2 million gallons (mg), and in excess of 66,000 feet of distribution mains. Most of the facilities were constructed after 1983. An RCNLD appraisal, performed by Kennedy Jenks, indicated a value of about $25 million. Rural's water quality is reportedly meeting standards.

The purchase price was $1.7 million cash. GSWC proposed to add $375,000 of the purchase price to the utility's general office rate base (with the rate of return and depreciation revenue requirements allocated to all service areas of the company- the general office allocation was to be depreciated over 8 years). The remaining purchase price of $1,325,000 was proposed to be added to the Santa Maria service area rate base. Initial rates were the existing Rural rates until new rates were adopted for the Santa Maria service area (with an ongoing currect rate case). The estimate of rate base for Rural in the application for sale approval was approximately $590,000 indicating a sales price premium of about $1,110,000 or 188 percent.

One consideration which makes this sale different from most is the amount of contributed facilities. Rural had an estimated $2.3 million of CIAC which, as stated below, the CPUC indicated may be compensated in whole or part in a proposed sale on a case by case basis.

Monthly customer rates for the Santa Maria district are about 35 percent higher than Rural's, but the latter's volumetric rates are greater by 10 to 15 percent. For a customer with a minimum 5/8-inch meter and 20 ccf (hundred cubic feet) usage, rates are close to unchanged ($52.49 for a Rural customer, versus $53.05 for a GSWC customer, a difference of only about 1 percent, with GSWC rates pending adoption in the ongoing rate case). Customers with lower usage would see higher bills; customers with higher usage would see lower bills. The active rate case was also targeting higher rates for 2017 and 2018 by 4.2 and 4.0 percent respectively.

In the settlement agreement between the state's utilities and the CPUC following the passage of SB 1268 in 1998 (D.99-10-064) regarding how to handle future proposed sales, the CPUC stated it would consider inclusion of CIAC as compensable property on a case by case basis (that is, allow the price paid for such purchased contributed facilities to be included in the buyer's rate base). This is the first sale approval since that time where the CPUC cited CIAC as a justification for approving a high sale premium. In the most recent sale proceedings, the CPUC appears to have become much more favorable in approving proposed sales in order to accomplish consolidation of the smaller water companies into the ownership of the largest Class A utilities in accordance the CPUC's 2010 Water Action Plan. The recent Meadowbrook sale decision (see below) also provided in the settlement agreement an allowance for California American Water Company (Cal-Am) to classify a portion of the sales price as a contribution by the company subject to refund by the ratepayers.

Meadowbrook Water Company

On December 21, 2015 Cal-Am filed an application (A.15-12-016) to acquire the stock of Meadowbook Water Company (Meadowbrook) providing service to approximately 1,700 customers in Merced County (located approximately 125 miles north of Sacramento). After negotiations between involved parties (not including area

public agencies or ratepayer groups, except as represented by the CPUC's Public Advocate's Office) a settlement agreement was signed. Subsequently, in December, 2016, the CPUC approved the settlement agreement and proposed sale (D.16-12-014). Meadowbrook was started by a building contractor in the 1950s to serve a residential development which today includes about 1,600 residential customers and 100 commercial connections. Service is provided through three wells controlled by hydropneumatic tanks, approximately 106,000 feet of cement asbestos pipe (almost all of which is 4- and 6-inch diameter), a SCADA system and VFD controls on all motors. All connections are metered. No compliance orders are outstanding. The total RCNLD for the system was estimated to be about $22 million.

The settlement agreement provided for a $4.0 million purchase price consisting of a $3,425,000 addition to rate base (added to the Sacramento District rate base of Cal-Am) plus $575,000 included as a contribution in aid of construction, which Cal-Am will not be able to earn a rate of return. However, the seller received the full amount of $4.0 million as the sale price. The $575,000 portion was to be paid off by the Sacramento District ratepayers as a 36-month surcharge. The existing rate base for the Meadowbrook system, based on the 2014 Annual Report (as of December 31, 2014), was $1,904,000, plus net current assets (current assets less current liabilities) of about $98,000 resulting in a total seller's asset balance of about $2,002,000. This resulted in a premium paid for the rate base of approximately 105 percent (making an adjustment for $98,000 of the purchase price being paid for net current assets).

The CPUC approved this settlement which was almost twice the highest premium approved historically. This is also believed to be the first time ratepayers from another District are required to pay for contributed system investment in an acquisition from another area. Based on the submitted public information, it is unclear how rates will be affected from this transaction. It appears Meadowbrook customers may have incurred a 40 percent or higher increase in average bills.

Rio Plaza Water Company

In 2016, Cal-Am proposed the acquisition of the stock of Rio Plaza Water Company in Ventura County, northeast of the City of Oxnard. The sole owner wished to sell the system on account of age and his desire to retire. This system serves approximately 520-metered connections including seven commercial or institutional customers and the remainder residential. The system relies on two groundwater wells, one booster pump station, two reservoirs and about 20,725-feet of distribution mains, primarily 4- to 10-inch diameter asbestos cement. It is believed the system was constructed between 1956 and 1961. The system is in compliance with drinking water standards and has adequate source capacity to serve its customer base. The buyer also owns a large system serving the City of Thousand Oaks located about 20 miles away.

Cal-Am proposed to pay $1.75 million plus assumption of about $46,000 in current liabilities net of current assets for this system to be operated as a standalone rate district. The rates at the time of sale were based on a return to margin basis as the existing rate base was on the order of $431,000. Imputing a comparable rate base based on the recently authorized projected net income and recommended average rate of return for Class C utilities in 2017 of 10.5 percent results in an amount of $509,000. Accordingly, Cal-Am proposed to acquire this system for a rate base premium of about 253 percent. The claimed submitted RCNLD for this system was $2,562,401 of which $1,155,000 was attributed to water rights in a public agency managed groundwater basin. The decision approving this sale (D.19-04-015, April 25, 2019) excluded the estimated value of water rights from the RCNLD estimate by the proponents. Therefore, the associated recognized RCNLD for this system was estimated to be $1,407,401, well under the adopted purchase price.

Hillview Water Company

The last sale of an existing CPUC regulated system on Table 2 is the proposed acquisition by Cal-Am of the Hillview Water Company (Hillview) located in Madera County. The stock purchase agreement for an amount of $7,479,459 (includes assumption of company debt as reported by the buyer) was dated October 5, 2017. This purchase price reflects a premium above the inputed rate base of about 178 percent. Hillview initiated water service in 1961 and now serves approximately 1,150 residential customers in six separate operating systems. Water quality continues to be an ongoing problem with arsenic, uranium, iron and manganese needing expensive removal treatment. The system has been classified as an "Inadequately Operated and Maintained Small Water Utility" on account of several outstanding compliance orders issued by the SWRCB. This designation provides several incentives to an acquiring large water utility (including the authorization to establish memorandum accounts to recover the cost of future unanticipated repair expenses up to seven years and recover sale transaction costs). The system is being sold by several children of the founder's family, one of which has been the sole general manager and is nearing retirement age.

Total main footage in the four service areas is about 322,000-feet, varying is size from 1- to 12-inches in diameter and comprised mainly of polyvinyl chloride. Water production is from 29 small capacity wells distributed through 45 tanks with a combined capacity of 2.3 mg. The estimated RCNLD of this water company, submitted with the sale application, is in excess of $30 million. This proposed purchase is currently being processed by the CPUC.

City of Perris Municipal Water System

The last two proposed sales are privatization sales of municipally owned systems to CPUC regulated buyers. The first in 2017 is the proposed purchase of the City of Perris water system by Liberty Utilities (Park Water) Corp. This system consists of two separate areas, the downtown area with about 2,374 connections and the North Perris system (the former McCanna Ranch Water Company) with approximately 1,367 connections, together serving an estimated 3,741-metered customers (3,385 residential and 356 commercial). The purchase price is $11,500,000, all cash. The City Council and customers voted to privatize the system on account of the water enterprise being in debt and the continuing annual operating deficits. Annual future water rates will be limited for 10 years to the greatest of 3.3% or annual increases in Eastern Municipal Water District (EMWD) water service rates which agency serves the remainder of the City of Perris service area. Current rates will be retained after the sale without substantial increase. This proposed sale is pending approval by the CPUC.

The North Perris system relies almost entirely on four groundwater wells, with one imported water connection being available for deliveries from EMWD. Groundwater quality is very good for this system with no regulatory notices or deficiencies except for minor monitoring violations (for either water qualify or operations). This system is of recent construction with all of the facilities constructed in 2003 (accordingly, about 12 years old at the time of the sale contract). Pipelines, totaling about 50,000 feet, vary from 8- to 16-inch diameter, believed to be all PVC. Other facilities include two steel reservoirs, each 0.5 mg, one booster station with four variable speed pumps (7.5 to 125 hp), telemetering and backup generation.

The downtown system is older with many facilities extending to 60 years of age. The majority of remaining construction occurred in the 1980s and 1990s. The water supply is primarily imported water from EMWD delivered through five interconnections, with the remainder produced from two wells. However, the water quality supplying these wells is very high in total dissolved solids and hardness requiring blending before distribution. No other water quality issues were identified for this system. Pipelines, totaling about 206,000 feet consist of a large amount of asbestos cement, 4- to 12-inch diameters, as well as PVC. There is also a small

amount of 2-, 12- and 14-inch steel pipes. Other facilities include one pump station (1,000 gpm) and two steel reservoirs (1.0 and 1.25 mg).

An RCNLD study by Stetson Engineers, Inc. for all facilities serving the Perris customers (exclusive of land, water rights, organization expense and going concern value) totaled approximately $22.9 million. On account of City financial statements combining the water and sewer system facilities, an analysis was made of the Stetson RCNLD facility estimates utilizing the Handy-Whitman Index of Water System Construction to derive the estimated original cost depreciated values for the proposed transferred water system facilities. This analysis estimated an OCNLD amount for the Perris system of $9,635,000, indicating a premium of approximately 19 percent is being paid by Liberty.

Bellflower Municipal Water System

Finally, the most recent proposed purchase is the pending acquisition by California American Water of the City of Bellflower (Bellflower) municipal water system filed with the CPUC for approval in September 2018. An amount of $17.0 million is being offered to the City to transfer the system. This system was acquired by the City from Peerless Water Company in 2007 at a cost of $5.8 million. Bellflower made the decision to privatize the system on account of the need to provide frequent annual operating subsidies from the City's general fund ($2.7 million since acquisition) and the results of master improvement planning indicating the need to expend over $20 million in the coming near term.

The Bellflower system serves about 1,827 connections, almost all residential, representing about 10 percent of the City's residents. Water production is entirely groundwater obtained from one high capacity well constructed in 2012. The system is comprised of about 78,000 feet of pipelines, ranging from 2- to 12-inch diameter with the majority over 50 years of age. The system is not capable of providing adequate fire flows in some areas. The entire ratepayers are metered. However, storage is minimal provided only by three 3,000-gallon hydropneumatic tanks located at three low capacity backup wells. The CIP schedules $2.2 million for storage installation. Water quality is very good with no issues (other than the detection of 1,4-Dioxane, an unregulated trace organic chemical, exceeding the notification level in 2015 in one of the wells). The system has no current or recent compliance orders from the SWRCB. Bellflower also owns 700 acre-feet of Central Basin water rights to be sold with the system to meet annual customer demand. Cal-Am valued these rights at a replacement value of $9.1 million ($13,000 per acre-foot).

A CPUC decision on the Bellflower sale for approval is not scheduled until the last quarter of this year. However, the CPUC Public Advocates Office (PAO) is protesting the application on the amount of rate base requested, based on its assertion that the price per connection is two to four times as high as all sales from 2016 to present and the purchase price is the second highest in the last 20 years. It should be noted that the City received three other bids for the system including an amount of $3.0 million from California Water Service Company, $12.26 million from Liberty Utilities (including $4.0 million for the system infrastructure plus water rights); and $14.5 million from Golden State Water Company.

Mesa Crest Water Company

It should also be noted that a review was made of the pending sale of Mesa Crest Water Company, located in La Canada, Los Angles County, to Liberty Utilities (Park Water Company). However, this sale violates the definition of fair market value in that the seller is under a CPUC directive to sell the system to a larger Class A utility as a settlement to a regulatory proceeding investigating the financial and operating practices of the current owners. This investigation was brought by the CPUC Consumer Protection and Enforcement Division. The owners were also under a CPUC directive to show cause why the Commission should not petition the state Superior Court to

appoint a receiver for Mesa-Crest. Clearly, the seller is under a compulsion to sell which the fair market value definition requires the seller not to be. Also, as a part of this appraisal, review was made of the pending acquisition of Fruitridge Vista Water Company in Sacramento by Cal-Am Water Company. However, this proposed acquisition for almost 5,000 connections for a purchase price in excess of $20 million, without water rights value, is considered to be too large to include in the comparable sales group.

Utility Sales to Non-Regulated Buyers

No sales to non-regulated buyers meeting the definition of fair market value were identified. It is unknown if there are currently such likely potential buyers of the Sativa system. However, any such sale, which might occur to a public agency buyer in the near future would most likely take place at a price very close to the one reached by considering the market sales for regulated buyers.

ANALYSIS OF MARKET SALES

Each of the sales in Table 2 was reviewed regarding system condition, service problems, service area growth potential, sale price and terms, rate impacts following sale, water rights value, RCNLD and other factors and circumstances (see Appendix 1).

Prior to the passage of SB 1268 in 1997 (the Act, referenced above), sales of utility properties subject to regulatory jurisdiction could be expected to take place at prices close to or at a moderate premium over the rate base of the subject utility system. As a matter of prior CPUC policy, the amount paid in excess of the derived rate base from historical investment was not allowed to be accounted for in the rate base established by the new owner. The sale of a utility could be expected to be at a premium when the system was in very good condition, had good growth potential in the service area, and a strong anticipation by the purchaser of earnings stability and growth. Conversely, a utility without these characteristics could be expected to sell at a price very close to historic rate base.

SB 1268 required the CPUC to recognize the fair market value paid for a utility up to RCNLD as the succeeding rate base. In selected cases, even prices above the RCNLD could receive CPUC approval if they were considered fair and reasonable. The Act outlines criteria to apply in determining whether or not the sale complies with this standard. However, the legislation continued to authorize the CPUC to have powers of disapproval over any sale not in the public interest (which did occur in the proposed purchase of Peerless Water Company by Southern California Water Company disapproved by the CPUC in 2001 finding that the proposed new rate base was unreasonable and unfair considering the future benefits received). Previous CPUC decisions have put buyers and sellers on notice that sales with significant potential rate increases would not be acceptable.

The above discussed sales to Class A utility buyers are examples of large regulated utilities paying significant premiums over net book value (105 to 253 percent) and having the premiums subsequently recognized by the CPUC in the rate base following acquisition. Pending approval are three additional proposed transfers with prices ranging from 19 to 149 percent. Two of these three proposed sales involve municipal sellers (privatization). Following the passage of the Act, the CPUC reached a settlement agreement with large utilities on guidelines to process proposed sales (D.99-10-064). Article 4.01 of the settlement approval guidelines specifically exempt the requirement for a large regulated utility to obtain CPUC approval for acquisition of a municipal system, although rates to be applied to the succeeding ownership do require CPUC approval (rates are limited to either the buyer's nearby system, the seller's existing system, or lower than both as per Art. 4.02).

Nevertheless, as noted above, in the pending sale approval process of the Bellflower system, the PAO is opposing the high price of this municipal system sale, requesting that the CPUC reduce the rate base to a more reasonable level.

It is believed the Sativa and Bellflower systems are the oldest operating systems among the comparable system sales. The others all have significant proportions of infrastructure of more recent construction dates. Growth is only a positive factor in two of the systems (Rural and Meadowbrook). Sativa also has the largest pending water quality issue with the need to address manganese removal (as did Bellflower with phosphate well treatment injection to control manganese). The other systems have good water quality, although Hillview has several significant issues requiring treatment and Rio Plaza has high TDS in comparison to Sativa. None of the systems had significant rate increases as a result of sale, with the exception of Meadowbrook having higher rates in a couple of years after transfer. Only Sativa has an outstanding SWRCB compliance order requiring substantial investment to correct.

The pending Bellflower system sale is considered as the strongest comparison with Sativa being located in the same groundwater basin, having a similar number of connections, with systems close in age needing substantial infrastructure replacements. Both systems also have large adjudicated water rights values. Allocating a portion of the proposed $17 million purchase price to water rights and the recently constructed high capacity well nets $4,954,000 paid for an estimated remaining system OCNLD of $4,347,000 for a premium of about 14 percent.

Considering all of the comparable factors between these two systems, in addition to taking into account comparisons with the other sales leads to an opinion that a Class A utility buyer would pay a projected price of about $2,000,000 for the OCNLD of the Sativa system, reflecting a 6 percent premium. Adding the estimated amount of $5,925,000 for the 474 acre-feet of Central Basin water rights (see section below) resulting in a total bid price of $7,925,000. This amounts to an estimated 90 percent of the RCNLD (compared to 81 percent for Bellflower).

Section 4 – Capitalization of Earnings

An indication of the value of the Sativa system sold to a regulated investor (either to an entity not having the ability to escalate the rate base or to a large utility not choosing to do so) can also be partially developed through the capitalization of earnings approach. However, this analysis approach only applies to the system assets not including any value attributed to water rights since no value for this asset category is currently on the balance sheet of Sativa, and no consideration was paid for its acquisition historically. Any requested recognition in the succeeding owner's rate base would require escalation (as noted above in the discussion of the market sale analysis, there is a pending issue whether or not the CPUC needs to recognize a sale rate base for a municipal system).

The operations of a water utility in California including earnings (if not a mutual water company or in the possession of a public agency), are required to be regulated by the CPUC if charges are applied to water deliveries. The Sativa system, currently not under CPUC jurisdiction, would be regulated by the CPUC if the system were sold to a private investor. Under the policies of the CPUC, the earnings are designed to yield a fair rate of return on the capital invested by the owners of the utility. This invested capital is referred to as rate base.

RELATIONSHIP BETWEEN RATE BASE AND CAPITALIZED EARNINGS VALUE

The earnings allowed can be expected to be established at levels which will yield a rate of return on capital invested by the owners of the utility, sufficient to attract capital considering other investment opportunities. Assuming that earnings are maintained by rate adjustments when necessary, then capitalization of these earnings (at a capitalization rate equal to the fair rate of return allowed by the CPUC) would by definition result in a number equal to the rate base. This is demonstrated by the following example (with the specific figures in the example being for illustrative purposes only and assuming 100 percent equity):

Rate Base = $150,000

Rate of Return allowed by CPUC = 10%

Then the CPUC will allow water rates sufficient to produce net revenues, which will provide (after general and administrative costs, operating expenses, taxes and depreciation) an annual income of:

0.10 X $150,000 = $15,000 per year

The amount which a purchaser would be willing to pay for a system which would produce a net income of $15,000 per year, if the purchaser were willing to accept a 10 percent return on his investment, could be estimated by:

$$\frac{\$15,000}{0.10} = \$150,000$$

It should be noted that although the rate base and the capitalized earnings value are the same numbers, conceptually they are different values.

The price a purchaser may be willing to pay for a system could also be estimated from the Present Worth Value for an annual payment of $15,000 at a current investment rate. With an interest rate of 4 percent and annual payments of $15,000 over 30 years, the result would be a present value of $260,000.

These estimates would be considered the rate base. To the extent that the CPUC allows a fair rate of return on the rate base higher than a rate of return demanded by an investor considering other potential investments, or to the extent that growth pressures or other factors enhance the expectation of future earnings, the purchaser could be expected to be willing to pay a premium over the rate base. Alternatively, if expected earnings in the estimation of the buyer are lower than required considering other potential investments, then the price paid by the buyer could be expected to include a discount from the rate base (in the case of a stock purchase).

RATE OF RETURN AND PROJECTED EARNINGS

As stated above, for regulated investor owned water utilities, the CPUC will authorize rates sufficient to generate earnings in order to attract investment and finance capital considering other market opportunities are competing for capital. Earnings are measured as a rate of return both to the utility investment overall and specifically to the equity shareholders. The shareholders obtain a higher rate of return than debt holders as a

result of financial leverage through the use of lower cost borrowed capital to make up a significant portion of the utility's capitalization. The authorized rate of return varies between utilities based on current economic conditions, the historic embedded cost of debt financing, and a judgement on the shareholder's risk for a particular utility based on a variety of factors.

It is not possible at this time to project with certainty a rate of return on overall rate base for a potential purchaser of the Sativa system without knowing specifically the identity of the buyer. However, Table 4 presents recent annual returns awarded by the California CPUC both on common equity and overall return to rate base to several large California water utilities, which are potential purchasers of the Sativa system. As shown, equity returns for five of the large utilities for 2019 average at a level of 9.80 percent. In order to provide these levels of return to shareholders through financial leverage, it is estimated by the CPUC staff that the overall rate of return would vary between about 7.9 to 9.1 percent, with an average overall rate of return of about 8.5 percent. For the capitalization analysis performed in this report for large Class A utilities, it is assumed an overall prospective rate of return of 8.5 percent is appropriate.

TABLE 4 - RECENT CPUC AUTHORIZED RATES OF RETURN FOR MAJOR CALIFORNIA WATER UTILITIES

Utility	S & P Bond Rating	Return on Rate Base	Return on Common Eq.
California American Water Co.	NA	8.41%	9.99%
California Water Service Co.	AA-	7.94%	9.43%
Suburban Water Systems	A	8.61%	9.79%
Park Water Company	NA	9.07%	9.79%
Golden State Water Co.	A+	8.34%	9.99%
Average		8.47%	9.80%

PROJECTED EARNINGS

Sativa, if sold to a regulated Class A investor merging the acquisition into a larger customer base with rates returning about 8.5 percent on investment, incremental projected earnings would be on the order of $160,000. Earnings would be higher, of course, if the purchase price paid is above the existing level of OCNLD and the succeeding rate base is escalated.

CAPITALIZED EARNINGS VALUE

It is our opinion that the anticipated rate of return, which would be expected to be allowed by the CPUC on the potential rate base of the transferred Sativa water system facilities is a reasonable rate at which to capitalize earnings Capitalization of $160,000 at a capitalization rate of 8.5 percent would indicate a potential sales price of approximately $1,882,000. Consequently, the capitalization of earnings approach for a Class A buyer combining

the system into a larger customer base indicates a potential price for the Sativa system essentially equivalent to the anticipated rate base component of the facilities being valued, or $1,882,000.

Section 5 – Reproduction Cost New Less Depreciations (RCNLD)

The reproduction cost new less depreciation (RCNLD) method of valuation, also known as the cost approach, is based on an estimate of the current cost of construction for the physical facilities of the water system, less the estimated actual depreciation to account for the facilities being less than new. Additionally, separate amounts are added for the current market value of other assets such as land and water rights. In the interest of thoroughness, this appraisal considers two methodologies for the estimation of the RCNLD. The first considers the original costs of the facilities and employs indexing to escalate the costs to present value, prior to applying a straight-line depreciation (Indexing Escalation). The second methodology applies current unit price construction costs to estimate the value prior to the depreciation (Current Unit Price).

INDEXING ESCALATION METHODOLOGY

Estimates of reproduction cost new (RCN) were made by utilizing the Handy-Whitman Cost Index for water utility system construction to escalate original costs of facilities as reported in company records (Handy-Whitman index data is only available currently through July 2018), but it is anticipated results would not vary significantly by escalating to the date of value when such data is available). In the case of general plant accounts (office furniture and equipment, transportation assets and similar assets) escalation was undertaken by the use of the Producer or Consumer Price Indexes. The amount of accrued depreciation was estimated for all assets by the straight-line method. Expected original and remaining service lives were based on judgment, giving consideration to data from several sources (including Sativa experience, CPUC guidelines, industry standards and experience gained by DRP in conducting numerous RCNLD studies). The costs of reproducing the Sativa water system facilities were estimated at price levels that prevailed in the first half of 2019.

In accordance with this approach, the current market value of land and water rights are normally added to the facilities' depreciated reproduction cost. At this time, separate land appraisals of parcels owned by Sativa were not conducted in view of the need to retain a separate local land appraiser that is not part of the scope of this effort. The small contributed value to the overall RCNLD from land assets, and the fact that a slightly higher RCNLD than shown below would not change the opinion of fair market value of the assets expressed in this report. However, the current estimated value of Central Basin groundwater rights owned by Sativa has been added in Table 4 based on the appraisal analysis presented below.

The results of the RCNLD analysis are summarized in the following Table 5. As shown, the RCNLD of the Sativa system facilities is about $8,827,000. The RCNLD of the system facilities exclusive of the water rights amounts to about $2,902,000. See Appendix 2 for the detailed calculation and summary of this estimation. Note that as stated previously, this cost does not include the proposed capital improvements that are to be made prior to any sale.

It is important to note that the comparable sales analysis did not support the proposition that a regulated buyer would normally pay total RCNLD for a system.

Verification of the RCNLD Indexing

As part of this methodology a rough verification analysis of the RCNLD for water mains was also performed by unit pricing (see Appendix 2). This infrastructure component typically comprises on the order of about 70 percent of a water system fixed plant (in the case of Sativa, it makes up about 74 percent as shown in Table 4). If a 20 percent contingency escalation factor is applied to the direct costs (used in planning before construction) in addition to the 15 percent engineering design and construction supervision, the unit pricing indicates an estimated RCNLD which is about 13 percent higher than the result obtained by indexing. On the other hand, if no contingency percentage is included, the unit price RCNLD is about 4 percent less than indexing. Accordingly, the full amount of contingency costs to install the Sativa system may not have been incurred. Therefore, it is considered the unit cost approach confirms the results obtained by indexing and the latter is the best estimate of the Sativa system RCNLD, as described above and presented in Table 4.

TABLE 5 - ESTIMATE OF REPRODUCTION COST NEW LESS DEPRECIATION FOR SATIVA WATER SYSTEM FACILITIES AS OF APRIL 30, 2019

Account No.	Description	Amount ($)
303	Land (a)	300,000
304	Structures	476,883
307-311	Wells and Pumping Equipment	1,928,052
317	Other Source Plant (Paulsen Conn.)	159,306
331	Water Mains	7,658,978
333	Services (b)	69,139
335	Hydrants (b)	14,113
340	Furniture & Office Equipment	42,534
341	Transportation Equipment	106,909
339	Other Maintenance Equipment	201,911
	Subtotal, Utility Plant in Service	**$10,957,825**
108	Depreciation Reserve	(8,485,393)
	Subtotal, Depreciated Utility Plant	**$2,687,427**
151	Plus, Materials and Supplies	43,734
105	Plus, Deferred Capital Charges	171,261
303	Plus, Water Rights Value (c)	5,925,000
	Total, Sativa RCNLD	**$8,827,422**

(a) Non-appraised estimate only.
(b) Majority of services and hydrants accounted for in water mains.
(c) See discussion below for range

CURRENT UNIT PRICE METHODOLOGY

The RCNLD valuation of facilities using this methodology was accomplished in three phases as follows (see Appendix 3 for calculations):

1. Determine the general overhead percentages for construction of the facilities,
2. Determine the construction costs of the water system inventory, as of June, 2019, and
3. Calculate the accrued depreciation.

General Overheads

The general overhead percentages used in this appraisal total approximately 40 percent for engineered items and non-engineered items. Engineered items include (classified by the PUC as Account Nos. 315 through 348) source of water, pumping, water treatment, and transmission and distribution. Non-engineered items (Account Nos. 371 through 373) include general equipment and structures.

The general overheads percentage is composed of the following:

- The contingency factor that compensates for the unforeseen or unknown conditions encountered during construction, which will increase the cost. The range recommended by Manual 45 of the American Society of Civil Engineers (ASCE) is 10 to 25 percent
- The cost of engineering for the construction of facilities. This item is divided into three parts, (1) design, (2) inspection, and (3) surveying. The design services are taken from Curve B of ASCE Manual No. 45. This guide indicates that the percent to be added for basic engineering services (preparation of plans and specifications) depends upon the construction cost and complexity of the project.
- The general administrative costs. This includes financial and legal costs, as well as the budgeting, cost accounting, and other administrative functions, which would be performed during the construction of the water system.
- Interest during construction.

Construction Costs

Utilizing the water facilities inventory completed as part of the Water System Evaluation Report, the cost of facilities was estimated by using standard methods accepted in the profession, such as Mean's Building Construction Cost Data current water system construction costs, communication with vendor's and contractors, and recent bid tabulations for similar work.

The inventory and construction cost estimates are presented in Appendix 3. Those data show the Reproduction Cost New (RCN) with the general overheads included, as well as the age, average service life, remaining life and accrued depreciation. The last column shows the Reproduction Cost New Less Accrued Depreciation.

Accrued Depreciation

The ages of the various facilities were provided by Sativa and depreciation was estimated. The average service life varies according to the size, type, and age of the facility. The estimated average service lives used for these facilities are within ranges utilized by the PUC, Standard Practice U-4. Remaining lives were based either on the appropriate Iowa Survivor Curve, or the forecast method, whichever was applicable. No allowances were made for salvage values.

Reproduction Cost New Less Accrued Depreciation

The Reproduction Cost New Less Accrued Depreciation of the Sativa water system facilities was found to be approximately $4,271,350, as shown on Table 6. As noted above, separate land appraisals of parcels owned by

Sativa were not conducted. However, in the interest of comparing the methodologies, an amount of $300,564 was included for a total of about $4,572,00.

Table 6 - Summary of RCNLD as of June 2019						
ACCT #	**DESCRIPTION**	**TOTAL COST WITHOUT GENERAL OVERHEAD**	**GENERAL OVERHEAD**	**RCN WITH GENERAL OVERHEAD**	**ACCRUED DEPRECIATION**	**RCN LESS ACCRUED DEPRECIATION**
311	STRUCTURES AND IMPROVEMENTS (SOURCE OF WATER PLANT)	$62,200	$24,880	$87,080	$8,654	$78,426
315	WELLS	$1,226,000	$490,400	$1,716,400	$993,410	$722,990
321	STRUCTURES AND IMPROVEMENTS (PUMPING PLANT)	$633,000	$253,200	$886,200	$466,081	$420,119
324	PUMPING EQUIPMENT	$487,000	$194,800	$681,800	$158,946	$522,854
332	WATER TREATMENT	$350,600	$140,240	$490,840	$32,701	$458,139
342	RESERVOIRS AND TANKS	$400,000	$160,000	$560,000	$450,842	$109,158
343	TRANSMISSION AND DISTRIBUTION MAINS	$5,291,009	$2,116,404	$7,407,413	$5,536,746	$1,870,666
345	SERVICES	$1,971,600	$788,640	$2,760,240	$2,701,262	$58,978
348	HYDRANTS	$348,000	$139,200	$487,200	$457,179	$30,021
	Total	**$10,769,409**	**$4,307,764**	**$15,077,173**	**$10,805,822**	**$4,271,350**

Note: This estimate does not include land values.

Going Concern

Going concern is a value, which represents the investment made in developing the water system and customers for the system. It reflects the fact that the business is now a viable business. Marston and Agg, in their book entitled "Engineering Valuation," state that "Going values allowed in actual cases frequently equal about 10 percent of the present value of the fixed-capital physical elements of public utility properties; usually, they are not less than 5 or more than 15 percent." Going concern value is an area where the appraiser may adjust the value upward if there is potential for future growth of a utility. For the Sativa system going concern value of 5-percent of Reproduction Cost New Less Accrued Depreciation, a conservative amount, would result in a value of approximately $201,723.

Organization Expense

Organization expense (preliminary expenses) is defined as the cost involved in organizing a utility as an operating system. It would include such costs as organizing the entity, obtaining operating permits financial studies and reports, setting up customer accounts, and determining the feasibility of the improvements. Other costs to be included would be the recruitment of proper maintenance and office personnel, preparation of meter books, organization of a billing system, setting up proper accounting systems with necessary forms,

records, books, depreciation and accrual programs, and establishing pension and welfare programs for the employees. Marston and Agg, in their book entitled "Engineering Valuation," indicate that, "It is not uncommon for valuators to allow, and courts to approve, preliminary expense values of 2.0 percent or 2.5 percent of the present value of the physical property in valuations of public utility properties." For purposes of this study, a value of 2.0 percent of the Reproduction Cost New Less Accrued Depreciation was utilized, resulting in a value of approximately $80,689.

CONSIDERATIONS

Note that there is disagreement within RCNLD methodologies regarding the inclusion of any value for either going concern or organization expense. According to the 1997 Water System Consolidation Act (CPUC Code section 2720), intangible asset values are not identified to be included as part of a system infrastructure RCNLD study to be submitted for sale approval by the CPUC. For the purposes of this estimate it was considered, but not specifically included in the valuation.

Section 6 – Central Basin Water Rights

Since the early 1960s, the Central Groundwater Basin underlying southeastern Los Angeles County has been an adjudicated basin with groundwater production restricted to those pumpers holding rights to defined pumping allocations. A Court appointed Watermaster (WRDSC) monitors annual extractions to ensure that each pumper does not exceed its individual pumping allocation and that the production in the Basin as a whole does not exceed the annual Judgment allowance. The legal withdrawal allowance or pumping right is not attached to land ownership such as in the case of surface water riparian rights. Accordingly, these production rights can be leased for one or more years for use by other pumpers, or bought and sold for permanent transfer between any parties having the capacity to transact property rights. Sativa owns 474 acre-feet of Central Basin water rights. The appraisal assignment is to review recent Central Basin sales of groundwater rights to determine an indication of likely price for such rights if offered for sale, taking into account current water supply and demand factors, economic conditions, trends in the water right lease market and other forces influencing the price such a right would bring in the marketplace.

The primary alternate source of water supply to purchasing imported water from The Metropolitan Water District of Southern California (MWDSC) in the Central Basin is the production of groundwater. For an active producer who has adequate production capacity, but insufficient groundwater rights, an active leasing market exists to mitigate a pumper's shortfall in needed rights. All leases must be on a July 1-June 30 fiscal year basis and received by the Watermaster by June 30th of the year in which the lease is effective.

Based on data obtained from Watermaster files containing lease contracts and information obtained from purveyors, the following Tables 7 and 8 are presented containing representative selections of groundwater production leases in the Central Basin for fiscal years 2010-11 and 2018-19, showing the increase in lease prices over the past eight year period. Shown are lessors, lessees, the contract date, acre-feet involved, and the price per acre-foot. Also included for each fiscal year is an annual total in acre-feet, the average price and weighted average price giving more credit to contracts of higher volume. Finally, shown is the weighted average price exclusive of June contracts. The lease prices tend to fall significantly in the last month before the end of the fiscal year. If a water right holder is not able to pump, carryover or lease the full allocated pumping right, the non-used portion is forfeited.

As shown, the weighted average lease price (exclusive of the June contract) for 2010-11 is on the order of $135 per acre foot compared to the present lease market value of about $175 per acre-foot in 2018-19, a lease price increase of about 30 percent over the past eight years, or about 3.75 percent annually. However, the last and largest (600 acre-feet) lease occurring in 2018-19 was at a level of $185 per acre-foot. At this higher level, lease prices have increased by approximately 37 percent for an estimated annual average of 4.6 percent. It can be expected that water rights sale prices would follow a somewhat similar escalation in view of the alternative of either buying or leasing Central Basin groundwater production.

TABLE 7 – LEASES OF CENTRAL BASIN GROUNDWATER PRODUCTION RIGHTS FISCAL YEAR 2010-11

Lessor	Lessee	Date	Acre-feet	$/AF
Cerritos CC District	Tract 349 Mutual	3/8/10	147	130
Suburban Water Systems	Orchard Dale Water Dist.	4/21/10	900	135
City of Bell Gardens	City of Lynwood	11/22/10	700	135
Central Basin Municipal	Suburban Water Systems	12/13/10	70	100
Suburban Water Systems	Orchard Dale Water Dist.	2/9/10	400	150
Tract 349 Renewals	7 Contract Renewals	various	266	120
Newark Group	Tract 349 Mutual	7/1/11	50	85
Total acre-feet			2,533	
Average				122
Weighted average (more credit to those of higher volume)				134
Weighted average exclusive of June 2011contracts				135

TABLE 8 – LEASES OF CENTRAL BASIN GROUNDWATER PRODUCTION RIGHTS FISCAL YEAR 2018-19

Lessor	Lessee	Date	Acre-feet	$/AF
Pabco Building Products	City of Cerritos	11/16/16	500	175
Mary Buell	City of Cerritos	5/16/18	1	205
Corning Trust	City of Cerritos	5/16/18	3.75	185
Nancy Keane Trust	City of Cerritos	5/16/18	4	185
Mary Mitsuchi Trust	City of Cerritos	5/16/18	11	180
City of Downey	City of Cerritos	6/13/18	500	160
City of Norwalk	Orchard Dale Water Dist.	7/1/18	600	185
Total acre-feet			1,620	
Average				182
Weighted average (more credit to those of higher volume)				174
Weighted average exclusive of June 2019 contracts				174

The most recently released 2017-18 Watermaster Report indicates that currently there are 130 entities holding water rights who could be possible sellers and only 63 active producers who would be likely buyers (the difference between the two groups represent entities who are not using their adjudicated rights or who have allowed others to use these rights through leases). However, many of the water rights holders represent public agencies who are improbable sellers by virtue of water service obligations or institutional obstacles (such as the City of Long Beach which is prohibited from selling or leasing water rights without an assent of two thirds of the

qualified voters of the City, voting on the proposition at a general or special election at which such proposition shall be lawfully submitted). Further, a review of 2017-18 Watermaster data indicates there were only nine large pumpers who needed to lease at least 500 acre-feet.

In examining reported transfers and sales for recent years, it was found that in many instances the transactions took place between associated entities. In other instances water rights were sold as a part of the sale of the land and no separate sales price for the water rights can be determined. Typically, sale price information between private parties was confidential and not available to DRP. In such cases, where either the buyer or seller was a publicly traded company, an attempt was made to discover the sale price by reviewing Security and Exchange Commission filings. For public agencies, Board minutes were reviewed to confirm or discover the sale price paid. Copies of contracts in the files of the Watermaster for all sales selected for research were reviewed for price and term information.

Set forth in Table 9 is a listing of sales for water rights in the Central Basin for seven recent fiscal years (2009-10 through 2015-16). Sales over the last three fiscal years have been infrequent and small. In 2016-17 only one sale occurred for 120 acre-feet; in 2017-18 seven transfers took place, from 4 to 94 acre-feet, totaling about 183 acre-feet; and for the current 2018-19 fiscal year only two sales have taken place amounting to 17 acre-feet. DRP was not able to obtain confidential price data for any of these small sales.

A market discussion was made with EcoGas, Inc., a water rights broker involved in many of the recent transactions, indicating that the current market is very soft with potential buyers uninterested in acquiring large offerings, adding that a sale proposal for a large bloc (several hundred acre-feet) might have to be negotiated in several small lots to different buyers. The representative also shared that currently there is a large of amount of water available for lease.

TABLE 9 – SALES OF CENTRAL BASIN GROUNDWATER PRODUCTION RIGHTS

BUYER	SELLER	DATE	ACRE-FEET	$/AF
2009-10 Fiscal Year				
Orchard Dale WD	Candlewood Country Club	6/9/10	147.0	7,010
City of Long Beach	Carol Francis Trust	6/29/10	8.0	<7,000
2010-11 Fiscal Year				
City of Bellflower	Union Develop Financial	7/26/10	12.0	7,250
Rowland Water District	CMPC Transition	10/26/10	1.0	5,000
2011-12 Fiscal Year				
Puente Basin Water Agency	United States Gypsum	5/7/12	365.0	8,600
2012-13 Fiscal Year				
Montebello Land and Water	Jones Company	7/26/12	70.0	10,300

City of Norwalk	City of Vernon	3/18/13	500.0	12,000
2013-14 Fiscal Year				
La Habra Heights CWD	Aqua Capital Mgt.	5/1/14	50.0	13,000
City of Los Angeles	Central Basin MWD	5/30/14	46.0	10,000
2014-15 Fiscal Year				
City of Los Angeles	Aqua Capital Mgt.	12/17/14	1,500.0	10,000
2015-16 Fiscal Year				
City of Los Angeles	Aqua Capital Mgt.	2/18/16	690.0	11,000

Excluded from the table are those sales and transfers, which are known to not be representative for various reasons (lack of arm's length transactions) or sales where prices between private parties are held confidential. The majority of the buyers and sellers listed in Table 7 (particularly those involved in the larger transactions) are financially sophisticated public agencies or business enterprises, who would be expected to be knowledgeable as to the factors influencing values of water rights.

As indicated, individual sale prices reached a level of $7,250 in 2009-10. Sale prices jumped in 2012-13 to a level of $10,000 to 13,000 likely as a result of the ongoing drought conditions occurring in the state (2012-13 was the second of the five year drought period). Annual rainfall for the Central Basin area averaged slightly under 50 percent of normal from 2011-12 through 2015-16. With the exception of 2017-18, a very dry year, the current 2018-19 and recent 2016-17 have been very wet at approximately 130 percent of normal, possibly resulting in the lower number and amounts of water rights sales.

The highest sale price reported is the modest purchase of 50 acre-feet for a unit price of $13,000 in 2013-14, which is in the middle of the drought period. Thereafter, prices fell to $10,000 to $11,000 for years at the end of the drought. At the end of 2013-14, the City of Los Angeles (Department of Water and Power) purchased 1,500 acre-feet of water rights from Aqua Capital Management for a purchase price of $15,000,000, or $10,000 per acre-foot. Subsequently, in February 2016, the City made an additional purchase from the same party of 690 acre-feet for a price of $7,590,000, or $11,000 per acre-foot. Both of these parties are knowledgeable and sophisticated. Additionally, it was reported to DRP that the City was aware at the time of the market prices paid for Central Basin rights. Finally, it should be pointed out that these two sales are the largest transactions for the last several years.

In view of the absence of recent sale data, it is considered reasonable to escalate the most recent large sale in 2015-16 at $11,000 per acre-foot for three years by the corresponding average increase in lease prices as discussed above. Accordingly, it is DRP's opinion that a sale price of $12,500 per acre-foot is reasonable and conservative. The price opinion is supported by the offer by Liberty Utilities in 2018 to purchase the City of Bellflower municipal system. This bid included an additional offer to separately acquire 680 acre-feet of groundwater rights in 2019 for a price of $12,527 per acre-foot. Accordingly, the current total Sativa water rights value would be approximately $5,925,000.

Validation – Estimation of Avoided Cost

As an additional validation of the Sativa water rights, and rough estimate was made of the avoided costs associated with pumping groundwater from the Central Basin versus purchasing treated MWD water (see Table 10). Based on experience in the Central Basin, it was assumed that the pumping and wellhead treatment costs would be approximately $150 per acre-foot. Applying the current WRD Replenishment Assessment and comparing it to the MWD Treated (Tier 1) rate with Central Basin Administrative Surcharge, results in an estimate avoided cost of approximately $669 per acre-foot.

Table 10 - Water Rights Analysis - Calculation from Avoided Costs

Well Operation	[$/AF]
Estimated Pumping and Treatment	$150
WRD Replenishment Assessment (2019)	$366
Total:	**$516**
Imported Water	
MWD Non-Interruptible- Treated *(Tier 1) (2019)*	$1,050
Central Basin Administrative Surcharge (2019)	$135
Total:	**$1,185**
Savings from Well Operation	$669
Interest Rate - Federal Prime Rate	5.5%
Present Worth (in perpetuity):	**$12,164**

A present value of that savings in perpetuity at the Prime Rate of 5.5 percent results in a price of $12,164 per acre-foot. It should be noted that this estimation is quite sensitive to changes in interest rate. A rate of 4 percent would increase this value to $16,725. However, for the purposes of validation, use of the current Prime Rate would seem reasonable.

APPENDIX 1

Appendix 1 - Market Sales Comparison Analysis

System	Sale of Asset or Stock	Year	Rate Base	Price	Premium $	Water Rts	No. Conn.	Price/Conn
Rural Water Company (Rural)	Asset	2013	590,000	1,700,000	1,110,000	Yes	950	1,789
Meadowbrook Water Company (Mead)	Stock	2014	1,904,000	3,902,000	1,998.00	No	1,700	2,295
Rio Plaza Water Company (Rio)	Stock	2016	509,000	1,796,000	1,287,000	Yes	520	3,454
Hillview Water Company (Hill)	Stock	2017	2,690,000	6,500,000	3,810,000	No	1,147	Unknown
Perris Municipal Water System (Perris)	Asset	2017	9,635,000	11,500,000	1,865,000	No	3,741	3,074
Bellflower Municipal Water System (Bell)(b)	Asset	2018	6,836,000 (est)	17,000,000	10,164,000	Yes	1,827	9,305
Sativa	Asset	2019	1,884,000	7,925,000	6,041,000	Yes	1,643	4,823

System	RCNLD [$]	Water Rights [$]	RCNLD w/o Water Rights [$]	Price as % of RCNLD w/o WR	Growth	Condition
Rural Water Company (Rural)	25,100,000	11,440,000	13,700,000	NA (d)	5% growth in prior 5 yrs.	Over 40% built in 2000; remainder in 1988 and later;
Meadowbrook Water Company (Mead)	22,000,000	NA	22,000,000	18	5% growth in prior 5 yrs.	No reg. viol.
Rio Plaza Water Company (Rio)	2,560,000	1,155,000	1,400,000	46	No growth in last 4 years	Adeq. Capacity; dist sys constructed in 1980; wells in 1956 and 1961;
Hillview Water Company (Hill)	30,000,000	NA	30,000,000	22	Minimal over prev. 5 yrs	Dist. System wt'd ave age of 26 yrs by RCN; water qual issues req'ing
Perris Municipal Water System (Perris)	22,900,000(a)	NA	22,900,000	50	Minimal over last 10 yrs.	No reg. violations; north system 12 years old (36% of total conn.);
Bellflower Municipal Water System (Bell)	20,900,000	9,100,000	11,800,000	67	Minimal	New wells 7,000 feet of mains; No reg. violations; $20 million CIP req'd
Sativa	8,827,000	5,925,000	2,902,000	69	Negligible	Poor as outlined in evaluation report; outstanding reg. compliance order

(a) Land and water rights value not included

(b) $4,324 per connection if water rights excluded.

(d) NA: Price does not cover estimated water rights value

APPENDIX 2

Appendix 2 - Original Cost New Less Depreciation (OCNLD) and Replacement Cost New Less Depreciation (RCNLD) Calculations
System Cost and Indexing Calculations

			Original Cost New Less Depreciation (OCNLD) Calculations							Replacement Cost New Less Depreciation (RCNLD) Indexing				
County Line No.	Year	Description	Original Cost [$]	Expected Life [yr]	Age [yr]	Revised Life [yr]	Remaining Life [yr]	Percent Remaining	OCNLD	Handy-Whitman Index			RCN	RCNLD
										Yr. Const.	Jul-18	Escalation		
10	1940	T & D	348,157	70	78	80	2	0.025	$ 8,704	32	657	20.53	$ 7,148,098	$ 178,702.46
18	1990	T & D	878	70	28		42	0.6	527	291	657	2.26	1,982	1,189
19	1990	T & D	1,300	70	28		42	0.6	780	291	657	2.26	2,935	1,761
20	1991	T & D	1,564	70	27		43	0.61	961	289	657	2.27	3,556	2,184
23	1991	T & D	3,000	70	27		43	0.61	1,843	289	657	2.27	6,820	4,189
24	1991	T & D	515	70	27		43	0.61	316	289	657	2.27	1,171	719
25	1991	T & D	6,052	70	27		43	0.61	3,718	289	657	2.27	13,758	8,452
26	1991	T & D	1,000	70	27		43	0.61	614	289	657	2.27	2,273	1,396
27	1992	T & D	1,000	70	26		44	0.63	629	275	657	2.39	2,389	1,502
28	1992	T & D	2,000	70	26		44	0.63	1,257	275	657	2.39	4,778	3,003
29	1992	T & D	1,559	70	26		44	0.63	980	275	657	2.39	3,725	2,341
30	1992	T & D	5,084	70	26		44	0.63	3,196	275	657	2.39	12,146	7,635
31	1992	T & D	1,184	70	26		44	0.63	744	275	657	2.39	2,829	1,778
32	1992	T & D	1,837	70	26		44	0.63	1,155	275	657	2.39	4,389	2,759
33	1992	T & D	1,343	70	26		44	0.63	844	275	657	2.39	3,209	2,017
34	1992	T & D	3,000	70	26		44	0.63	1,886	275	657	2.39	7,167	4,505
35	1992	T & D	1,524	70	26		44	0.63	958	275	657	2.39	3,641	2,289
36	1992	T & D	1,742	70	26		44	0.63	1,095	275	657	2.39	4,162	2,616
37	1993	T & D	1,000	70	25		45	0.64	643	292	657	2.25	2,250	1,446
38	1993	T & D	2,000	70	25		45	0.64	1,286	292	657	2.25	4,500	2,893
39	1993	T & D	7,400	70	25		45	0.64	4,757	292	657	2.25	16,650	10,704
41	1993	T & D	2,000	70	25		45	0.64	1,286	292	657	2.25	4,500	2,893
42	1993	T & D	1,264	70	25		45	0.64	813	292	657	2.25	2,844	1,828
44	1993	T & D	1,050	70	25		45	0.64	675	292	657	2.25	2,363	1,519
45	1994	T & D	1,413	70	24		46	0.66	929	291	657	2.26	3,190	2,096
95	2007	Tie-in Compton	27,890	60	11		49	0.82	22,777	348	384	1.10	30,775	25,133
99	2006	New pipeline to street	18,674	60	12		48	0.80	14,939	311	384	1.23	23,057	18,446
	2013	Additions	4,644	60	5		55	0.92	4,257	380	384	1.01	4,693	4,302
	2014	Additions	57,042	60	4		56	0.93	53,239	372	384	1.03	58,882	54,957
	2015	Additions	42,411	60	3		57	0.95	40,290	375	384	1.02	43,429	41,257
	2016	Additions	213,749	60	2		58	0.97	206,624	377	384	1.02	217,718	210,461
	2017	Additions	5,087	60	1		59	0.98	5,002	377	384	1.02	5,181	5,095
	2018-19	Additions	5,683	60	0		60	1.00	5,683	384	384	1	5,683	5,683
40	1993	30-min SCBA (assume T & D)	1,882	10	25	0	0	0.00	-	292	657	2.25	4,235	-
		Subtotal:	**$ 775,928**						**$ 393,405**				**$ 7,658,978**	**$ 617,750**
21	1991	Fire Hydrant	2,236	50	27		23	0.46	1,029	384	1041	2.71	6,062	2,788
92	2003	Fire Hydrant	4,486	50	15		35	0.7	3,140	580	1041	1.79	8,052	5,636
		Subtotal:	**$ 6,722**						**4,169**				**$ 14,113**	**$ 8,424**
101-102	2006	Services	7,513	30	12		28	0.93	7,012	442	640	1.45	10,879	10,153
103-109	2008	Services	23,742	30	10		20	0.67	15,828	504	640	1.27	30,149	20,099
110-113	2009	Services	22,665	30	9		21	0.70	15,866	516	640	1.24	28,112	19,678
		Subtotal:	**$ 53,920**						**38,706**				**$ 69,139**	**$ 49,931**
		Total System:	**$ 836,570**						**$ 436,280**				**$ 7,742,230**	**$ 676,105**

Replacement Cost New Less Depreciation (RCNLD) Verification				
Description	Unit Price		RCN	Assumptions
	[LFT]			
2-inch AC	722	$ 60	$ 43,320	Unknown-assume AC
4-inch AC, Unkn, & Unconfirmed	19,565	$ 80	$ 1,565,200	
6-inch AC & Unkn	20,703	$ 120	$ 2,484,360	
6-inch CI	1,008	$ 160	$ 161,280	
4-inch CI & PVC	4,216	$ 108	$ 455,328	
4-inch Steel	1,408	$ 115	$ 161,920	
8 inch PVC	1,300	$ 210	$ 273,000	
Subtotal:	**48,922**		**$ 5,144,408**	
	[QTY]			
4-inch hydrants	29	$ 4,000	$ 116,000	
6-inch hydrants	29	$ 7,000	$ 203,000	
Subtotal:	**58**		**$ 319,000**	
3/4-inch services	1,643	$ 1,200	$ 1,971,600	
Subtotal:	**1,643**		**$ 1,971,600**	
4-inch gate valves	87	$ 560	$ 48,720	
6-inch gate valves	60	$ 1,800	$ 108,000	
Subtotal:	**147**		**$ 156,720**	

Replace Cost New (RCN) Subtotal	$	7,591,728
Plus Indirect Costs at 35%	$	2,657,105
RCN Total	**$**	**10,248,833**
Percentage Depreciation Calculated from Indexing		-91.93%
Depreciation Calculated from Indexing	$	(9,422,192)
Replace Cost New Less Depreciation (RCNLD) Tota	**$**	**826,641**
Excess of Unit Pricing Over Indexing		1.34
Plus Indirect Costs at 15%	$	1,138,759
RCN Total	**$**	**8,730,487**
Depreciation Calculated from Indexing	$	(8,026,312)
Replace Cost New Less Depreciation (RCNLD) Tota	**$**	**704,175**
Excess of Unit Pricing Over Indexing		1.14

Applying same depreciation as Indexing Calculation

Appendix 2 - Original Cost New Less Depreciation (OCNLD) and Replacement Cost New Less Depreciation (RCNLD) Calculations
Well Site Cost and Indexing Calculations

			Original Cost New Less Depreciation (OCNLD) Calculations							Replacement Cost New Less Depreciation (RCNLD) Indexing				
County Line No.	Year	Description	Original Cost [$]	Expected Life [yr]	Age [yr]	Revised Life [yr]	Remaining Life [yr]	Percent Remaining	OCNLD	Handy-Whitman Index			RCN	RCNLD
										Yr. Const	18-Jul	Escalation		
22	1994	Well No. 5	$ 321,977	50	24		26	0.52	$ 167,428	290	543	1.87	$ 602,874	$ 313,495
50	1994	Well No. 5- Audit Adj	10,230	50	24		26	0.52	5,320	290	543	1.87	19,155	9,960
65	1999	Renovate Well No. 5	24,500	50	19	45	26	0.58	14,156	323	543	1.68	41,187	23,797
	2016	Well repairs/maintenance (a)	2,706	50	3	29	26	0.90	2,426	505	543	1.08	2,910	2,609
	2019	Well repairs/maintenance (a)	10,532	50	0	26	26	1.00	10,532	543	543	1	10,532	10,532
		Subtotal:	**$ 369,945**						**$ 199,861**				**$ 676,658**	**$ 360,393**
	(a) Well renovations cannot extend in life beyond remaining life of main well.													
12	1984	Tank repair (assume well no. 3)	10,759	50	34	37	3	0.08	872	241	700	2.90	31,250	2,534
68	2004	Coat Tank 3 Interior	24,131	15	14	17	3	0.18	4,258	416	700	1.68	40,605	7,166
120	2011	Relocate lines- Well No. 3	10,400	30	7		23	0.77	7,973	444	700	1.58	16,396	12,571
73	2000	Manways- Wells 3 and 5	35,492	30	18		12	0.4	14,197	369	700	1.90	67,329	26,932
116	2010	Sample stations	1,400	30	8		22	0.73	1,027	552	700	1.27	1,775	1,302
86	2000	Water tank liner	24,131	15	18	21	3	0.14	3,447	369	700	1.90	45,777	6,540
87	2000	Widen water tank/manhole	29,757	30	18		12	0.4	11,903	369	700	1.90	56,450	22,580
51	1996	Replacement parts- #5	11,859	25	22		3	0.12	1,423	446	1216	2.73	32,333	3,880
52	1997	McBride Electric	102	25	21		4	0.16	16	476	1216	2.55	261	42
59	1998	Wiring- pump- Willowbrook	375	25	20		5	0.2	75	486	1216	2.50	938	188
84	1999	Electrical rewiring	2,937	25	19		6	0.24	705	499	1216	2.44	7,157	1,718
85	1999	Electrical wiring	2,128	25	19		6	0.24	511	499	1216	2.44	5,186	1,245
93	2003	Breaker- Stockwell pump	1,116	25	15		10	0.4	446	546	1216	2.23	2,485	994
94	2004	New Equipment	19,775	25	14		11	0.44	8,701	569	1216	2.14	42,261	18,595
114	2009	Chlorine conversion	1,530	15	9		6	0.4	612	660	954	1.45	2,212	885
		Subtotal:	**$ 175,892**						**$ 56,167**				**$ 352,415**	**$ 107,168**
		Wells Total:	**$ 545,837**						**$ 256,028**				**$ 1,029,073**	**$ 467,561**
										Consumer Price Index (CPI)				
Plant Maintenance Equipment Cost and Indexing Calculations										Yr. Aqd.	2019	Escalation		
101	1984	Jeeger compressor	1,890	15	34	37	3	0.08	153	103.9	256.1	2.46	$ 4,659	$ 378
102	1991	Welder w/undercarriage	2,695	15	27	30	3	0.1	270	136.2	256.1	1.88	5,067	507
103	1999	Backhole digger	3,500	15	19	22	3	0.14	477	166.6	256.1	1.54	5,380	734
104	2011	Kubota loader/backhoe	57,414	15	7		8	0.53	30,621	224.9	256.1	1.14	65,379	34,869
105	2011	Air compressor	2,110	15	7		8	0.53	1,125	224.9	256.1	1.14	2,403	1,281
	2013	No description	2,380	15	5		10	0.67	1,587	233	256.1	1.10	2,616	1,744
	2016	No description	94,401	15	2		13	0.87	81,814	240	256.1	1.07	100,734	87,303
	2017	Auditor's entry- undefined	15,000	15	1		14	0.93	14,000	245.1	256.1	1.04	15,673	14,628
		Total:	**$ 179,390**						**$ 130,047**				**$ 201,911**	**$ 141,443**
Trucks and Autos Cost and Indexing Calculations														
202	1992	Sierra pickup	3,257	10	26	29	3	0.10	337	140.3	256.1	1.83	5,945	615
203	2000	Ford F-250	10,578	10	18	21	3	0.14	1,511	172.2	256.1	1.49	15,732	2,247
204	2000	Ford Focus	18,761	10	18	21	3	0.14	2,680	172.2	256.1	1.49	27,902	3,986
205	2004	Crysler Town & Country	24,881	10	14	17	3	0.18	4,391	188.9	256.1	1.36	33,732	5,953
206	2008	Nissan truck	19,838	10	10	15	5	0.33	6,613	215.3	256.1	1.19	23,597	7,866
		Total:	**$ 77,315**						**$ 15,532**				**$ 106,909**	**20,667**
Office Furniture and Equipment Cost and Indexing Calculations														
	Pre-1990	Office furniture/equipment	9,240	15	29+		Salvage at 5%		462					462
	1990s	Office furniture/equipment	26,626	15	19+		Salvage at 10%		2,663					2,663
	2000-2010	Office furniture/equipment	8,315	15	8+		Salvage at 15%		1,247					1,247
	2012	Audit adjustment	13,470	10	6		4	0.4	5,388	229.6	256.1	1.12	$ 15,025	6,010
	2013	No description	283	10	5		5	0.5	142	233	256.1	1.10	311	156
	2016	No description	25,488	10	2		7	0.7	17,842	240	256.1	1.07	27,198	19,038
		Total:	**$ 83,422**						**$ 27,743**				**$ 42,534**	**$ 29,576**

Appendix 2 - Original Cost New Less Depreciation (OCNLD) and Replacement Cost New Less Depreciation (RCNLD) Calculations
Summary of Cost and Indexing Calculations

Spare Parts

2016	2017
1,610	8,407
1,806	4,683
1,933	2,145
785	3,814
2,779	1,085
4,663	
6,310	
3,714	
$ 23,600	$ 20,134

Well Site Improvements Cost and Indexing Calculations

			Original Cost New Less Depreciation (OCNLD) Calculations							Replacement Cost New Less Depreciation (RCNLD) Indexing				
County Line No.	Year	Description	Original Cost [$]	Expected Life [yr]	Age [yr]	Revised Life [yr]	Remaining Life [yr]	Percent Remaining	OCNLD	Handy-Whitman Index			RCN	RCNLD
										Yr. Const	18-Jul	Escalation		
46	1996	Design/Engineering	$ 7,249	40	22		18	0.45	$ 3,262	325	700	2.15	$ 15,613	7,026
47	1996	Block Bldg, 2064 Wayside	44,856	40	22		18	0.45	20,185	325	700	2.15	96,613	43,476
48	1996	Transformer & Outlet	1,716	25	22		3	0.12	206	446	1216	2.73	4,679	561
49	1996	Wiring and Switch	376	25	22		3	0.12	45	446	1216	2.73	1,025	123
53	1998	Greenwood	25,071	30	20		10	0.33	8,357	339	700	2.06	51,769	17,256
54	1998	County permits	339	30	20		10	0.33	113	339	700	2.06	700	233
55	1998	Greenwood	8,333	30	20		10	0.33	2,778	339	700	2.06	17,207	5,736
56	1998	Greenwood- cleanup	850	30	20		10	0.33	283	339	700	2.06	1,755	585
57	1998	Greenwood- final	16,667	30	20		10	0.33	5,556	339	700	2.06	34,416	11,472
58	1998	Fences on Well sites 3 & 4	16,000	30	20		10	0.33	5,333	339	700	2.06	33,038	11,013
60	1998	Demo work- Greenwood	1,500	30	20		10	0.33	500	339	700	2.06	3,097	1,032
61	1999	Greenwood construction #2	90,504	30	19		11	0.37	33,185	499	700	1.40	126,960	46,552
62	1999	Paving and tile floor	11,843	30	19		11	0.37	4,342	499	700	1.40	16,613	6,092
63	1999	Tile floor	1,654	30	19		11	0.37	606	499	700	1.40	2,320	851
64	1999	Fence at Hatchway	6,700	30	19		11	0.37	2,457	499	700	1.40	9,399	3,446
66	1999	Steel post Gomez	325	30	19		11	0.37	119	499	700	1.40	456	167
67	1999	Restripe parking lot	450	15	19	21	2	0.10	43	499	700	1.40	631	60
69	2000	Roofing	2,090	20	18	21	3	0.14	299	369	700	1.90	3,965	566
70	1999	Mural 8 x 24 feet	2,700	15	19	21	2	0.10	257	347	700	2.02	5,447	519
71	2000	Mural 8 x 24 feet	3,200	15	18	20	2	0.1	320	369	700	1.90	6,070	607
72	1999	Parking/Alvardo	800	20	19	22	3	0.14	109	347	700	2.02	1,614	220
75	2001	Generator and wiring	50,016	25	17		8	0.32	16,005	499	1216	2.44	121,883	39,002
76	2001	Mural - well no. 5	4,100	15	17	19	2	0.11	432	375	700	1.87	7,653	806
77	2001	Mural Pinknay	1,200	15	17	19	2	0.11	126	375	700	1.87	2,240	236
79	2001	Paint fence #2	680	15	17	19	2	0.11	72	375	700	1.87	1,269	134
80	2001	Paint fence #3	725	15	17	19	2	0.11	76	375	700	1.87	1,353	142
81	2001	Paint fence #4	800	15	17	19	2	0.11	84	375	700	1.87	1,493	157
82	2001	Paint fence #5	900	15	17	19	2	0.11	95	375	700	1.87	1,680	177
83	2001	Concrete slab	1,950	30	17		13	0.43	845	375	700	1.87	3,640	1,577
89	2003	Asphalt drive well no. 4	3,500	20	15		5	0.25	875	391	700	1.79	6,266	1,566
90	2003	Concrete slab	4,400	30	15		15	0.5	2,200	391	700	1.79	7,877	3,939
91	2003	Concrete driveway #4	2,375	30	15		15	0.5	1,188	391	700	1.79	4,252	2,126
97	2007	Road permits	500	30	11		19	0.63	317	486	700	1.44	720	456
98	2007	Surveillance system	15,242	15	11		4	0.27	4,065	628	1216	1.94	29,513	7,870
100	2006	New lamp pole (2)	4,960	30	12		18	0.60	2,976	464	700	1.51	7,483	4,490
115	2009	New fence	29,500	30	9		21	0.70	20,650	524	700	1.34	39,408	27,586

117	2010	Mural restoration	3,500	15	8		7	0.47	1,633	552	700	1.27	4,438	2,071
118	2011	Storage bins	142,716	30	7		23	0.77	109,416	564	700	1.24	177,130	135,800
119	2011	Storage bins	30,245	30	7		23	0.77	23,188	564	700	1.24	37,538	28,779
	2017	Roof repair- well no. 3	2,190	20	1		19	0.95	2,081	666	700	1.05	2,302	2,187
	2017	Roof repair- well no. 2	2,450	20	1		19	0.95	2,328	666	700	1.05	2,575	2,446
	2017	Roof repair- well no. 3	2,190	20	1		19	0.95	2,081	666	700	1.05	2,302	2,187
	2017	Roof repair- well no. 2	2,450	20	1		19	0.95	2,328	666	700	1.05	2,575	2,446
		Subtotal:	**$ 549,812**						**$ 281,413**				**$ 898,979**	**423,774**
										Consumer Price Index (CPI)				
Office Improvements Cost and Indexing Calculations										**Yr. Aqd.**	**2019**	**Escalation**		
305	1964	Office and shop	$ 1,358	40	54	57	3	0.05	$ 71	31	256.1	8.26	$ 11,218.83	$ 590
306	1969	Bulletproof glass	990	40	49	52	3	0.06	47	36.7	256.1	6.98	6,908	399
307	1978	Screen door	418	20	40	42	2	0.05	20	65.2	256.1	3.93	1,642	78
308	1982	Iron bars	1,165	40	36		4	0.1	117	96.5	256.1	2.65	3,092	309
309	1984	Fence - parking lot	950	40	34		7	0.18	166	103.9	256.1	2.46	2,342	410
301	1990	Building additions	41,342	40	28		12	0.3	12,403	130.7	256.1	1.96	81,008	24,302
302-04	1990	Fence, paving and mural	11,570	40	28		12	0.3	3,471	130.7	256.1	1.96	22,671	6,801
310-11	1993	Building additions	81,611	40	25		15	0.38	30,604	144.5	256.1	1.77	144,641	54,240
313	1999	Flooring	1,915	40	19		21	0.53	1,005	166.6	256.1	1.54	2,944	1,545
314-16	2000	Flooring, door and cabinet	2,316	40	18		22	0.55	1,274	172.2	256.1	1.49	3,444	1,894
312	2000	Bullet resistant system	1,900	25	18		7	0.28	532	172.2	256.1	1.49	2,826	791
317-18	2002	Cameras	2,822	10	16	18	2	0.11	314	179.9	256.1	1.42	4,017	446
320	2005	New roof	9,900	20	13		7	0.35	3,465	195.3	256.1	1.31	12,982	4,544
321	2008	Carpeting	4,070	10	10	12	2	0.17	678	215.3	256.1	1.19	4,841	807
322	2008	Office upgrade	10,325	20	10		10	0.5	5,163	215.3	256.1	1.19	12,282	6,141
323	2009	Office upgrade	3,420	20	9		11	0.55	1,881	214.5	256.1	1.19	4,083	2,246
324	2009	Camera	1,012	10	9	11	2	0.18	184	214.5	256.1	1.19	1,208	220
325	2010	Camera	882	10	8		2	0.2	176	218.1	256.1	1.17	1,036	207
326	2011	Camera	1,133	10	7		3	0.3	340	224.9	256.1	1.14	1,290	387
	2014	No description	15,725	20	4		16	0.8	12,580	236.7	256.1	1.08	17,014	13,611
	2015	No description	6,207	20	3		17	0.85	5,276	237	256.1	1.08	6,707	5,701
	2016	Fence paint and repairs	2,510	15	2		13	0.87	2,175	240	256.1	1.07	2,678	2,321
		Subtotal:	**$ 203,541**						**$ 81,942**				**$ 350,875**	**$ 127,992**

Summary of Cost and Indexing Calculations

Categories	OCN	Depreciation	OCNLD	RCN	Depreciation	RCNLD
Deferred charges	171,261		171,261	171,261		171,261
Paulsen Interconn	159,306		159,306	159,306		159,306
Real Estate	154,511		154,511	300,000	Estimated Only	300,000
T & D	775,928		393,405	7,658,978		617,750
FH	6,722		4,169	14,113		8,424
Services	53,920		38,706	69,139		49,931
Well Sites	545,837		256,028	1,029,073		467,561
Well Site Improv	549,812		281,413	898,979		423,774
Spare 2016	23,600		23,600	23,600		23,600
Spare 2017	20,134		20,134	20,134		20,134
Well Maint Equipment	179,390		130,047	201,911		141,443
Trucks/Autos	77,315		15,532	106,909		20,667
Office Furn	83,422		27,743	42,534		29,576
Office Improv	203,541		81,942	350,875		127,992
2018-19 Offc Improv	126,008		126,008	126,008		126,008
Totals	**3,130,707**	**1,246,903**	**1,883,804**	**11,172,818**	**8,485,391**	**2,687,427**

APPENDIX 3

Appendix 3 - Summary of RCNLD as of June 2019						
ACCT #	DESCRIPTION	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD	RCN WITH GENERAL OVERHEAD	ACCRUED DEPRECIATION	RCN LESS ACCRUED DEPRECIATION
311	STRUCTURES AND IMPROVEMENTS (SOURCE OF WATER PLANT)	$ 62,200	$ 24,880	$ 87,080	$ 8,654	$ 78,426
315	WELLS	$ 1,226,000	$ 490,400	$ 1,716,400	$ 993,410	$ 722,990
321	STRUCTURES AND IMPROVEMENTS (PUMPING PLANT)	$ 633,000	$ 253,200	$ 886,200	$ 466,081	$ 420,119
324	PUMPING EQUIPMENT	$ 487,000	$ 194,800	$ 681,800	$ 158,946	$ 522,854
332	WATER TREATMENT	$ 350,600	$ 140,240	$ 490,840	$ 32,701	$ 458,139
342	RESERVOIRS AND TANKS	$ 400,000	$ 160,000	$ 560,000	$ 450,842	$ 109,158
343	TRANSMISSION AND DISTRIBUTION MAINS	$ 5,291,009	$ 2,116,404	$ 7,407,413	$ 5,536,746	$ 1,870,666
345	SERVICES	$ 1,971,600	$ 788,640	$ 2,760,240	$ 2,701,262	$ 58,978
348	HYDRANTS	$ 348,000	$ 139,200	$ 487,200	$ 457,179	$ 30,021
	Total	**$10,769,409**	**$4,307,764**	**$15,077,173**	**$ 10,805,822**	**$ 4,271,350**

Notes:

"General Overhead" is approximately 40 percent of "Total Cost without General Overhead"

Summary of RCNLD does not include land values.

SATIVA WATER SYSTEM

STRUCTURES AND IMPROVEMENTS
ACCOUNT NUMBER 311

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	Interconnection with City of Compton	1	$31,100	$31,100	$12,440	$43,540	0	0	7	35	28.22	19.88	$8,654	$34,886
	(6" One Way Interconnection)													
	New Interconnection with Liberty	1	$31,100	$31,100	$12,440	$43,540	0	0	0	35	35.00	0.00	$0	$43,540
	TOTAL	**2**	**--**	**$62,200**	**$24,880**	**$87,080**	**--**	**0**	**--**	**--**	**--**	**--**	**$8,654**	**$78,426**

Notes:

Description and quantity obtained from 2016 Sanitary Survey
Remaining Life based on Iowa Table R3 Curve (35 yr)

SATIVA WATER SYSTEM

WELLS

ACCOUNT NUMBER 315

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	Well No. 2 (445 ft) - Cannot be Operated	1	$0	$0	$0	$0	0	0	79	50	5.88	93.07	$0	$0
2	Well No. 3 (316 ft)	1	$316,000	$316,000	$126,400	$442,400	0	0	75	50	7.10	91.35	$404,141	$38,259
3	Well No. 5 (910 ft)	1	$910,000	$910,000	$364,000	$1,274,000	0	0	25	50	29.05	46.25	$589,269	$684,731
	TOTAL	**3**	**--**	**$1,226,000**	**$490,400**	**$1,716,400**	**--**	**0**	**--**	**--**	**--**	**--**	**$993,410**	**$722,990**

Notes:

Description and quantity obtained from Sanitary Survey (2016)

SATIVA WATER SYSTEM

STRUCTURES AND IMPROVEMENTS (PUMPING PLANT)
ACCOUNT NUMBER 321

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	Well Building (2-Story Concrete Block)	1	$389,000	$389,000	$155,600	$544,600	0	0	30	50	25.9	53.66	$292,220	$252,380
2	Well Building (1-Story Concrete Block)	1	$153,000	$153,000	$61,200	$214,200	0	0	30	50	25.9	53.66	$114,935	$99,265
3	Well Building (1-Story Concrete Block)	1	$91,000	$91,000	$36,400	$127,400	0	0	25	50	29.1	46.25	$58,927	$68,473
	TOTAL	**3**	**--**	**$633,000**	**$253,200**	**$886,200**	**--**	**0**	**--**	**--**	**--**	**--**	**$466,081**	**$420,119**

Notes:

Description and quantity obtained from Sanitary Survey (2016). Age of 2-story building obtained from as-builts.

SATIVA WATER SYSTEM

PUMPING EQUIPMENT
ACCOUNT NUMBER 324

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
	Wells													
1	*Well No. 2* - 50 HP Vertical Turbine Pump w/ VFD and electric motor (435 gpm)	1	$0	$0	$0	$0	0	0	79	25	0.00	100.00	$0	$0
2	*Well No. 3* - 60 HP Vertical Turbine Pump w/ VFD and electric motor (363 gpm) (County to replace)	1	$0	$0	$0	$0	0	0	5	25	20.23	19.82	$0	$0
3	*Well No. 5* - 100 HP Vertical Turbine Pump and electric motor (600 gpm) (County to replace)	1	$0	$0	$0	$0	0	0	25	25	8.03	75.69	$0	$0
4	*Well No. 3* - 60 HP Vertical Turbine Pump w/ fixed speed motor (County to install)	1	$124,000	$124,000	$49,600	$173,600	0	0	1	25	24.00	4.00	$6,944	$166,656
5	*Well No. 5* - 100 HP Vertical Turbine Pump w/ fixed speed motor (County to install)	1	$213,000	$213,000	$85,200	$298,200	0	0	1	25	24.00	4.00	$11,928	$286,272
6	Generator, 300 kVA, 345 hp Diesel	1	$150,000	$150,000	$60,000	$210,000	0	0	25	25	8.03	75.69	$158,946	$51,054
	TOTAL		--	**$487,000**	--	**$210,000**	--	**0**	--	--	--	--	**$158,946**	**$51,054**

Notes:

Description and quantity obtained from Sanitary Survey (2016). Age assumed to be same as well construction year.

SATIVA WATER SYSTEM

WATER TREATMENT EQUIPMENT

ACCOUNT NUMBER 332

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	Well 2 - Vacuum-operated gas feed chlorination system	1	$0	$0	$0	$0	0	0	25	15	0.00	100.00	$0	$0
2	Well 3 - Vacuum-operated gas feed chlorination system (County to replace)	1	$0	$0	$0	$0	0	0	25	15	0.00	100.00	$0	$0
3	Well 5 - Vacuum-operated automatic switch over gas chlorination system (County to replace)	1	$0	$0	$0	$0	0	0	25	15	0.00	100.00	$0	$0
4	Well 3 - Sodium hypochlorite (County to install)	1	$175,300	$175,300	$70,120	$245,420	0	0	1	15	14.01	6.66	$16,350	$229,070
5	Well 5 - Sodium hypochlorite (County to install)	1	$175,300	$175,300	$70,120	$245,420	0	0	1	15	14.01	6.66	$16,350	$229,070
	TOTAL	5	--	$350,600	$140,240	$490,840	--	0	--	--	--	--	$32,701	$458,139

Notes:

Description and quantity obtained from 2016 Sanitary Survey.

SATIVA WATER SYSTEM

RESERVOIRS AND TANKS
ACCOUNT NUMBER 342

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	**Hydropneumatic Tank (Well 2)** - 10,000 gallon capacity	1	100,000	100,000	40,000	140,000	0	0	79	50	5.88	93.07	$130,302	$9,698
2	**Hydropneumatic Tank (Well 3)** - 10,000 gallon capacity	2	100,000	200,000	80,000	280,000	0	0	75	50	7.10	91.35	$255,786	$24,214
3	**Hydropneumatic Tank (Well 5)** - 10,000 gallon capacity	1	100,000	100,000	40,000	140,000	0	0	25	50	29.05	46.25	$64,755	$75,245
	TOTAL	**4**	**--**	**400,000**	**160,000**	**560,000**	**--**	**0**	**--**	**--**			**$450,842**	**$109,158**

Notes:

Description and quantity obtained from 2013 Water Master Plan (Civiltec)

SATIVA WATER SYSTEM

TRANSMISSION AND DISTRIBUTION MAINS

ACCOUNT NUMBER 343

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION OF PIPE	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
		L.F.	$/L.F.	$	$	$	%	$	YR	YR	YR	%	$	$
1	2 inch Unknown	722	$50	$36,100	$14,440	$50,540	0	0	89	40	0.00	100.00	$50,540	$0
2	4 inch Unknown	1,466	$95	$139,270	$55,708	$194,978	0	0	75	60	10.52	87.70	$170,993	$23,985
3	4 inch Unconfirmed	3,262	$95	$309,890	$123,956	$433,846	0	0	75	60	10.52	87.70	$380,478	$53,368
4	6 inch Unknown	15,330	$122	$1,870,260	$748,104	$2,618,364	0	0	47	60	23.62	66.55	$1,742,610	$875,754
5	4 inch AC	14,837	$95	$1,409,515	$563,806	$1,973,321	0	0	75	60	10.52	87.70	$1,730,579	$242,742
6	6 inch AC	5,373	$122	$655,506	$262,202	$917,708	0	0	47	60	26.62	63.84	$585,877	$331,831
7	4 inch PVC	2,606	$97	$252,782	$101,113	$353,895	0	0	75	40	0.00	100.00	$353,895	$0
8	4 inch Steel	1,408	$95	$133,760	$53,504	$187,264	0	0	75	50	4.92	93.84	$175,736	$11,528
9	4 inch Cast Iron	1,610	$95	$152,950	$61,180	$214,130	0	0	75	60	10.52	87.70	$187,789	$26,341
10	6 inch Cast Iron	1,008	$122	$122,976	$49,190	$172,166	0	0	75	60	10.52	87.70	$150,988	$21,179
11	8 inch PVC	1,300	$160	$208,000	$83,200	$291,200	0	0	1	40	39.10	2.49	$7,262	$283,938
	TOTAL	**48,922**	**--**	**$5,291,009**	**$2,116,404**	**$7,407,413**	**--**	**0**	**--**	**--**	**--**	**--**	**$5,536,746**	**$1,870,666**

Notes:

Description and quantity obtained from available Sativa plans.

It is assumed unknown 2-inch pipelines will be replaced with 2-inch PVC pipelines

It is assumed unknown, AC, and Cast Iron 4 and 6-inch pipelines will be replaced with 4 and 6-inch ductile iron pipelines

SATIVA WATER SYSTEM

SERVICES

ACCOUNT NUMBER 345

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
SERVICES														
1	3/4-inch	1,643	$1,200	$1,971,600	$788,640	$2,760,240	0	0	60	35	1.31	97.86	$2,701,262	$58,978
	TOTAL	**1,643**	**--**	**$1,971,600**	**$788,640**	**$2,760,240**	**--**	**0**	**--**	**--**	**--**		**$2,701,262**	**$58,978**

Notes:

Description and quantity obtained from Sativa staff.

SATIVA WATER SYSTEM

HYDRANTS

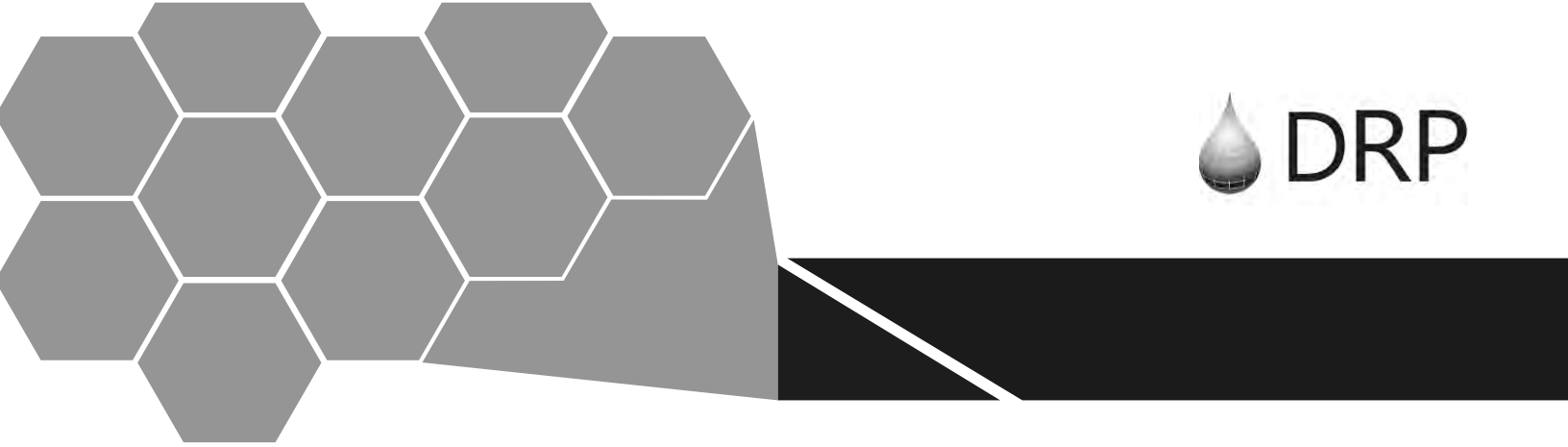
ACCOUNT NUMBER 348

FACILITIES SUMMARY
REPRODUCTION COST NEW LESS ACCRUED DEPRECIATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINE #	DESCRIPTION	NUMBER OF UNITS	UNIT COST	TOTAL COST WITHOUT GENERAL OVERHEAD	GENERAL OVERHEAD 40%	RCN WITH GENERAL OVERHEAD	SALVAGE VALUE		AGE	AVERAGE SERVICE LIFE	REMAINING LIFE	ACCRUED DEPRECIATION		RCN LESS ACCRUED DEPRECIATION
			$	$	$	$	%	$	YR	YR	YR	%	$	$
1	4-inch Fire Hydrant (Double Outlets)	29	$6,000	$174,000	$69,600	$243,600	0	0	60	40	3.94	93.84	$228,589	$15,011
2	6-inch Fire Hydrant (Double Outlets)	29	$6,000	$174,000	$69,600	$243,600	0	0	60	40	3.94	93.84	$228,589	$15,011
	TOTAL	58	--	$348,000	$139,200	$487,200	--	0	--	--	--	--	$457,179	$30,021

Notes:

Quantity and size information obtained from Sativa staff



DRP Engineering, Inc.
2550 W. Main Street, Suite #212
Alhambra, CA 91801
Phone: (626) 693-2966

FILED
08/13/21
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Attachment 7

Colliers Appraisal

FOUR FORMER SATIVA-OWNED PARCELS

2015 Hatchway St., 13320 Willowbrook Ave., 13139 Aranbe St. & 2081/2083 E. Stockwell St.
Compton, California 90220

APPRAISAL REPORT

Date of Report: October 19, 2019

Colliers File #: LAX190431



PREPARED FOR
Kirk Michael
Chief Financial Officer
Suburban Water Systems
12535 Reed Road
Sugar Land, TX 77478

PREPARED BY
COLLIERS INTERNATIONAL
VALUATION & ADVISORY SERVICES

LETTER OF TRANSMITTAL

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October 19, 2019

Kirk Michael
Chief Financial Officer
Suburban Water Systems
12535 Reed Road
Sugar Land, TX 77478

RE: Four Former Sativa-Owned Parcels
2015 Hatchway St., 13320 Willowbrook Ave., 13139 Aranbe St. & 2081/2083 E. Stockwell St.
Compton, California 90220

Colliers File #: LAX190431

Mr. Michael:

This appraisal report satisfies the scope of work and requirements agreed upon by Suburban Water Systems and Colliers International Valuation & Advisory Services. At the request of the client, this appraisal is presented in an Appraisal Report format as defined by *USPAP* Standards Rule 2-2(a). My appraisal format provides a summary description of the appraisal process, subject and market data and valuation analyses.

The purpose of this appraisal is to develop an opinion of the As-Is Market Value of the subject property's fee simple interest. The following table conveys the final opinion of market value of the subject property that is developed within this appraisal report:

VALUE TYPE	INTEREST APPRAISED	DATE OF VALUE	VALUE
As-Is Market Value	Fee Simple	October 8, 2019	$380,000
As-Is Market Value	Fee Simple	October 8, 2019	$200,000
As-Is Market Value	Fee Simple	October 8, 2019	$210,000
As-Is Market Value	Fee Simple	October 8, 2019	$160,000
AS-IS MARKET VALUE	**FEE SIMPLE**	**October 8, 2019**	**$950,000**

The subject comprises four residential land parcels that have been developed with water wells to serve the City of Compton. They are situated in unincorporated Los Angeles County and lie within Compton's sphere of influence. They are gated and the yards are paved. One parcel has a concrete block office building and another has a concrete block shed with two roll-up doors. Both buildings were estimated to have been built in 1985 and are in average condition. The table on the following page itemizes each parcel:

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PROPERTIES APPRAISED				
ADDRESS	WELL NO.	LAND SF	BLDG. SF	BLDG. TYPE
2015 E. Hatchway St.	2	6,553	1,600	Office
13320 S. Willowbrook St.	3	7,203	-	-
13139 S. Aranbe St.	4	4,934	900	Shed
2081/2083 E. Stockwell St.	5	4,398	-	-

The client has directed me to value the land and depreciated replacement cost of the above two buildings. I was not provided with any cost estimates for the well infrastructure and it is beyond the scope of this assignment. Accordingly, this report employs the extraordinary assumption that the wells will be sealed and the infrastructure removed at the time of sale to the most probable buyer, which is a residential developer.

The analyses, opinions and conclusions communicated within this appraisal report were developed based upon the requirements and guidelines of the current Uniform Standards of Professional Appraisal Practice (USPAP), the requirements of the Code of Professional Ethics and the Standards of Professional Appraisal Practice of the Appraisal Institute.

The report, in its entirety, including all assumptions and limiting conditions, is an integral part of, and inseparable from, this letter. *USPAP* defines an Extraordinary Assumption as, “an assignment specific-assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser’s opinions or conclusions”. *USPAP* defines a Hypothetical Condition as, “that which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis”.

The Extraordinary Assumptions and/or Hypothetical Conditions that were made during the appraisal process to arrive at my opinion of value are fully discussed below. I advise the client to consider these issues carefully given the intended use of this appraisal, as their use might have affected the assignment results.

EXTRAORDINARY ASSUMPTIONS

The following Extraordinary Assumption was made for this assignment:

- All four sites are improved with well infrastructure, pipes, structures to house pumps and motors, etc. It is an extraordinary assumption of this report that this infrastructure will be removed prior to the properties being marketed for sale.

HYPOTHETICAL CONDITIONS

No Hypothetical Conditions were made for this assignment.

RELIANCE LANGUAGE

The Appraisal is for the sole use of the Client; however, Client may provide only complete, final copies of the Appraisal report in its entirety (but not component parts) to third parties who shall review such reports in connection with loan underwriting or securitization efforts. Colliers International Valuation & Advisory Services is not required to explain or testify as to appraisal results other than to respond to the Client for routine and customary questions. Please note that our consent to allow the Appraisal prepared by Colliers International Valuation & Advisory Services or portions of such Appraisal, to become part of or be referenced in any public offering, the granting of such consent will be at our sole and absolute discretion and, if given, will be on condition that Colliers International Valuation & Advisory Services will be provided with an Indemnification Agreement and/or Non-Reliance letter, in a form and content satisfactory to Colliers International Valuation & Advisory Services, by a party satisfactory to Colliers International Valuation & Advisory Services. Colliers International Valuation & Advisory Services does consent to your submission of the reports to rating agencies,

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loan participants or your auditors in its entirety (but not component parts) without the need to provide Colliers International Valuation & Advisory Services with an Indemnification Agreement and/or Non-Reliance letter.

Colliers International Valuation & Advisory Services hereby expressly grants to Client the right to copy the Appraisal and distribute it to other parties in the transaction for which the Appraisal has been prepared, including employees of Client, other lenders in the transaction, and the borrower, if any.

My opinion of value reflects current conditions and the likely actions of market participants as of the date of value. It is based on the available information gathered and provided to us, as presented in this report, and does not predict future performance. Changing market or property conditions can and likely will have an effect on the subject's value.

The signature below indicates my assurance to the client that the development process and extent of analysis for this assignment adhere to the scope requirements and intended use of the appraisal. If you have any specific questions or concerns regarding the attached appraisal report, or if Colliers International Valuation & Advisory Services can be of additional assistance, please contact the individuals listed below.

Sincerely,

COLLIERS INTERNATIONAL
VALUATION & ADVISORY SERVICES



David A. Williams, MAI
Valuation Services Director
Certified General Real Estate Appraiser
State of California License #AG035639
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REPORT ORGANIZATION

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CERTIFICATION

ASSUMPTIONS & LIMITING CONDITIONS

ADDENDA

Engagement Letter
Legal Description
Valuation Glossary
Qualifications of Appraiser
Qualifications of Colliers International Valuation & Advisory Services

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GENERAL INFORMATION

Property Name	Four Former Sativa-Owned Parcels
Property Type	Land - Residential (Single-family) Land
Address	2015 Hatchway St., 13320 Willowbrook Ave., 13139
City	Compton
State	California
Zip Code	90220
County	Los Angeles
Core Based Statistical Area (CBSA)	Los Angeles-Long Beach-Anaheim, CA
Market	Los Angeles
Submarket	Compton
Number Of Parcels	4
Assessor Parcels	6155-017-900, 6154-010-900, 6152-019-901, 6155-005-900 & 901

SITE INFORMATION

Land Area	**Acres**	**Square Feet**
2015 E. Hatchway St.	0.15	6,553
13320 S. Willowbrook St.	0.17	7,203
13139 S. Aranbe St.	0.11	4,934
2081/2083 E. Stockwell St.	0.10	4,398
Total	**0.53**	**23,088**
Topography	Level at street grade	
Shape	Rectangular	
Access	Average	
Exposure	Average	
Current Zoning	R1 (R1)	
Flood Zone	Zone X (Unshaded)	
Seismic Zone	Highest Risk	

IMPROVEMENT INFORMATION

Gross Building Area SF (GBA)	
Office Building	1,600 SF
Shed	900 SF
Year Built	1980s
Quality	Average
Condition	Average
Type Of Construction	Concrete block

HIGHEST & BEST USE

As Vacant	Development Of One Single-Family Residence Per Property
As Improved	Conversion To Alternate Use

EXPOSURE TIME

Exposure Time	Six to Nine Months

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AERIAL PHOTOGRAPH



SUBJECT PHOTOGRAPHS



2015 HATCHWAY ST.



PUMPING STATION



REAR ELEVATION AND PARKING



OFFICE INTERIOR



**WESTBOUND ON HATCHWAY ST.
(SUBJECT TO RIGHT)**



**EASTBOUND ON HATCHWAY ST.
(SUBJECT TO LEFT)**

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13320 WILLOWBROOK ST.



REMARK



SOUTHBOUND ON WILLOWBROOK (SUBJECT TO LEFT)



NORTHBOUND ON WILLOWBROOK (SUBJECT AT RIGHT)



13139 ARANBE ST.



NORTHERLY VIEW OF SHED AND SITE

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SOUTHBOUND ON ARANBE
(SUBJECT AT RIGHT)



NORTHBOUND ON ARANBE
(SUBJECT TO LEFT)



2081-2083 STOCKWELL



NORTHERLY VIEW



WESTBOUND ON STOCKWELL ST.
(SUBJECT TO RIGHT)



EASTBOUND ON STOCKWELL ST.
(SUBJECT TO LEFT)

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PROPERTY IDENTIFICATION

The subject is a Land (Residential (Single-family) Land) property totaling 0 SF NRA located on a 0.53-acre site at 2015 Hatchway St., 13320 Willowbrook Ave., 13139 Aranbe St. & 2081/2083 E. Stockwell St. in Compton, Los Angeles County, California. The assessor's parcel numbers are: 6155-017-900, 6154-010-900, 6152-019-901, 6155-005-900 & 901.

The legal description of the subject property is presented in the Addenda.

SCOPE OF WORK

The scope of work for this appraisal assignment is outlined below:

- The appraiser analyzed the regional and local area economic profiles including employment, population, household income, and real estate trends.
- The appraiser confirmed and analyzed legal and physical features of the subject, and how they impact the functionality and overall competitive position of the property.
- The appraiser conducted Highest and Best Use analysis and conclusions were drawn for the highest and best use of the subject property As-Vacant and As-Improved.
- The appraiser confirmed and analyzed financial features of the subject property. This information, as well as trends established by confirmed market indicators, was used to forecast performance of the subject property.
- Selection of the valuation methods was based on the identifications required in USPAP relating to the intended use, intended users, definition and date of value, relevant property characteristics and assignment conditions. This appraisal developed the Cost Approach.
- Reporting of this appraisal is in an Appraisal Report format as required in USPAP Standard 2. The appraiser's analysis and conclusions are summarized within this document.
- I understand the Competency Rule of USPAP and the author of this report meets the standards.
- No one provided significant real property appraisal assistance to appraiser signing this certification.

SOURCES OF INFORMATION

The following sources were contacted to obtain relevant information:

SOURCES OF INFORMATION

ITEM	SOURCE
Tax Information	Los Angeles County Tax Assessor
Zoning Information	Los Angeles County Planning Dept.
Site Size Information	Los Angeles County Tax Assessor
Building Size Information	Appraiser Measurements
Flood Map	InterFlood
Demographics	Pitney Bowes/Gadberry Group - GroundView®
Legal Description	Grant Deed from RealQuest

SUBJECT PROPERTY INSPECTION

The following table illustrates the Colliers International professionals involved with this appraisal report and their status related to the property inspection.

SUBJECT PROPERTY INSPECTION

APPRAISER	INSPECTED	EXTENT	DATE OF INSPECTION
David A. Williams, MAI	Yes	Site Only	October 8, 2019

It is my understanding that the interior of the office building and shed are commensurate with the exterior quality and condition.

CLIENT IDENTIFICATION

The client of this specific assignment is Suburban Water Systems.

PURPOSE

The purpose of this appraisal is to develop an opinion of the As-Is Market Value of the subject property's fee simple interest.

INTENDED USE

The intended use of this appraisal is to assist the client in making internal business decisions relating to the acquisition of this asset.

INTENDED USERS

Suburban Water Systems is the only intended user of this report. Use of this report by third parties and other unintended users is not permitted. This report must be used in its entirety. Reliance on any portion of the report independent of others, may lead the reader to erroneous conclusions regarding the property values. Unless approval is provided by the authors no portion of the report stands alone.

ASSIGNMENT DATES

Date of Report	October 19, 2019
Date of Inspection	October 8, 2019
Valuation Date - As-Is	October 8, 2019

PERSONAL INTANGIBLE PROPERTY

No personal property or intangible items are included in this valuation.

PROPERTY AND SALES HISTORY

Current Owner
The subject title is currently recorded in the name of Sativa LA County Water District, which acquired title to the property at an unknown date in 2018 (not recorded).

Three-Year Sales History
The subject property has not transferred during the past three years of the effective date of value stated in this report.

Subject Sale Status
The subject was taken over by Los Angeles County Water District in 2018. The district is seeking to auction the properties. As of the effective date of this report, there is no list price or reserve bids for any of the properties.

DEFINITIONS OF VALUE

Given the scope and intended use of this assignment, the definition of Market Value is applicable. The definition of Market Value, along with all other applicable definitions for this assignment, is located in the Valuation Glossary section of the Addenda.

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PROPERTY RIGHTS APPRAISED

The property rights appraised constitute the fee simple interest.

VALUE SCENARIOS

The valuation scenarios developed in this appraisal report include the As-Is Market Value of the subject property's fee simple interest.

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REGIONAL MAP



LOS ANGELES-LONG BEACH-GLENDALE MSA (LOS ANGELES COUNTY)

Los Angeles County is located along the Pacific Ocean in Southern California and is part of the two-county (Orange County being the other) Los Angeles-Long Beach-Santa Ana Metropolitan Statistical Area (MSA). With a population of approximately 13.3 million, the MSA is the 2nd most populated MSA in the U.S., and the most populated MSA in California. The Los Angeles area is regarded as the epicenter of the Southern California region and according to Price Waterhouse's ranking of GDP for global cities, the city of Los Angeles has the 2nd largest GDP in the U.S. and 3rd largest globally.



The county of Los Angeles encompasses 4,752 square miles, which includes the two offshore islands of San Clemente and Santa Catalina. The county had an estimated population of 9,969,834 in 2014, making it the most populous county in the United States. The city of Los Angeles, with a population of 3,884,307 is the largest city in the state of California and 2nd largest city in the nation, after New York City.

At the turn of the 21st Century Los Angeles has virtually attained the same importance to new immigrants as New York did at the turn of the 20th century. Los Angeles is the nation's premier place of entry for immigrants and probably the most significant region in the country for affecting their national assimilation, just as New York was a century ago. Accordingly the county has become a prime starting point for new entrepreneurs seeking to achieve upward mobility. Therefore, in addition to large corporations, universities, hospitals and public sector employment located within the Los Angeles-Long Beach-Glendale MSA, smaller businesses make up most of the local employment picture. A 2011 report issued by the U.S. Census lists 408,126 established businesses in the Los Angeles-Long Beach-Glendale MSA (down a total of 1,182 in all size groups from last year's report). Of these businesses 162 companies employed 1,000 people or more, whereas 354,270 businesses employed 1-9 people, representing 87% of all businesses listed. These figures reflect the impact and importance of small business in the local economy.

DEMOGRAPHIC ANALYSIS

The following is a demographic study of the region sourced by *Pitney Bowes/Gadberry Group - GroundView*®, an on-line resource center that provides information used to analyze and compare the past, present, and future trends of geographical areas. Demographic changes are often highly correlated to changes in the underlying economic climate. Periods of economic uncertainty necessarily make demographic projections somewhat less reliable than projections in more stable periods. These projections are used as a starting point, but we also consider current and localized market knowledge in interpreting them within this analysis. Please note that our demographics provider sets forth income projections in constant dollars which, by definition, reflect projections after adjustment for inflation. We are aware of other prominent demographic data providers that project income in current dollars, which do not account for inflation. A simple comparison of projections for a similar market area made under the constant and current dollar methodologies can and likely will produce data points that vary, in some cases, widely. Further, all forecasts, regardless of demographer methodology(ies), are subjective

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in the sense that the reliability of the forecast is subject to modeling and definitional assumptions and procedures.

REGIONAL AREA DEMOGRAPHICS

YEAR	US	CA	CBSA	YEAR	US	CA	CBSA
POPULATION				**NUMBER OF HOUSEHOLDS**			
2010 Total Population	308,745,538	37,253,956	12,828,837	2018	122,929,625	13,049,105	4,353,704
2018 Total Population	328,062,672	39,857,821	13,429,511	2023	126,604,011	13,333,173	4,428,532
2023 Total Population	339,788,898	41,463,447	13,806,318	CAGR	0.6%	0.4%	0.3%
2010 - 2018 CAGR	0.8%	0.8%	0.6%	**AVERAGE HOUSEHOLD SIZE**			
2018 - 2023 CAGR	0.7%	0.8%	0.6%	2018	2.60	2.99	3.03
POPULATION DENSITY				2023	2.62	3.05	3.07
2018 Per Square Mile	91	252	2,749	CAGR	0.13%	0.38%	0.21%
2023 Per Square Mile	94	262	2,826	**HOUSING UNITS**			
MEDIAN AGE				Owner Occupied	80,041,309	7,290,968	2,184,448
2018	37.35	35.40	35.69	Renter Occupied	42,888,316	5,758,137	2,169,256
2023	38.09	36.21	36.49	**AVERAGE HOUSEHOLD INCOME**			
CAGR	0.39%	0.46%	0.45%	2018	$84,367	$98,603	$98,726
MEDIAN HOME VALUE				2023	$100,862	$117,101	$117,458
2018	$183,983	$405,009	$494,118	CAGR	3.6%	3.5%	3.5%
PER CAPITA INCOME				**MEDIAN HOUSEHOLD INCOME**			
2018	$32,413	$32,958	$32,546	2018	$58,828	$68,209	$67,631
2023	$38,504	$38,413	$38,316	2023	$70,600	$81,780	$81,336
CAGR	3.5%	3.1%	3.3%	CAGR	3.7%	3.7%	3.8%

Source: Pitney Bowes/Gadberry Group - GroundView®

Population

According to Pitney Bowes/Gadberry Group - GroundView®, a Geographic Information System (GIS) Company, the Los Angeles-Long Beach-Anaheim metropolitan area had a 2018 total population of 13,429,511 and experienced an annual growth rate of 0.6%, which was lower than the California annual growth rate of 0.8%. The metropolitan area accounted for 33.7% of the total California population (39,857,821). Within the metropolitan area the population density was 2,749 people per square mile compared to the lower California population density of 252 people per square mile and the lower United States population density of 91 people per square mile. The 2018 median age for the metropolitan area was 35.69, which was 4.64% younger than the United States median age of 37.35 for 2018. The median age in the metropolitan area is anticipated to grow by 0.45% annually, increasing the median age to 36.49 by 2023.

Education and Healthcare

Education and healthcare are among the top employing industries in the county and are of great consequence to the populace as a whole. For over 50 years, UCLA Health System has provided healthcare and the latest in medical technology to the people of the Los Angeles MSA. The UCLA Health System is among the most comprehensive and advanced healthcare systems in the world with 4 hospitals, 9 primary care centers, 6 specialty care centers and 6 other locations of labs, pharmacies and outpatient centers, Additionally, Kaiser Permanente, a cohesive managed care consortium, impacts Los Angeles County and neighboring Orange County, with 7 area hospitals and medical centers, pharmacies, and medical care facilities situated throughout the two-county MSA. Cedars-Sinai Medical Center also serves the greater Los Angeles MSA with primary and specialty care.

The California State University system is composed of 23 campuses throughout the state with over 400,000 students enrolled and is the largest senior system of higher education in the United States. The flagship campus, located in Long Beach enrolls over 34,000 students, the largest campus is in Northridge with over 36,000 students, and the Los Angeles campus has over 21,000 students enrolled. Another public university is

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the University of California's education system, which includes 10 campuses throughout the state and comprises more than 220,000 students and more than 170,000 faculty and staff. Its largest campus, with an estimated enrollment of 39,593, is located in Los Angeles (UCLA). Among community colleges, the Los Angeles Community College District is the largest community college district in the United States serving more than 250,000 students annually at nine colleges, spread throughout 36 cities in the greater Los Angeles area.

The University of Southern California, located in the heart of Los Angeles, is the oldest private research university in California and one of the world's leading private research universities. The university has a total enrollment of 36,896 students of which 17,380 are full-time undergraduate students and 19,516 are post-graduate.

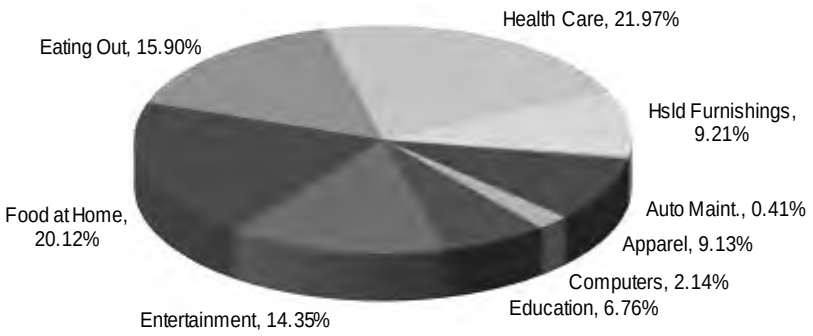
Household Trends

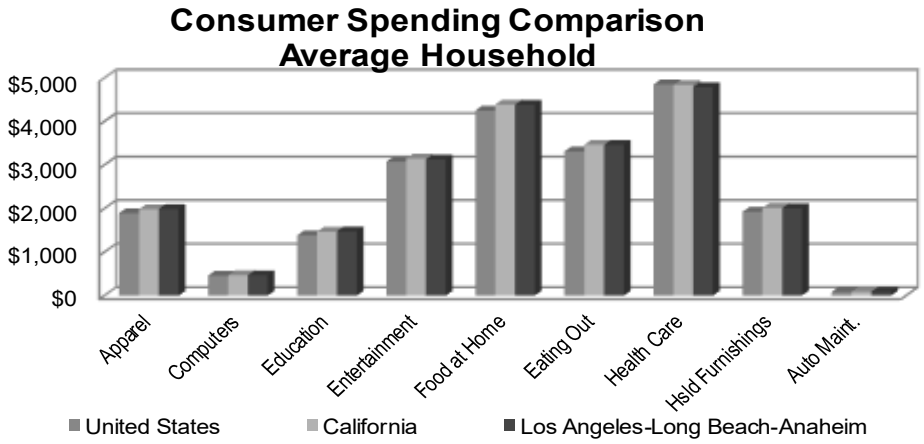
The 2018 number of households in the metropolitan area was 4,353,704. The number of households in the metropolitan area is projected to grow by 0.3% annually, increasing the number of households to 4,428,532 by 2023. The 2018 average household size for the metropolitan area was 3.03, which was 16.54% larger than the United States average household size of 2.6 for 2018. The average household size in the metropolitan area is anticipated to grow by 0.21% annually, raising the average household size to 3.07 by 2023. The Los Angeles-Long Beach-Anaheim metropolitan area had 49.83% renter occupied units, compared to the lower 44.13% in California and the lower 34.89% in the United States.

Income Trends

The 2018 median household income for the metropolitan area was $67,631, which was 15.0% higher than the United States median household income of $58,828. The median household income for the metropolitan area is projected to grow by 3.8% annually, increasing the median household income to $81,336 by 2023. As is often the case when the median household income levels are higher than the national average, the cost of living index is also higher. According to the American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index, the Los Angeles-Long Beach-Anaheim, CA MSA's cost of living is 147.9 compared to the national average score of 100. The ACCRA Cost of Living Index compares groceries, housing, utilities, transportation, health care and miscellaneous goods and services for over 300 urban areas.

Consumer Spending Los Angeles-Long Beach-Anaheim





EMPLOYMENT

Total employment has increased annually over the past decade in the state of California by 1.5% and increased annually by 1.2% in the area. From 2017 to 2018 unemployment decreased in California by 0.6% and decreased by 0.3% in the area. In the state of California unemployment has increased over the previous month by 0.2% and increased by 0.4% in the area.

EMPLOYMENT & UNEMPLOYMENT STATISTICS 2009 - 2018

	TOTAL EMPLOYMENT				UNEMPLOYMENT RATE		
	California		Los Angeles-Long Beach-Anaheim, CA Metropolitan Statistical Area		United States*	California	Los Angeles-Long Beach-Anaheim, CA Metropolitan Statistical Area
Year	Total	% Δ Yr Ago	Total	% Δ Yr Ago			
2009	16,182,572	(4.0%)	5,796,868	(4.7%)	9.3%	11.2%	10.9%
2010	16,091,945	(0.6%)	5,689,711	(1.8%)	9.6%	12.2%	11.8%
2011	16,258,133	1.0%	5,734,334	0.8%	8.9%	11.7%	11.4%
2012	16,602,672	2.1%	5,817,662	1.5%	8.1%	10.4%	10.2%
2013	16,958,403	2.1%	5,944,864	2.2%	7.4%	8.9%	9.0%
2014	17,310,937	2.1%	6,063,229	2.0%	6.2%	7.5%	7.6%
2015	17,681,849	2.1%	6,174,555	1.8%	5.3%	6.2%	6.1%
2016	18,002,773	1.8%	6,310,779	2.2%	4.9%	5.5%	5.0%
2017	18,285,492	1.6%	6,407,180	1.5%	4.4%	4.8%	4.5%
2018	18,582,802	1.6%	6,474,397	1.0%	3.9%	4.2%	4.2%
CAGR	**1.5%**	**-**	**1.2%**	**-**	**-**	**-**	**-**

Source: U.S. Bureau of Labor Statistics *Unadjusted Non-Seasonal Rate

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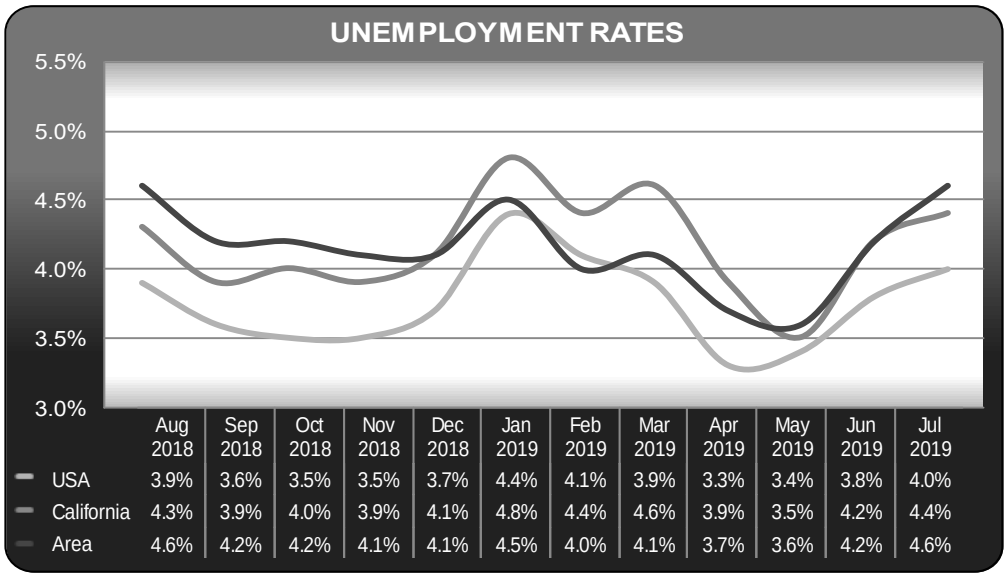

	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019
USA	3.9%	3.6%	3.5%	3.5%	3.7%	4.4%	4.1%	3.9%	3.3%	3.4%	3.8%	4.0%
California	4.3%	3.9%	4.0%	3.9%	4.1%	4.8%	4.4%	4.6%	3.9%	3.5%	4.2%	4.4%
Area	4.6%	4.2%	4.2%	4.1%	4.1%	4.5%	4.0%	4.1%	3.7%	3.6%	4.2%	4.6%

The adjusted unemployment rate in Los Angeles County from December 2018 through July 2019 increased from 4.1 to 4.6 percent. This compares to an unemployment rate of 4.1 to 4.4 percent for the State of California and 4.1 to 4.6 for the country as a whole.

TOP EMPLOYERS

EMPLOYER NAME	EMPLOYEES	INDUSTRY
Kaiser Permanente	33,600	Healthcare
Northrop Grumman Corp.	21,000	Aerospace
University of Southern California	16,180	Education
Target Corp.	15,000	Retail
Ralphs/Food 4 Less	13,500	Retail
Cedars-Sinai Medical Center	12,068	Healthcare
Bank of America	12,000	Financial
Boeing Co,	11,520	Aerospace
Providence Health & Services	10,616	Healthcare
Home Depot	10,250	Retail

Source: EDD

In addition to large corporations, universities, hospitals and public sector employment located within the Los Angeles MSA, smaller businesses make up a large portion of the local employment picture.

ENTERTAINMENT & TOURISM

A key component to the area's economy, the Hollywood-based motion picture/TV production industry, is still struggling with its recessionary downtime due to cut-backs in advertising, film production companies leaving the area, and general studio budget tightening. Although the state of California initiated a new program of film tax credits in 2009 in an attempt to keep productions in the area, it did little to stem the outward flow of film production. The mass-exodus to areas such as Georgia, Louisiana and Canada has continued, further crippling an already limping industry.

Tourism is another major economic driver to the area. The destination parks of Disneyland, Knott's Berry Farm, Pacific Park, and Six Flags Magic Mountain draw a steady stream of visitors. Likewise, a plethora of world-famous beaches as well as upscale shopping sites such as Rodeo Drive are popular tourist destinations. The motion picture studios such as Universal, Walt Disney, 20th Century Fox and Paramount attract tourists year round. The area also provides an assortment of waterparks, zoos, aquariums, museums and a colorful nightlife with hot spots located in Hollywood, West Hollywood, Sunset Strip and downtown Los Angeles. In addition,

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major sport team affiliations representing basketball, baseball, soccer, hockey and more, contribute towards Southern California's livability and vitality.

AIRPORT | PORT STATISTICS

The county has an extensive freeway network and a vast urban and suburban surface street network. Both the freeways and streets are notorious for severe traffic congestion, and the area's freeway-to-freeway interchanges regularly rank among the top 10 most congested points in the country. There are eight major Interstates that service the county as well as nine state routes. Interstates 5 and 405 provide access north to San Fernando and on to San Francisco and also south to Orange County and San Diego County. Interstates 110, 710 and 605 provide north and south access within Los Angeles County. Interstate 105 provides east and west access in the south part of Los Angeles County. Interstate 10 and 210 provide access west to San Bernardino County and beyond.

Los Angeles International Airport (LAX) is the most significant airport in the county and is the sixth busiest airport in the world and third busiest in the United States. It serves almost 60 million passengers a year and handles more than 1.9 million tons of cargo. An estimated 59,000 jobs directly attributable to LAX are located on or near the airport. Approximately 408,000 jobs, spread throughout the region, are attributable to LAX. There are two smaller airports that also serve the region, Long Beach Municipal Airport, located in Long Beach and Bob Hope Airport, located in Burbank.

LOS ANGELES INTERNATIONAL AIRPORT (LAX)

YEAR	ENPLANED PASSENGERS	% CHG
2007	30,113,985	-
2008	28,861,477	(4.2%)
2009	27,439,897	(4.9%)
2010	28,857,755	5.2%
2011	30,528,737	5.8%
2012	31,326,268	2.6%
2013	32,425,892	3.5%
2014	34,314,197	5.8%
2015	36,351,226	5.9%
2016	39,636,042	9.0%
2017	41,232,432	4.0%

Source: U.S. Department of Transportation

SUMMARY

The Los Angeles metropolitan area is one of the world's largest economies. International trade is the largest industry and about forty percent of all containerized goods enter the United States pass through Los Angeles. The economy is exceptionally diversified with industries including aerospace, entertainment, fashion, biomedical services, consumer products, and tourism.

With the above said Los Angeles is not without challenges. Traffic remains an issue, the harbor, airport, rail yards, and local utility companies are in need of upgrades to infrastructure. The current unemployment level of 4.7% is above both California and national levels, however unemployment has steadily improved since 2011, particularly in the last year. In conclusion, Los Angeles has one of the largest and most diverse economies in the world and economic prospects are positive. Strong continued demand for real property in the Los Angeles metropolitan area is forecast and outlook is favorable.

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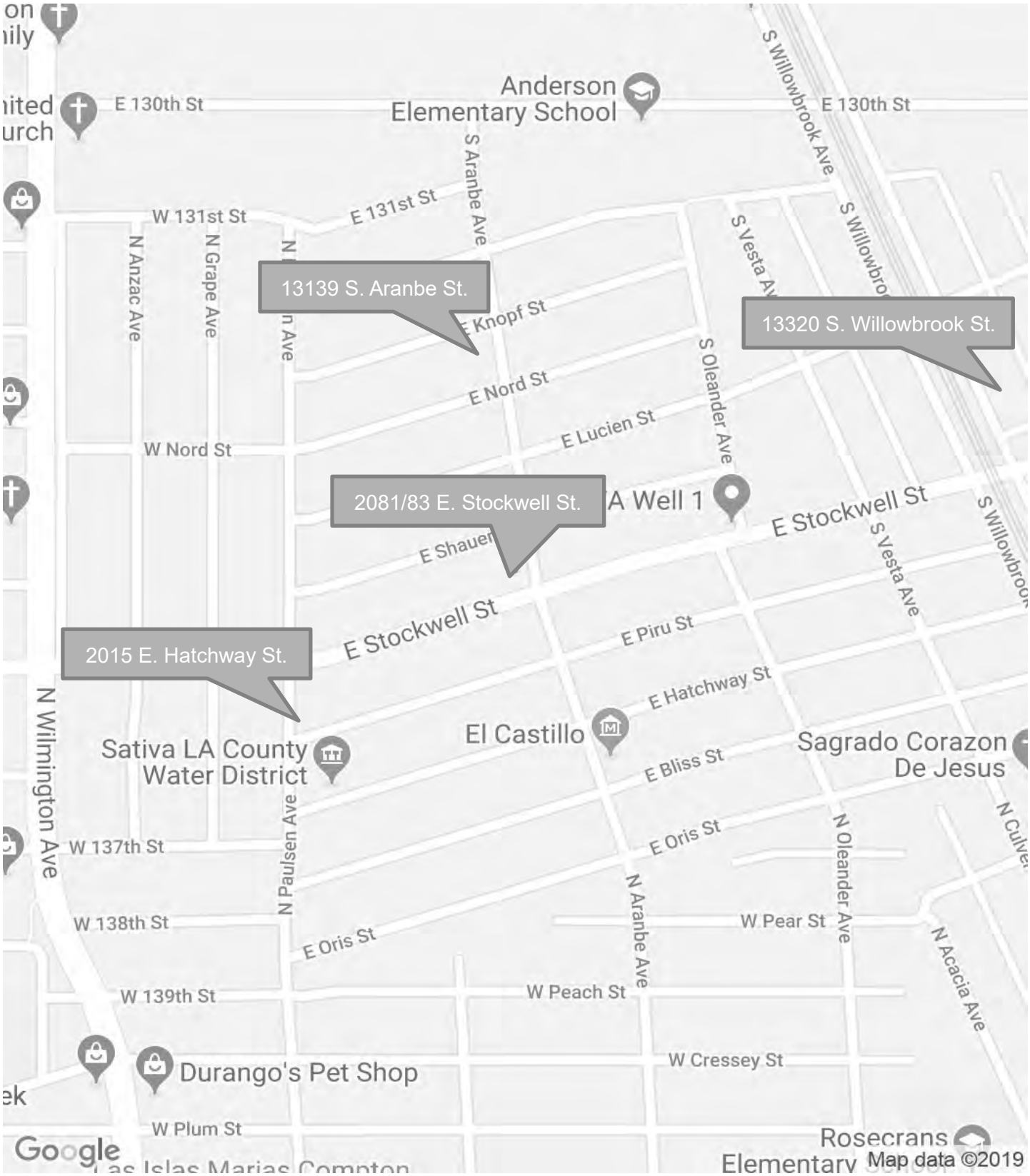
LOCAL AREA MAP



LOCAL AREA ANALYSIS

In this section of the report, I provide details about the local area and describe the influences that bear on the real estate market as well as the subject property. Below are insights into the local area based on fieldwork, interviews, demographic data and experience working in this market.

LOCAL AREA PROFILE

The subject property is located unincorporated Los Angeles County within the sphere of influence of Compton, California. The local area is entirely built out primarily with older single-family residences and industrial uses Rancho Dominguez lies to the west and south, Compton lies to the east and Lynwood lies to the north.

DEMOGRAPHIC PROFILE

Below is a demographic study of the area, sourced by *Pitney Bowes/Gadberry Group - GroundView*®, an on-line resource center that provides information used to analyze and compare the past, present, and future trends of properties and geographical areas. Please note that our demographics provider sets forth income projections in constant dollars which, by definition, reflect projections after adjustment for inflation. We are aware of other prominent demographic data providers that project income in current dollars, which do not account for inflation. A simple comparison of projections for a similar market area made under the constant and current dollar methodologies can and likely will produce data points that vary, in some cases, widely. Further, all forecasts, regardless of demographer methodology(ies), are subjective in the sense that the reliability of the forecast is subject to modeling and definitional assumptions and procedures.

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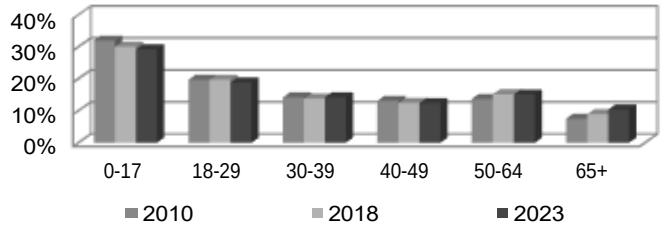
LOCAL AREA DEMOGRAPHICS

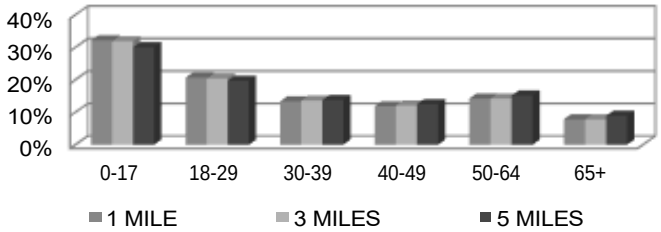
DESCRIPTION	1 MILE	3 MILES	5 MILES	DESCRIPTION	1 MILE	3 MILES	5 MILES
POPULATION				**AVERAGE HOUSEHOLD INCOME**			
2000 Population	39,917	311,882	856,031	2018	$57,635	$57,547	$59,963
2010 Population	43,342	327,804	883,457	2023	$70,226	$70,212	$72,735
2018 Population	40,998	317,184	872,709	Change 2018-2023	21.85%	22.01%	21.30%
2023 Population	41,668	322,775	888,226	**MEDIAN HOUSEHOLD INCOME**			
Change 2000-2010	8.58%	5.11%	3.20%	2018	$44,010	$44,255	$44,559
Change 2010-2018	(5.41%)	(3.24%)	(1.22%)	2023	$51,992	$53,238	$53,901
Change 2018-2023	1.63%	1.76%	1.78%	Change 2018-2023	18.14%	20.30%	20.97%
POPULATION 65+				**PER CAPITA INCOME**			
2010 Population	3,006	21,567	66,260	2018	$14,202	$14,091	$15,729
2018 Population	3,213	24,776	77,823	2023	$17,145	$17,036	$18,894
2023 Population	3,823	29,483	91,904	Change 2018-2023	20.72%	20.90%	20.12%
Change 2010-2018	6.89%	14.88%	17.45%	**2018 HOUSEHOLDS BY INCOME**			
Change 2018-2023	18.99%	19.00%	18.09%	<$15,000	15.9%	14.6%	14.1%
NUMBER OF HOUSEHOLDS				$15,000-$24,999	14.0%	14.1%	13.5%
2000 Households	9,451	72,179	218,571	$25,000-$34,999	11.5%	11.6%	12.0%
2010 Households	10,048	75,779	225,003	$35,000-$49,999	15.8%	16.3%	16.0%
2018 Households	10,007	76,291	226,862	$50,000-$74,999	18.3%	18.0%	17.4%
2023 Households	10,073	76,915	228,611	$75,000-$99,999	11.2%	11.4%	11.2%
Change 2000-2010	6.32%	4.99%	2.94%	$100,000-$149,999	8.8%	9.7%	10.8%
Change 2010-2018	(0.41%)	0.68%	0.83%	$150,000-$199,999	2.3%	3.0%	3.2%
Change 2018-2023	0.66%	0.82%	0.77%	$200,000 or greater	2.1%	1.4%	1.9%
HOUSING UNITS (2018)				**MEDIAN HOME VALUE**	$249,337	$280,373	$309,318
Owner Occupied	5,212	37,271	102,688	**AVERAGE HOME VALUE**	$257,063	$293,676	$326,690
Renter Occupied	4,810	39,077	124,216	**HOUSING UNITS BY UNITS IN STRUCTURE**			
HOUSING UNITS BY YEAR BUILT				1, detached	7,519	50,008	131,332
Built 2010 or later	76	714	1,602	1, attached	630	6,176	20,539
Built 2000 to 2009	481	3,513	8,450	2	155	2,036	7,304
Built 1990 to 1999	566	3,861	12,163	3 or 4	489	5,214	17,015
Built 1980 to 1989	717	5,243	16,613	5 to 9	335	5,136	17,305
Built 1970 to 1979	665	5,703	21,924	10 to 19	284	2,424	11,154
Built 1960 to 1969	980	8,984	31,343	20 to 49	111	1,684	7,775
Built 1950 to 1959	3,085	18,542	50,753	50 or more	357	2,124	7,277
Built 1940 to 1949	1,731	18,014	45,335	Mobile home	141	1,530	7,062
Built 1939 or earlier	1,706	11,716	38,679	Boat, RV, van, etc.	0	15	142

Source: Pitney Bowes/Gadberry Group - GroundView®

POPULATION GROWTH BY AGE - 5 MILES



POPULATION BY AGE



Transportation Routes

Major traffic arteries are shown in the chart below:

MAJOR ROADWAYS & THOROUGHFARES

HIGHWAY	DIRECTION	FUNCTION	DISTANCE FROM SUBJECT
Interstate 110	north-south	Interstate Highway	This is within a mile of the subject property.
Interstate 105	east-west	Interstate Highway	This is within 3 miles of the subject property.
SR-91	east-west	Local Highway	This is within 3 miles of the subject property.
SURFACE STREETS	**DIRECTION**	**FUNCTION**	**DISTANCE FROM SUBJECT**
Willowbrook St.	southeast-northwest	Primary Arterial	One of the subject properties fronts this street.
Stockwell St.	east-west	Secondary Arterial	One of the subject properties fronts this street.
Wilmington St.	north-south	Primary Arterial	This is within a mile of the subject property.
El Segundo Blvd.	east-west	Commercial Corridor	This is within a mile of the subject property.

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Public Transportation is available within ½-mile of the subject along Wilmington St. and El Segundo Blvd.

Economic Factors

Compton is known as the “Hub City” because of its unique geographical proximity being in the center of the Los Angeles County boundaries. As the ‘Hub City’ it makes Compton strategically located along the Alameda Corridor, a rail passageway of 25% of all U.S. waterborne international trade, in addition to being a large industrial center for transit and distribution, business services, high technology, home and lifestyle products, metals, financial services, and textile manufacturing. The Hub City is part of the Gateway region and has a 77-acre Compton / Woodley Airport that is home to 275 based aircraft and experiences over 66,000 flight operations each year. This air transportation asset is complimented by the Hub City's four major freeways adjacent to the City's boundaries. Interstate 710 runs from the seaports through the eastern boundary; the State Route 91 freeway extends through the southern boundary; Interstate 105 runs slightly along the north of the City; and Interstate 110 along to the west. Additionally, the Interstates 405 and 605 freeways are within two miles of Compton's southern and eastern edges, respectively.

Compton was recently designated as an "Entrepreneurial Hot Spot" by Cognetics, Inc., an independent economic research firm. Compton made the national list for best places to start and grow a business, and ranked #2 in Los Angeles County out of a field of 88 cities. The city's Planning and Economic Development department provides a business assistance program consisting of a comprehensive mix of resources to small business owners and entrepreneurs. The grocery chains Ralphs and Food 4 Less, subsidiaries of Kroger, are headquartered in Compton. Gelson's Market, a subsidiary of Arden Group, Inc., a holding company, is also based there. [43]

Community Services

Community services and facilities are readily available in the surrounding area. These include public services such as fire stations, hospitals, police stations, and schools (all ages). The subject property is located in the Compton Unified School District. GreatSchools.org is an on-line tool that rates every school on a scale of one to ten based on test scores**.** They also track parents rating of the school on a one to five scale. The following chart details the ratings of schools nearest to the subject.

SCHOOL DISTRICTS

SCHOOL DISTRICT	NUMBER OF SCHOOLS					
	ELEMENTARY	MIDDLE	HIGH	PUBLIC	CHARTER	TOTAL
Compton Unified School District	26	25	9	37	3	40
Compton Unified Rop School District	0	0	1	1	0	1

HIGH SCHOOLS

HIGH SCHOOLS	GREATSCHOOLS RATING	PARENT RATING	SCHOOL TYPE	GRADES SERVED	DISTANCE FROM SBJ.	CITY LOCATION	TOTAL ENROLLMENT
Cesar Chavez Continuation High Schoc	-	3	public	9-12	0.52 miles	Compton	154
Compton Early College High	-	-	public	9-12	0.55 miles	Compton	117
Thurgood Marshall School	-	1	public	K-12	0.73 miles	Compton	-
King/Drew Medical Magnet High School	7	4	public	9-12	1.20 miles	Los Angeles	1,570
Centennial High School	2	3	public	9-12	1.24 miles	Compton	928
Compton High School	1	3	public	9-12	1.38 miles	Compton	1,783
Compton Adult	-	-	public	n/a	1.46 miles	Compton	-
Middle College High School	8	5	public	9-12	1.53 miles	Los Angeles	387
Compton Community Day High School	-	4	public	9-12	2.07 miles	Compton	10
Benjamin Banneker Special Education C	-	-	public	9-12	2.09 miles	Los Angeles	171

Source: GreatSchools.org

IMMEDIATE AREA PROFILE

This section discusses uses and development trends in the immediate area that directly impact the performance and appeal of the subject property.

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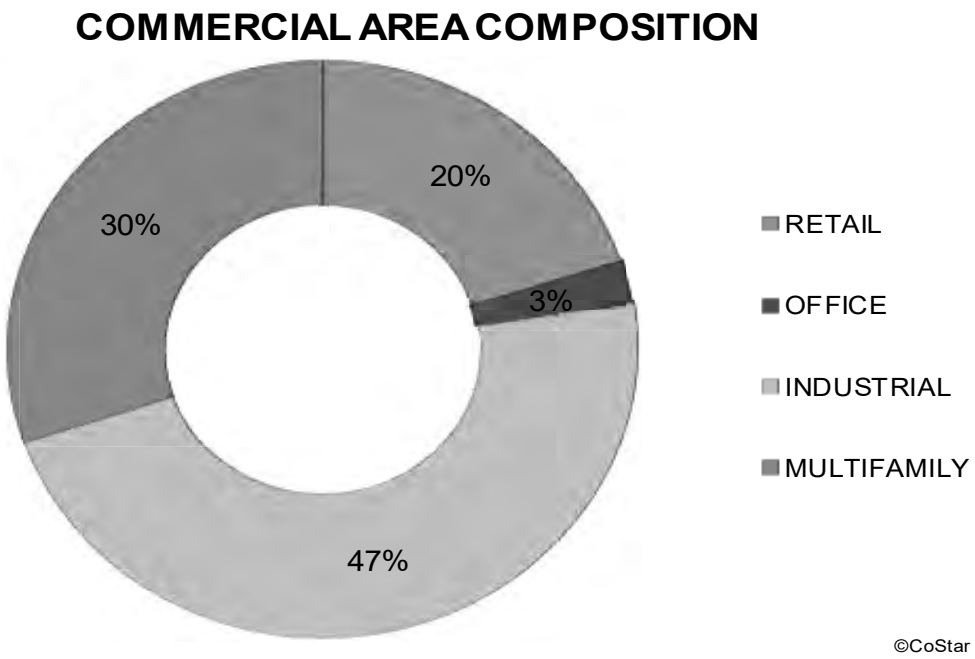
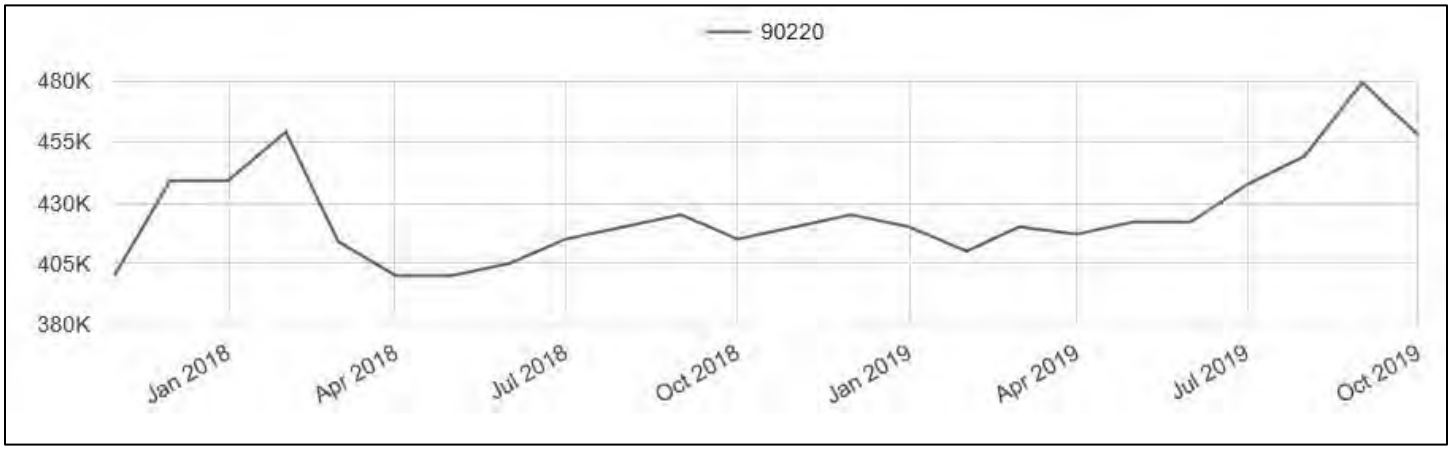
Predominant Land Uses

Significant commercial development in the immediate area consists primarily of industrial uses, along with retail, multifamily and some office. The local area has a mix of commercial uses nearby and the composition is shown in the following graph.



Residential Development

Residential users in the immediate area are primarily single family residential. The following table provided by Movoto.com shows the fluctuation in property values over the past two years for the subject's zip code:



The 90220 zip code is over 95% built-out, with new development taking place on under-improved lots. According to Realtor.com, there are currently eight newly-constructed homes on the market and six of them are in escrow. Further, I identified three newly-constructed homes (one of them is Sale Comparable 5 shown later in this report). The lots sold as entitled for approximately $150,000 SF each. The buyer was a developer who subsequently developed three SFRs at approximately 1,000 SF each, and sold them for approximately $420,000, indicating that it is financially feasible to construct new SFR housing in this neighborhood.

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Multi-Family Development

The following chart shows a summary of multi-family data by type in the immediate area from CoStar.

MULTIFAMILY SUMMARY			
CLASS	**PROPERTIES**	**NRA (SF)**	**AVG YR BLT**
A	0	0	-
B	7	148,386	1988
C	88	1,219,873	1957
TOTAL	**95**	**1,368,259**	**1960**

Source: CoStar

The largest three multi-family properties are at 2431 East El Segundo Boulevard, 145 West Rosecrans Avenue and 12630 Compton Avenue with an NRA of 107,978 SF, 75,806 SF and 75,000 SF that were built in 1973, 1983 and 1973, respectively. The closest large multi-family property in proximity to the subject is at 2213 East El Segundo Boulevard with an NRA of 57,950 SF that was built in 2017. The majority of properties were constructed before 2000. The following chart and map show the subject property and its location relative to the 10 largest multi-family properties in the immediate area from CoStar.

LARGEST MULTIFAMILY PROPERTIES						
NAME	**DISTANCE**	**MAP PIN**	**CLASS**	**NRA (SF)**	**STORIES**	**YEAR BUILT**
Lutheran Gardens	0.5 Miles	A	C	107,978	2	1973
Douglas Park Apartments	0.6 Miles	B	C	75,806	2	1983
Whitfield Manor	0.9 Miles	C	C	75,000	2	1973
Lynw ood Villas	1.1 Miles	D	C	64,000	2	1960
Mosaic Gardens at Willow brook	0.5 Miles	E	B	57,950	2	2017
3130 Euclid Avenue Apartments	1.1 Miles	F	C	44,618	2	1963
Santa Fe Apartments	1.0 Miles	G	C	42,848	2	1980
Multifamily Building	1.1 Miles	H	C	41,600	2	1959
Pine Terrace Apartments	1.1 Miles	I	C	39,472	2	1961
Burtonian Apartments	1.2 Miles	J	C	38,240	2	1962

Source: CoStar



Retail Development

The following chart shows a summary of retail data by type in the immediate area from CoStar.

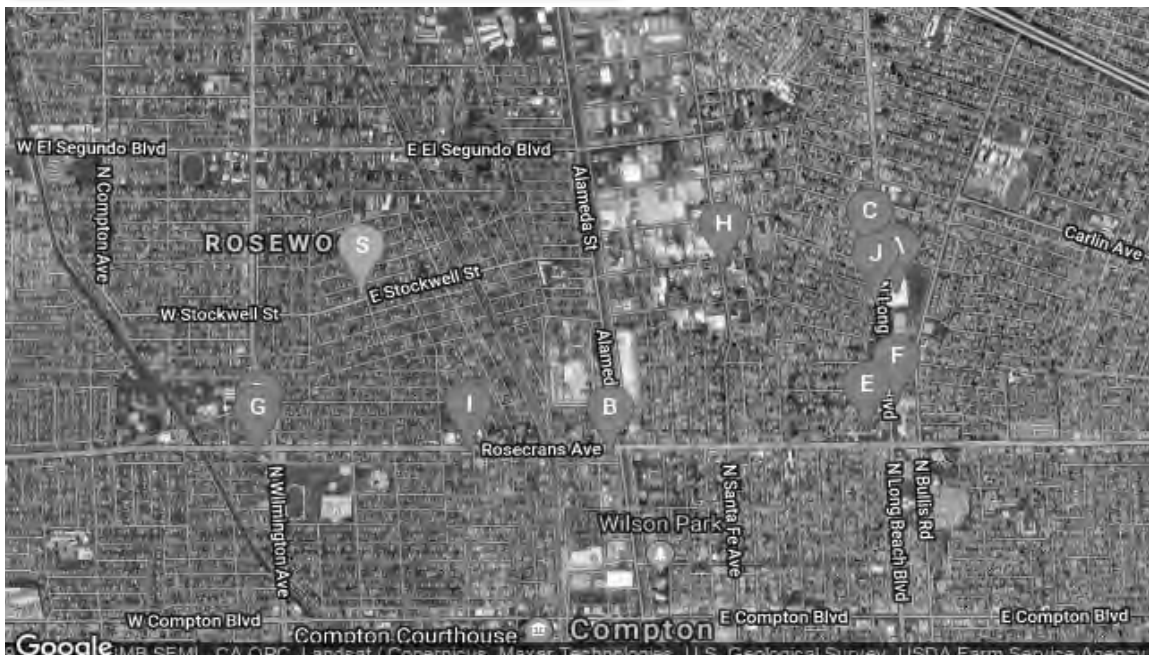
RETAIL SUMMARY					
TYPE	**PROPERTIES**	**NRA (SF)**	**AVG YR BLT**	**OCCUPANCY**	**AVG RENT**
General Retail	145	908,827	1959	92.5	$28.43
TOTAL	**145**	**908,827**	**1959**	**92.5**	**$28.43**

Source: CoStar

The largest three retail properties are at 2100 North Long Beach Boulevard, 212 East Rosecrans Avenue and 2201 North Long Beach Boulevard with an NRA of 245,484 SF, 38,575 SF and 35,975 SF that were built in 1947, 1965 and 1948, respectively. The closest large retail property in proximity to the subject is at 821 West Rosecrans Avenue with an NRA of 26,944 SF that was built in 1968. The majority of properties were constructed before 2000. The following chart and map show the subject property and its location relative to the 10 largest retail properties in the immediate area from CoStar.

LARGEST SHOPPING CENTERS							
NAME	**DISTANCE**	**MAP PIN**	**TYPE**	**NRA (SF)**	**% LEASED**	**YEAR BUILT**	**AVG RENT**
Retail Building	1.5 Miles	A	General Retail	245,484	-	1947	N/Av
Retail Building	0.8 Miles	B	General Retail	38,575	100.0	1965	N/Av
City Shopping Center	1.4 Miles	C	General Retail	35,975	100.0	1948	N/Av
Retail Building	0.5 Miles	D	General Retail	26,944	100.0	1968	N/Av
Rosecrans Center	1.4 Miles	E	General Retail	22,048	92.7	2007	$24.60
Retail Building	1.5 Miles	F	General Retail	17,445	-	1996	N/Av
Wilmingrose Center	0.6 Miles	G	General Retail	16,460	100.0	1991	N/Av
Retail Building	1.0 Miles	H	General Retail	14,565	86.1	1994	$17.84
Retail Building	0.6 Miles	I	General Retail	14,477	100.0	1948	N/Av
Retail Building	1.4 Miles	J	General Retail	13,325	100.0	1952	N/Av

Source: CoStar



Office Development

The following chart shows a summary of office data by class in the immediate area from CoStar.

OFFICE SUMMARY					
CLASS	**PROPERTIES**	**NRA (SF)**	**AVG YR BLT**	**OCCUPANCY**	**AVG RENT**
A	0	0	-	-	-
B	5	40,863	1893	100.0	-
C	14	70,821	1951	100.0	-
TOTAL	**19**	**111,684**	**1935**	**100.0**	**$0.00**

Source: CoStar

The largest three office properties are at 1051 West Rosecrans Avenue, 12700 Long Beach Boulevard and 300 East Rosecrans Avenue with an NRA of 28,000 SF, 21,876 SF and 14,000 SF that were built in 1957, 1947 and 1955, respectively. The closest large office property in proximity to the subject is at 541 West Rosecrans Avenue with an NRA of 4,306 SF that was built in 1946. All of the properties were constructed before 2000. The following chart and map show the subject property and its location relative to the 10 largest office properties in the immediate area from CoStar.

LARGEST OFFICE BUILDINGS							
NAME	**DISTANCE**	**MAP PIN**	**CLASS**	**NRA (SF)**	**% LEASED**	**YEAR BUILT**	**AVG RENT**
Office Building	0.7 Miles	A	B	28,000	100.0	1957	N/Av
Office Building	1.5 Miles	B	C	21,876	100.0	1947	N/Av
Office Building	0.9 Miles	C	C	14,000	100.0	1955	N/Av
Office Building	0.6 Miles	D	C	9,509	100.0	1928	N/Av
Office Building	1.4 Miles	E	C	6,155	100.0	1970	N/Av
Office Building	1.5 Miles	F	C	5,068	100.0	1933	N/Av
Office Building	0.4 Miles	G	C	4,306	100.0	1946	N/Av
Office Building	0.9 Miles	H	B	3,658	100.0	1957	N/Av
Office Building	0.6 Miles	I	B	3,566	100.0	1799	N/Av
Office Building	1.1 Miles	J	C	3,533	100.0	1970	N/Av

Source: CoStar



Industrial Development

The following chart shows a summary of industrial data by type in the immediate area from CoStar.

INDUSTRIAL SUMMARY					
TYPE	**PROPERTIES**	**NRA (SF)**	**AVG YR BLT**	**OCCUPANCY**	**AVG RENT**
Industrial	97	2,140,998	1957	92.8	$13.74
Flex	0	0	-	-	-
TOTAL	**97**	**2,140,998**	**1957**	**92.8**	**$13.74**

Source: CoStar

The largest three industrial properties are at 419 East Euclid Avenue, 1501 North Tamarind Avenue and 1700 North Alameda Street with an NRA of 360,391 SF, 167,000 SF and 140,064 SF that were built in 1959, 1946 and 1990, respectively. The closest large industrial property in proximity to the subject is at 126 East Oris Street with an NRA of 94,875 SF that was built in 2019. The majority of properties were constructed before 2000. The following chart and map show the subject property and its location relative to the 10 largest industrial properties in the immediate area from CoStar.

LARGEST INDUSTRIAL PROPERTIES							
NAME	**DISTANCE**	**MAP PIN**	**TYPE**	**NRA (SF)**	**% LEASED**	**YEAR BUILT**	**AVG RENT**
Industrial Building	0.8 Miles	A	Industrial	360,391	100.0	1959	$11.58
Owens Corning	0.6 Miles	B	Industrial	167,000	100.0	1946	N/Av
Industrial Building	0.8 Miles	C	Industrial	140,064	100.0	1990	N/Av
Industrial Building	0.7 Miles	D	Industrial	115,277	100.0	1951	N/Av
Industrial Building	0.6 Miles	E	Industrial	94,875	100.0	2019	N/Av
Industrial Building	0.8 Miles	F	Industrial	75,000	0.0	1941	N/Av
Industrial Building	0.8 Miles	G	Industrial	71,000	100.0	1954	N/Av
Industrial Building	0.9 Miles	H	Industrial	50,000	100.0	1958	N/Av
Industrial Building	0.6 Miles	I	Industrial	50,000	100.0	1944	N/Av
Industrial Building	0.8 Miles	J	Industrial	45,000	100.0	1951	N/Av

Source: CoStar



The following map shows the subject property and the five largest retail, office, and industrial properties in the immediate area from CoStar.



SUBJECT PROPERTY ANALYSIS

The following discussion draws context and analysis on how the subject property is influenced by the local and immediate areas.

Subject Property Analysis
The uses adjacent to the property are noted below:

- **North –** All four properties are bounded by single family residences to the north
- **South -** All four properties are bounded by single family residences to the south
- **East -** All four properties are bounded by single family residences to the east
- **West -** All four properties are bounded by single family residences to the west

Access
The subject sites have frontage on neighborhood residential streets. The property at 13320 Willowbrook St. fronts onto a primary arterial. Based on my field work, access for the subject properties is rated average compared to other properties with which they compete.

Visibility
The subject properties are visible in both directions along the streets on which they have frontage. In comparison to competitive properties, the subject property has good visibility.

Subject Conclusion
Trends in the local and immediate areas, adjacent uses and the property's specific location features indicate an overall typical external influence for the subject, which is concluded to have an average position in context of competing properties.

SUMMARY

The subject neighborhood is well-located, with good regional freeway access. It is primarily a mix of residential and industrial uses and is slowly being redeveloped. Based on my analysis, continued growth is likely for the next two to three years.

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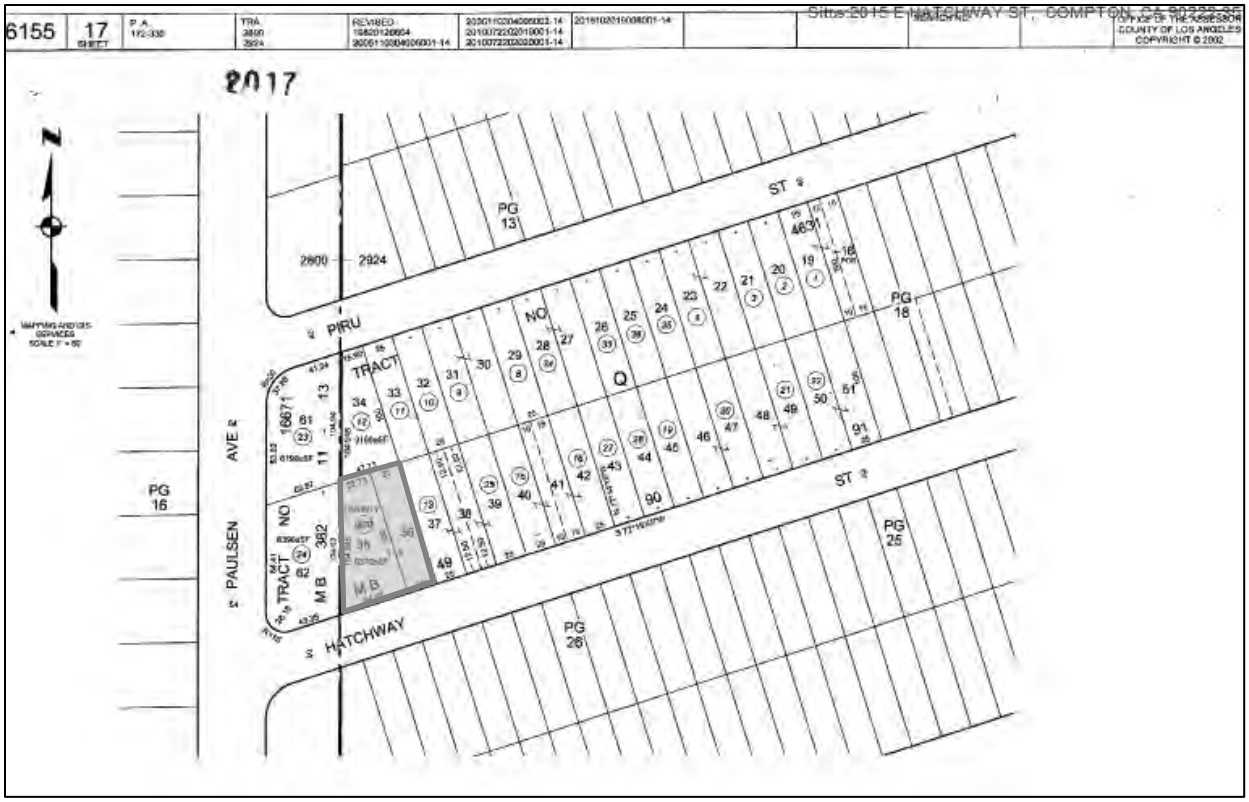
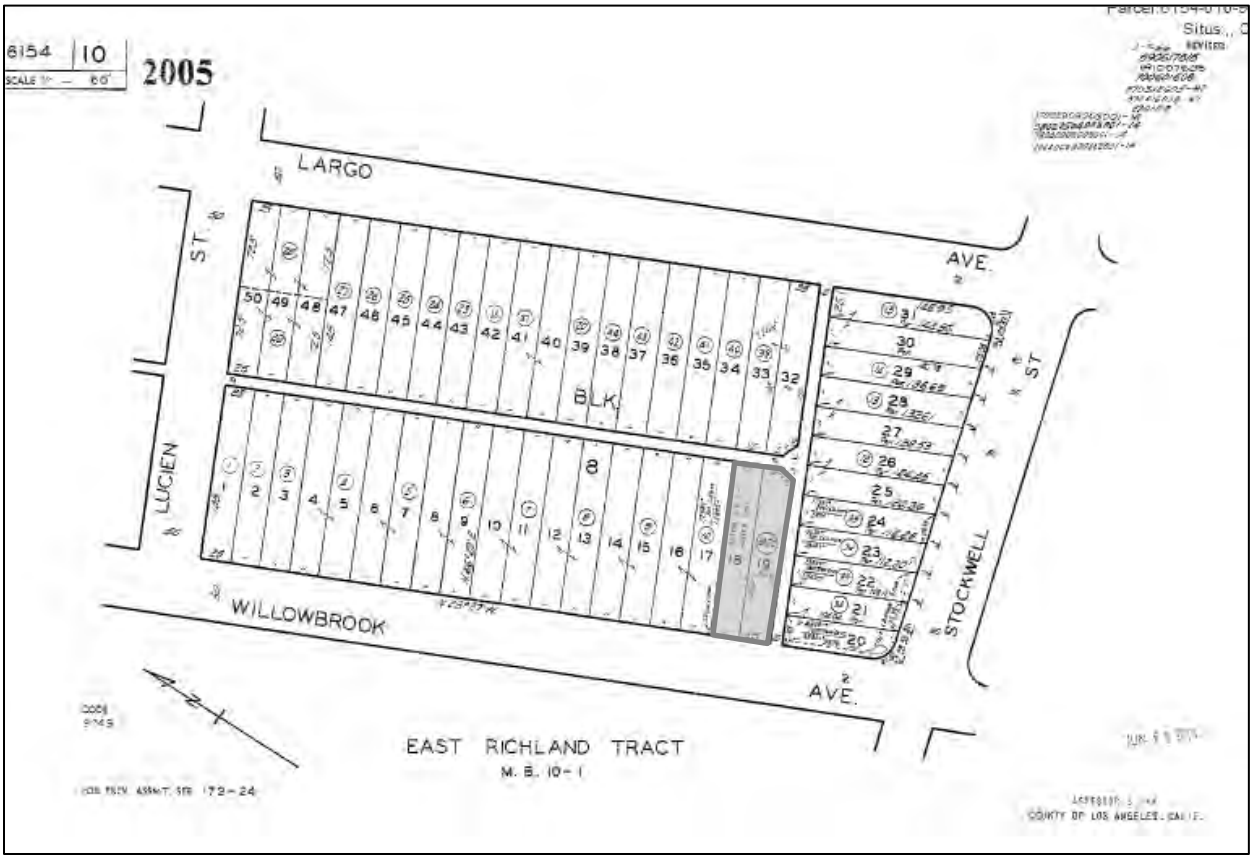
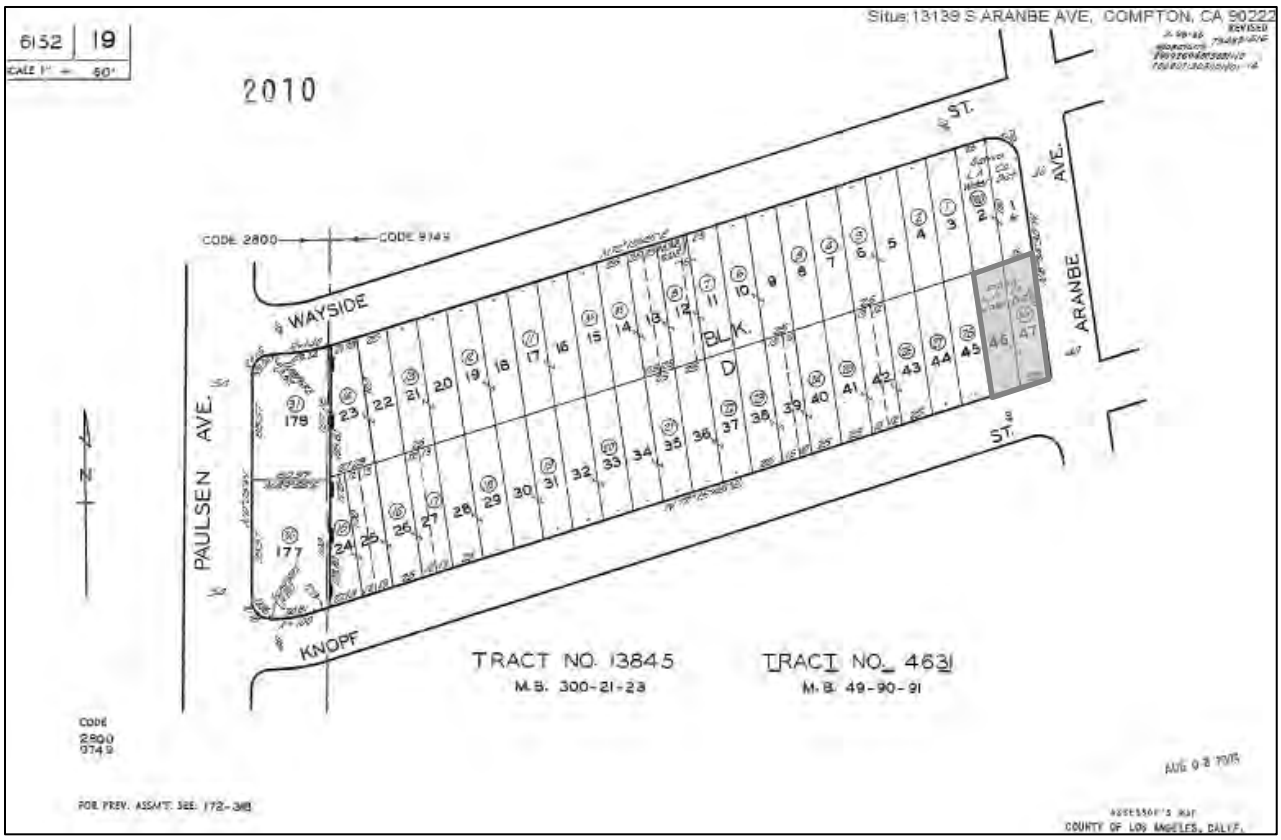
PLAT MAP – 2015 HATCHWAY



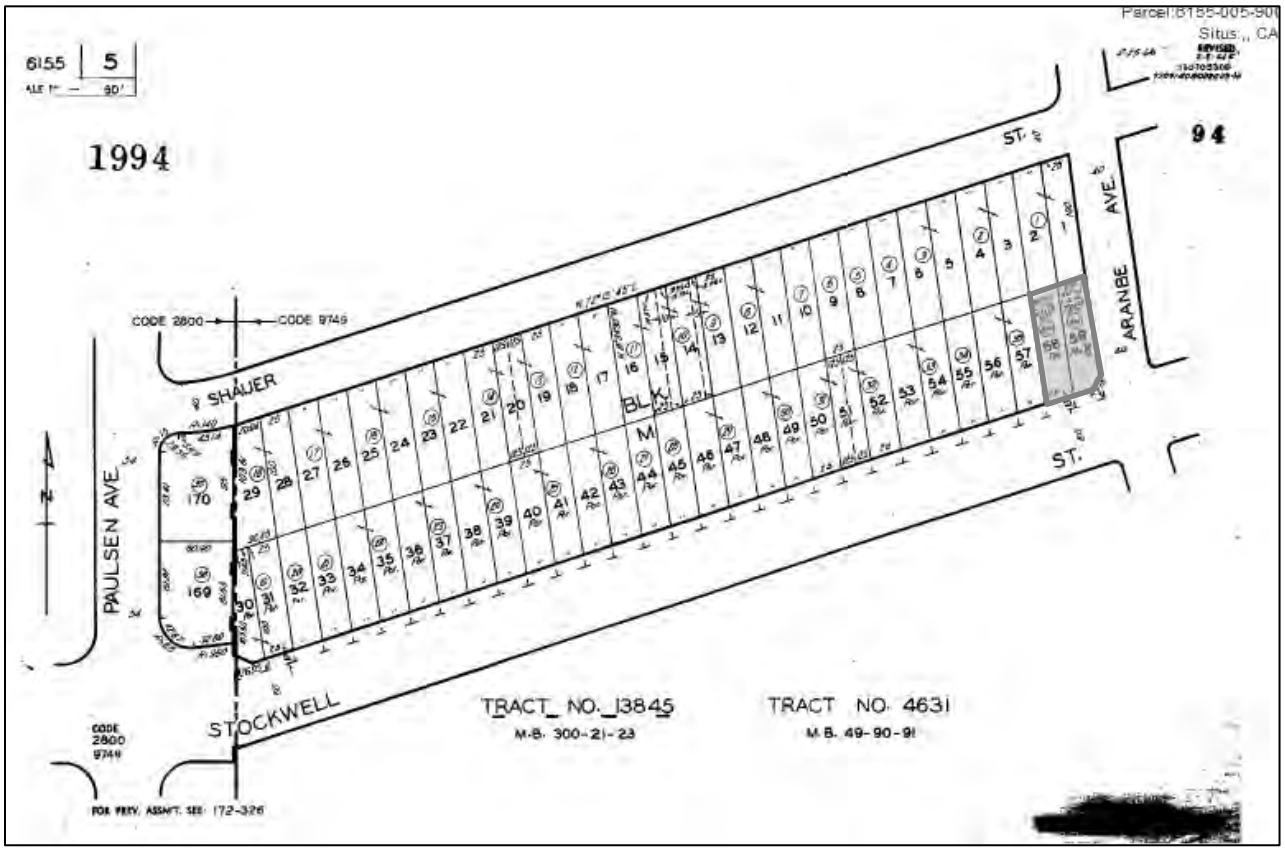
PLAT MAP – 13320 WILLOWBROOK



PLAT MAP – 13139 ARANBE



PLAT MAP – 2081/83 STOCKWELL



ZONING MAP


13139 S. Aranbe St.
13320 S. Willowbrook St.
2081/83 E. Stockwell St.
2015 E. Hatchway St.
E Wayside St
E Nord St
E Lucien St
E Shauer St
E Stockwell St
E Piru St
E Hatchway St
E Bliss St
E Orie St
W Fig St
W Winona Ave
W Winona St
S Oleander Ave
S Vesta Ave
S Largo Ave
S Aranbe Ave
N Paulsen Ave
N Culver Ave
WILLOWBROOK
WILLOWBROOK AVE
District 2
37th St
R-1
R-2
Scale 1: 4,514
Go
0 150 300ft

SITE DESCRIPTION

General Description The subject site consists of 4 parcels. As noted below, the subject site has 23,088 SF (0.53 AC) of land area. The area is estimated based on the assessor's parcel map, and may change if a professional survey determines more precise measurements. Going forward, our valuation analyses will utilize the usable site area. The following discussion summarizes the subject site size and characteristics.

Assessor Parcels See Multiple Parcel Chart For Breakdown

Number Of Parcels 4

Land Area	**Acres**	**Square Feet**
2015 E. Hatchway St.	0.15	6,553
13320 S. Willowbrook St.	0.17	7,203
13139 S. Aranbe St.	0.11	4,934
2081/2083 E. Stockwell St.	0.10	4,398
Total Land Area	**0.53**	**23,088**

Shape Rectangular & Irregular (Aranbe)

Topography Level at street grade

Drainage Assumed Adequate

Utilities All available to the site

Accessibility **Average** - All four of the properties are situated along residential streets with one curb cut per property.

Exposure **Average** - All four properties have average exposure for a residential street.

Seismic Highest Risk

Flood Zone Zone X (Unshaded). This is referenced by Community Number 060111, Panel Number 06037C815F, dated September 26, 2008. Zone X (unshaded) is a moderate and minimal risk area. Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones. Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)

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MULTIPLE PARCEL SITE DESCRIPTION GRID

ADDRESS	PARCEL	TOTAL SF	TOTAL AC	SHAPE	ACCESS	EXPOSURE
2015 E. Hatchway St.	6155-017-900	6,553	0.15	Irregular	Average	Average
13320 S. Willowbrook St.	6154-010-900	7,203	0.17	Rectangular	Average	Average
13139 S. Aranbe St.	6152-019-901	4,934	0.11	Rectangular	Average	Average
2081/2083 E. Stockwell St.	6155-005-900 & 901	4,398	0.10	Rectangular	Average	Average
TOTAL	**TOTAL**	**23,088**	**0.53**			

Easements

A preliminary title report was not available for review. During the on-site inspection, no adverse easements or encumbrances were noted. This appraisal assumes that there is no negative value impact on the subject improvements. If questions arise regarding easements, encroachments, or other encumbrances, further research is advised.

Soils

A soils analysis was not available for review. Based on the development of the subject, it appears the soils are stable and suitable for the existing improvements.

Hazardous Waste

We have not conducted an independent investigation to determine the presence or absence of toxins on the subject property. If questions arise, the reader is strongly cautioned to seek qualified professional assistance in this matter. Please see the Assumptions and Limiting Conditions for a full disclaimer.

Site Rating

Overall, the subject sites are considered average in terms of their location, exposure, and access to employment, education and shopping centers, recognizing its location along residential streets.

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IMPROVEMENT DESCRIPTION

As discussed previously, two of the four properties are improved with improvements to be valued, as show in the following table:

MULTIPLE BUILDING DESCRIPTION GRID

BUILDING	GBA	YEAR BUILT	EFF. AGE	ECON. LIFE	REM. LIFE	STORIES	BLDG CLASS	ROLL-UP DOORS	QUALITY	CONDITION
2015 E. Hatchway St.	1,600	1985	20	50	30	2	C	0	Average	Average
13139 S. Aranbe St.	900	1985	20	50	30	1	C	2	Average	Average
TOTAL	**2,500**					**1 - 2**		**2**		

The information presented below is a description of the existing improvements, based on my inspection and photographs provided by the client. I was not provided with plans, drawing using sources deemed dependable for this analysis and have determined the size of each building based upon physical measurement. It is assumed that there are no hidden defects, and that all structural components are functional and operational, unless otherwise noted.

Design	Office & Shed
Number of Buildings	2
Number of Stories	2 (office), 1 (shed)
Gross Building Area (GBA)	1,600 SF (office), 900 (shed)
Percent Air Conditioned	100% (office), 0% (shed)
Grade Level Doors	0 (office), 2 (shed)
Year Built	1985 (estimated)
Age/Life Analysis	
Actual Age	34 Years
Effective Age	20 Years
Economic Life	50 Years
Remaining Life	30 Years
Quality	Average
Condition	Average

Basic Construction	Concrete block
Foundation	Poured concrete slab
Framing	Concrete block
Exterior Walls	Concrete block
Roof	Built-up assemblies with tar and gravel cover
Insulation	Assumed to be standard and to code for both walls and ceilings
Air Conditioning	Rooftop-mounted (office only)
Lighting	Fluorescent and Incandescent
Interior Walls	Drywall (office only)
Electrical	Each building has a meter
Ceilings	Drywall in office; exposed in shed

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Windows	Standard windows; glass in aluminum frames
Doors	Automatic double door system, glass in metal frame
Flooring	Carpet/tile in office; concrete in shed
Plumbing	Standard plumbing office; none for shed
Fire Protection	None
Security	Locked gates, cameras
Landscaping	Concrete yards, minimal landscaping
Parking	The office property has eight parking spaces for a parking ratio of 5.0/1,000 SF.
Deferred Maintenance	Based on my limited inspection, no observable deferred maintenance exists.

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ZONING ANALYSIS

The zoning characteristics for the subject property are summarized below:

ZONING SUMMARY	
Municipality Governing Zoning	Los Angeles County Planning & Zoning Department
Current Zoning	R1 (R1)
Permitted Uses	Single-Family Residential, Eldercare, Utilities Infrastructure
Prohibited Uses	Commercial, Industrial, Medium and High-Density Residential
Current Use	Utilities Infrastructure
Is Current Use Legally Permitted?	Yes
Zoning Change	Not Likely

ZONING REQUIREMENTS	
Minimum Site Area (SF)	5,000 SF
Minimum Yard Setbacks	
Front (Feet)	20
Rear (Feet)	15
Side (Feet)	Interior Lot: 5 feet or 10% of average width of narrow lot, but not less than 3 feet; Corner Lot: 5 feet except on reversed corner lot, which is 10 feet
Maximum Building Height	35 Feet
Parking Requirement	
Spaces Per Residence	2 (Covered)

Source: Los Angeles County Planning & Zoning Department

The subject's lot size predates the current zoning of the site and is considered a pre-existing non-conforming use.

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HIGHEST AND BEST USE ANALYSIS

This section develops the highest and best use of the subject property as-vacant and as-improved. The highest and best use, or most probable use, must be legally permissible, physically possible, financially feasible, and maximally productive.

As-Vacant Analysis

Permitted uses of the subject's R1 (R1) zoning were listed in the Zoning Analysis section. Regarding physical characteristics, three of the subject sites are rectangular and one is irregular in shape. They have level topography with average access and average exposure. Three of the properties have frontage on residential streets and the fourth has frontage along an arterial. Each of the four properties is of sufficient size and shape to be developable with an SFR use. The immediate area is developed with single family residential uses along residential streets and arterials, along with commercial and multifamily uses along major arterials. Based on my observations of land development trends for sites with similar zoning and physical characteristics as the subject and analysis of current supply/demand trends, the highest and best use of the subject site as-vacant is development of one single-family residence per property.

As-Improved Analysis

The subject's land use (as-improved) is permitted outright by the R1 zoning. The legal factors influencing the highest and best use of the subject property support the existing use at each property; however, it is an extraordinary assumption of this report that the wells are capped and the infrastructure removed prior to sale. This renders two of the properties vacant. The remaining two are separately developed with an office building and a shed. The improvements are of average quality construction and in average condition. Both are estimated to have been constructed in 1985 and each has a remaining economic life of 30 years based on my estimate.

In the case of the shed, there is sufficient area on the property for the development of a single family residence. As for the office, there is a possibility for conversion to one of the conditionally permitted uses, such as temporary housing, elder daycare, etc. In both cases, these uses are financially feasible.

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VALUATION METHODS

The following presentation of the appraisal process deals directly with the valuation of the subject property. The paragraphs below describe the standard approaches to value that were considered for this analysis.

Income Approach
The two fundamental methods of this valuation technique include Discounted Cash Flow and Direct Capitalization.

Characteristics specific to the subject property do not warrant that this valuation technique is developed. Development of the Income Approach is not a specific scope requirement of this assignment. Based on the preceding information, the Income Approach will not be presented.

Sales Comparison Approach
Characteristics specific to the subject property do not warrant that this valuation technique to be developed. Development of the Sales Comparison Approach is not a specific scope requirement of this assignment. Due to unique characteristics of the interest being appraised or lack of market transactions of like substitute comparable properties, insufficient sales data is available to provide a credible value opinion by the Sales Comparison Approach. Based on this reasoning, the Sales Comparison Approach is not presented within this appraisal.

Land Valuation
Characteristics specific to the subject property warrant that a site value is developed. Development of the subject site value is a specific scope requirement of this assignment.

Cost Approach
Characteristics specific to the subject property warrant that this valuation technique is developed. Development of the Cost Approach is a specific scope requirement of this assignment as there are special purpose improvements to be valued. Based on this, the Cost Approach will be presented.

Reconciliation of Value Conclusions
The Cost. Approach is the only approach used to value the subject property.

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LAND VALUATION

The most relevant unit of comparison is the price per square foot, as it best reflects the analysis used by buyers and sellers in this market for land with similar utility and zoning. A thorough search was made for similar land sales in terms of proximity to the subject, size, location, development potential, and date of sale. Overall, the sales selected represent the best comparables available for this analysis.

I start with the valuation of 2015 E. Hatchway and modify the value conclusion for each of the other properties.

Adjustment Process

The following adjustments or general market trends were considered for the basis of valuation.

Transactional Adjustments

Dollar adjustments to the comparable sales were considered and made when warranted for transactional adjustments including property rights transferred, financing terms, conditions of sale, expenditures after purchase such as demolition costs and market conditions. The following table summarizes the market conditions adjustment applied in this analysis.

MARKET CONDITIONS ADJUSTMENT			
Per Year As Of	October 2019	(As-Is)	0%

The market has exhibited value stability during the time from the oldest sale date up through the effective valuation date; therefore a market conditions adjustment is not warranted.

Property Adjustments

Quantitative percentage adjustments are also made for location and physical characteristics such as size, shape, access, exposure, topography, zoning and overall utility. Where possible the adjustments applied are based on paired data or other statistical analysis. It should be stressed that the adjustments are subjective in nature and are meant to illustrate my logic in deriving a value opinion for the subject site.

Presentation

The following Land Sales Summation Table, Location Map and plat maps summarize the sales data used in this analysis. Following these items, the comparable land sales are adjusted for applicable elements of comparison and the opinion of site value is concluded.

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LAND SALES SUMMATION TABLE

COMPARABLE	SUBJECT	COMPARABLE 1	COMPARABLE 2	COMPARABLE 3	COMPARABLE 4	COMPARABLE 5
Address	2015 E. Hatchway St.	1935 San Rafael St.	1033 W. 151st St.	9702 Wilmington Ave.	1918 E. 105th St.	9714 Defiance Ave.
City	Compton	Compton	Compton	Los Angeles	Los Angeles	Los Angeles
State	CA	CA	CA	CA	CA	CA
APN	6155-017-900	6185-016-066	6142-026-016	6046-017-002	6066-001-023	6048-017-020
PHYSICAL INFORMATION						
SF	6,553	7,581	4,389	4,493	3,251	2,918
Shape	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular
Zoning	R1	R1	ML	R1	R1	R1
Topography	Level	Level	Level	Level	Level	Level
Street Frontage	Average	Average	Average	Average	Average	Average
Utilities	Yes	Yes	Yes	Yes	Yes	Yes
Easements	Standard	Standard	Standard	Standard	Standard	Standard
Envrmtl Issues	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted
Entitled	No	No	No	No	No	Yes
SALE INFORMATION						
Date		-	3/29/2019	12/1/2018	5/31/2018	4/6/2018
Status		Escrow	Sold	Sold	Sold	Sold
Rights Transferred		Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Transaction Price		$240,000	$150,000	$193,000	$127,000	$149,000
$/SF Land		$31.66	$34.18	$42.96	$39.06	$51.06

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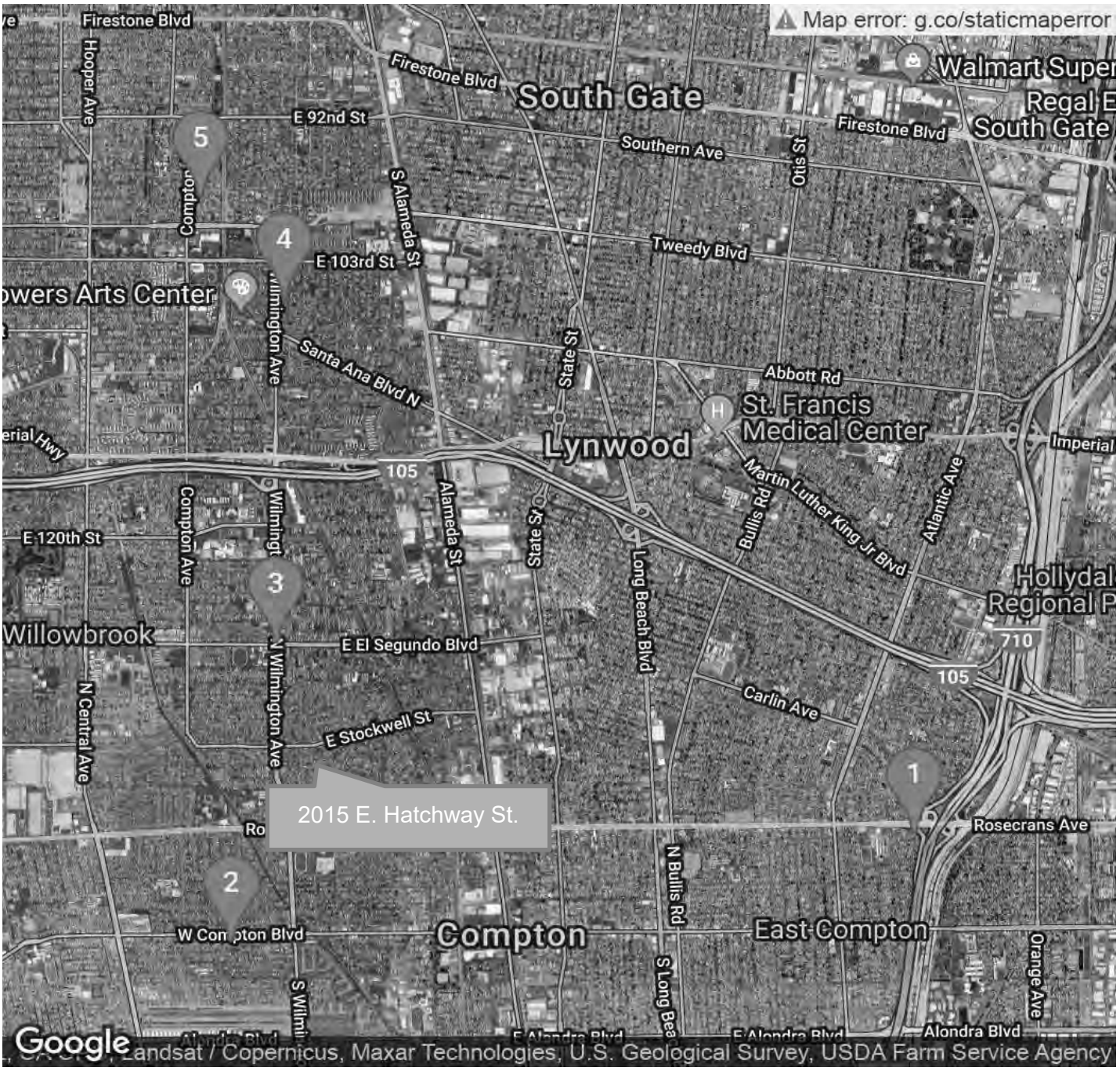
LAND SALES LOCATION MAP



COMPARABLE KEY

COMP	DISTANCE	ADDRESS	SALE DATE	ACRES	SF	$/SF
SUBJECT	-	2015 Hatchw 2015 E. Hatchw ay St.	-	0.2	6,553	-
No. 1	2.7 Miles	1935 San Rafael St., Compton, CA	-	0.2	7,581	$31.66
No. 2	1.1 Miles	1033 W. 151st St., Compton, CA	3/29/2019	0.1	4,389	$34.18
No. 3	0.5 Miles	9702 Wilmington Ave., Compton, CA	12/1/2018	0.1	4,493	$42.96
No. 4	2.1 Miles	1918 E. 105th St., Los Angeles, CA	5/31/2018	0.1	3,251	$39.06
No. 5	2.7 Miles	9714 Defiance Ave., Los Angeles, CA	4/6/2018	0.1	2,918	$51.06

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LAND SALES EXHIBITS



COMPARABLE 1



COMPARABLE 2



COMPARABLE 3



COMPARABLE 4 (PRIOR TO DEMOLITION IN 2018)



COMPARABLE 5

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LAND SALES ANALYSIS

Sale 1 is a 7,580 SF lot situated on the north side of San Rafael Street in Compton. It is paved and has a 375 SF garage at the rear of the property. It is zoned R-1, single-familiy development. The property is within 50 yards of I-710, which has no sound walls along this portion. According to the broker, it is in poor condition and will be tore down by the buyer. The property is under contract for $240,000, or $31.66/SF.

As compared with the subject (2015 E. Hatchway St.), this comparable has an inferior location adjacent to a heavily-traveled regional freeway and inferior (larger) size, which typically transacts at a lower $/SF. It also has a superior rectangular shape, which is more conducive to development. Overall, the comparable is considered to be inferior to the subject on a $/SF basis.

Sale 2 is a 4,389 SF lot situated on the north side of E. 151st Street in Compton. It is unpaved and has been used for a garden and parking area by the adjacent property. It is zoned RL, which allows for medium density residential development; however, as a stand-alone lot, it does not meet the minimum size requirement and highest and best use would therefore be development of a SFR.

The property sold in March 2019 for $240,000, or $34.18/SF. The buyer is an investor holding for speculative development.

As compared with the subject, this comparable has superior (smaller) size, which typically transacts at a higher $/SF. It also has a superior rectangular shape, which is more conducive to development. Overall, the comparable is considered to be superior to the subject on a $/SF basis.

Sale 3 is a 4,493 SF corner lot situated on the southeast corner of Wilmington Street and E. 97th Street in Los Angeles. It is zoned R1. It was previously used as a tire shop, a legally non-permissible use. A phase one environment report indicates that the site is safe for residential development. The property sold in December 2018 for $190,000, or $42.96/SF.

As compared with the subject, this comparable has superior (smaller) size, superior access as it is a corner lot and superior rectangular shape, which is more conducive to development . Overall, the comparable is considered to be superior to the subject on a $/SF basis.

Sale 4 is a 3,251 SF corner lot situated on the north side of E. 105th Street in Los Angeles. It is zoned R1. It was previously developed with a single-family residence, which was demolished in 2018. The property sold in May 2018 for $127,000, or $39.06/SF.

As compared with the subject, this comparable has superior (smaller) size and rectangular shape, which is more conducive to development. Overall, the comparable is considered to be superior to the subject on a $/SF basis.

Sale 5 is a 2,918 SF corner lot situated on the east side of Defiance Avenue in Los Angeles. It is zoned R1. It was previously a portion of a vacant lot, which was subdivided in 2017. The property sold to a developer in April 2018 for $149,000, or $51.06/SF. At the time of sale, it was fully entitled for development of a 1,387 SF SFR.

As compared with the subject, this comparable has superior (smaller) size and rectangular shape, which is more conducive to development. It is also superior in that it was fully entitled at the time of sale. Overall, the comparable is considered to be superior to the subject on a $/SF basis.

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Adjustment Grid

The following grid summarizes the adjustments previously discussed:

LAND SALES ADJUSTMENT TABLE						
COMPARABLE	SUBJECT	COMPARABLE 1	COMPARABLE 2	COMPARABLE 3	COMPARABLE 4	COMPARABLE 5
Address	2015 E. Hatchway	1935 San Rafael	1033 W. 151st	9702 Wilmington	1918 E. 105th St.	9714 Defiance
City	Compton	Compton	Compton	Los Angeles	Los Angeles	Los Angeles
APN	6155-017-900	6185-016-066	6142-026-016	6046-017-002	6066-001-023	6048-017-020
SF	6,553	7,581	4,389	4,493	3,251	2,918
Shape	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular
Site Utility Rating	Average	Average	Average	Average	Average	Average
Zoning	R1	RL	ML	R1	R1	R1
Topography	Level	Level	Level	Level	Level	Level
Street Frontage	Average	Average	Average	Average	Average	Average
Utilities	Yes	Yes	Yes	Yes	Yes	Yes
Easements	Standard	Standard	Standard	Standard	Standard	Standard
Envmtl Issues	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted
Entitled	No	No	No	No	No	Yes
SALE INFORMATION						
Date		-	3/29/2019	12/1/2018	5/31/2018	4/6/2018
Status		Escrow	Sold	Sold	Sold	Sold
Rights Transferred		Fee Simple	Fee Simple	Fee Simple	Fee Simple	Fee Simple
Analysis Price		$240,000	$150,000	$193,000	$127,000	$149,000
Price/SF		$31.66	$34.18	$42.96	$39.06	$51.06
TRANSACTIONAL ADJUSTMENTS						
Property Rights		0%	0%	0%	0%	0%
Conditions of Sale		0%	0%	0%	0%	0%
Financing		0%	0%	0%	0%	0%
Expenditures After the Sale		0%	0%	0%	0%	0%
Market Conditions[1]		0%	0%	0%	0%	0%
Subtotal Transactional Adj Price		$31.66	$34.18	$42.96	$39.06	$51.06
PROPERTY ADJUSTMENTS						
Location		10%	0%	0%	0%	0%
Size		5%	-10%	-10%	-15%	-15%
Exposure		0%	0%	0%	0%	0%
Access		0%	0%	-5%	0%	0%
Shape		-10%	-10%	-10%	-10%	-10%
Onsites		0%	0%	0%	0%	0%
Offsites		0%	0%	0%	0%	0%
Entitled		0%	0%	0%	0%	-20%
Subtotal Property Adjustment		5%	-20%	-25%	-25%	-45%
TOTAL ADJUSTED PRICE		**$33.24**	**$27.34**	**$32.22**	**$29.30**	**$28.08**

STATISTICS	UNADJUSTED	ADJUSTED
LOW	$31.66	$27.34
HIGH	$51.06	$33.24
MEDIAN	$39.06	$29.30
AVERAGE	$39.78	$30.04

[1] Market Conditions Adjustment: 0%

Date of Value (for adjustment calculations): 10/8/19

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CALCULATION OF LAND VALUE

The comparable land sales indicate an adjusted value range from $27.34 to $33.24/SF, with a median of $29.30/SF and an average of $30.04/SF. Based on the results of the preceding analysis, Comparable 2 ($27.34/SF adjusted), Comparable 3 ($32.22/SF adjusted) and Comparable 4 ($29.30/SF adjusted) are given primary consideration for the subject's opinion of land value.

The following table summarizes the analysis of the comparables, reports the reconciled price per square foot value conclusion, and presents the concluded value of the subject site.

CALCULATION OF LAND VALUE

	ANALYSIS	ADJUSTMENT				NET	GROSS	OVERALL
COMP	PRICE	TRANSACTIONAL[1]	ADJUSTED	PROPERTY[2]	FINAL	ADJ %	ADJ %	COMPARISON
1	$31.66	0%	$31.66	5%	**$33.24**	5%	25%	SECONDARY
2	$34.18	0%	$34.18	-20%	**$27.34**	-20%	20%	PRIMARY
3	$42.96	0%	$42.96	-25%	**$32.22**	-25%	25%	PRIMARY
4	$39.06	0%	$39.06	-25%	**$29.30**	-25%	25%	PRIMARY
5	$51.06	0%	$51.06	-45%	**$28.08**	-45%	45%	SECONDARY
LOW	**$27.34**					**AVERAGE**		**$30.04**
HIGH	**$33.24**					**MEDIAN**		**$29.30**

COMPONENT	SUBJECT SF		$/SF CONCLUSION		VALUE
2015 E. Hatchway St.	6,553	x	$30.00	=	$200,000
13320 S. Willowbrook St.	7,203	x	$28.00	=	$200,000
13139 S. Aranbe St.	4,934	x	$34.00	=	$170,000
2081/2083 E. Stockwell St.	4,398	x	$36.00	=	$160,000
TOTAL PROPERTY	**23,088**	**x**	**$31.62**	**=**	**$730,000**

[1]Cumulative [2]Additive Rounded to nearest $10,000

As previously discussed, I first value the Hatchway Street property. Regarding the Willowbrook and Aranbe properties, the comparables were re-adjusted for size. For the Stockwell property, the comparables were re-adjusted for size and for access as the property is situated on a corner.

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COST APPROACH

The Cost Approach is a set of procedures through which a value indication is derived for the fee simple estate by estimating the current cost to construct a reproduction of (or replacement for) the existing structures,, including an entrepreneurial incentive or profit; deducting depreciation from the total cost; and adding the estimated land value. Adjustments may then be made to the indicated value of the fee simple estate in the subject property to reflect the value of the property interest being appraised.[1]

Replacement Cost Analysis

The following cost approach to value was developed based on replacement cost analysis. Replacement Cost is defined as: The estimated cost to construct, at current prices as of a specific date, a substitute for a building or other improvements, using modern materials and current standards, design, and layout.[2]

Replacement cost includes both direct and indirect costs. Direct costs are expenditures for labor and materials used in the construction of improvements (also known as hard costs). Indirect costs are expenditures for items other than labor and materials that are necessary for construction, but are not typically part of the construction contract (also known as soft costs). Indirect costs often include real property taxes during construction, professional fees, permanent financing fees, leasing commissions, marketing costs and contingency.

Replacement Cost New (Buildings)

This section calculates the replacement cost new of the subject building improvements by estimating total direct and indirect costs to which an entrepreneurial profit incentive is applied. Marshall Valuation Service was selected to support the direct and indirect costs.

Marshall Valuation Service

Marshall Valuation Service is a comprehensive appraisal guide widely used throughout the United States for developing replacement costs and depreciated values of buildings and other improvements, and is largely considered the authority on building costs.

The table on the following page outlines the process I applied for developing replacement cost new of the subject building improvements with Marshall Valuation Service. First, the subject components were researched to identify the applicable base building costs per square foot. Next, the base building costs were adjusted for square foot refinements, height and size refinements, and current and local cost multipliers to determine an estimate of direct costs. After determining direct costs using Marshall Valuation Service, I then analyzed market evidence to estimate indirect costs. Finally, an appropriate developer’s profit was applied to provide an indication of the replacement cost new.

[1] The Dictionary of Real Estate Appraisal, Sixth Edition, Appraisal Institute, Chicago, Illinois, 2015
[2] The Dictionary of Real Estate Appraisal, Sixth Edition, Appraisal Institute, Chicago, Illinois, 2015

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REPLACEMENT COST NEW (BUILDINGS)

MARSHALL VALUATION SERVICE DIRECT COST			
Number of Buildings	2		
Gross Building Area	2,500 SF	**1**	**2**
MVS Building Type		Office Bldg.	Shed
Number of Stories		2	1
Height per Story		10'	12'
Component Description			
MVS Section/Page/Class		15/17/C	14/29/C
MVS Publication Date		Nov-17	Nov-17
Quality Rating		Average	Average
Component SF (Gross)		1,600	900
Base Cost (Per SF)		**$76.00**	**$34.75**
SQUARE FOOT REFINEMENTS			
Heating and Cooling		$0.00	$0.00
Fire Sprinklers		$4.00	$0.00
Elevators		$0.00	$0.00
Subtotal		**$80.00**	**$34.75**
HEIGHT & SIZE REFINEMENTS			
Number of Stories Multiplier		1.000	1.000
Height Per Story Multiplier		1.000	1.000
Area/Perimeter Multiplier		1.000	1.000
Subtotal		**$80.00**	**$34.75**
COST MULTIPLIERS			
Current Cost Multiplier		1.05	1.06
Local Multiplier		1.20	1.20
DIRECT COSTS PER SF		**$100.80**	**$44.20**
Indirect Cost (% of Direct)[1]	15%	15%	15%
INDIRECT COST PER SF		$15.12	$6.63
DIRECT & INDIRECT TOTAL PER SF		**$115.92**	**$50.83**
CALCULATION OF REPLACEMENT COST NEW WITH PROFIT			
Component SF (Gross)		1,600	900
Direct & Indirect Total		$185,472	$45,749
ENTREPRENEURIAL PROFIT %[1]	10%	10%	10%
Entrepreneurial Profit $		$18,547	$4,575
FINAL TOTAL REPLACEMENT COST NEW		**$204,019**	**$50,324**

[1]Colliers International Estimate

Based on my research, indirect costs are typically 10% to 20% of direct cost for this type of development in the marketplace. Considering the size and project characteristics, I have estimated indirect costs at 15% of direct costs.

Entrepreneurial profit and overhead compensates the developer for project risk and management. It is unlikely that a developer would proceed with a development unless adequate profit is available to justify the effort. Based on anecdotal evidence provided by developers of similar Residential (Single-family) Land projects, profit is typically based on a percentage of replacement cost, generally 5% to 15%, depending upon project size, location, marketability and risk. An entrepreneurial profit and overhead allocation of 10% was used in this analysis.

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The replacement cost new as developed with Marshall Valuation Service is summarized in the following table.

REPLACEMENT COST NEW SUMMARY (BUILDINGS)			
MARSHALL VALUATION SERVICE			
Direct & Indirect Costs	@15%	$231,221	$92.49/SF
Entrepreneurial Profit	@10%	$23,122	$9.25/SF
TOTAL REPLACEMENT COST NEW (RCN)		**$254,343**	**$101.74/SF**

Depreciation Analysis (Buildings)

The following table details the depreciation estimate developed for the subject building improvements.

DEPRECIATION ANALYSIS (BUILDINGS)			
		1	2
Component Description		0	0
TOTAL REPLACEMENT COST NEW		**$204,019**	**$50,324**
LESS: Physical Curable		$0	$0
LESS: Functional Curable		$0	$0
LESS: Functional Incurable		$0	$0
Subtotal Adjusted Replacement Cost New		$204,019	$50,324
Age/Life Analysis			
Economic Life		50	50
Effective Age		15	15
Remaining Economic Life		35	35
Percent Depreciated		30.0%	30.0%
LESS: Age/Life Depreciation		($61,206)	($15,097)
Adjusted Replacement Cost New		$142,813	$35,227
LESS: Economic Obsolescence (External)	0%	$0	$0
Depreciated Replacement Cost New (Buildings)		**$142,813**	**$35,227**

My analysis of depreciation reflects physical and functional curable prior to consideration of physical and functional incurable items, which are treated as components of the age-life analysis. If applicable, economic obsolescence was independently estimated and deducted. For this analysis it is assumed that economic obsolescence was allocated solely to the improvements.

Site Improvements Replacement Cost

The shed's site improvements consist of concrete paving and have no remaining economic life as highest and best use calls for the development of a SFR. The office property is improved with an asphalt-paved parking lot. The replacement cost new of is presented in the following table.

SITE IMPROVEMENTS REPLACEMENT COST NEW								
ITEM	UNITS	AREA	RCN	TOTAL RCN	INDIRECT 15%	ADJUSTED RCN	PROFIT 10%	TOTAL RCN
Site Improvements	SF	5,753	$7.00	$40,271	$6,041	$46,312	$4,631	$50,943

The site improvements area was calculated based on the subject useable land area less the footprint of the buildings, or 5,753 SF (6,553 – 800 SF footprint). The replacement cost new was estimated at $7.00/SF with support from Marshall Valuation Service. Allocations for indirect costs of 15% and profit of 10% were carried forward from the conclusions made within the analysis of building improvements.

The following table shows the estimated depreciation and the resulting depreciated replacement cost for the subject site improvements.

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SITE IMPROVEMENTS DEPRECIATION											
ITEM	RCN	PHYS CURABLE	FUNCT CURABLE	ADJ TOTAL	ECON LIFE	EFF AGE	DEPREC %	AGE/LIFE DEPREC	ADJ TOTAL	ECON OBS 0%	DEPREC COST
Site Improvements	$50,943	$0	$0	$50,943	15	5	33%	($16,981)	$33,962	$0	$33,962

Depreciation for physical and functional curable was noted in the schedule above. If applicable, economic obsolescence is independently estimated and deducted.

COST APPROACH CONCLUSION

The Cost Approach analysis and conclusion are presented in the following table.

COST APPROACH VALUE CONCLUSION		
IMPROVEMENTS (BUILDINGS)	**OFFICE**	**SHED**
Direct & Indirect Costs	$185,472	$45,749
PLUS: Entrepreneurial Profit	$18,547	$4,575
LESS: Total Depreciation	($61,206)	($15,097)
TOTAL DEPRECIATED VALUE OF IMPROVEMENTS (BUILDINGS)	$142,813	$35,227
IMPROVEMENTS (SITE)		
Direct & Indirect Costs	$46,312	$0
PLUS: Entrepreneurial Profit	$4,631	$0
LESS: Total Depreciation	($16,981)	$0
TOTAL DEPRECIATED VALUE OF IMPROVEMENTS (SITE)	$33,962	$0
SUMMARY (ALL IMPROVEMENTS)		
Adjusted Costs/Cost New	$176,775	$45,749
PLUS: Total Entrepreneurial Profit	$23,178	$4,575
TOTAL REPLACEMENT COST NEW	$199,954	$50,324
LESS: Total Depreciation	($16,981)	($15,097)
TOTAL DEPRECIATED VALUE OF IMPROVEMENTS	$182,973	$35,227
PLUS: Land Value (Primary Site)	$200,000	$170,000
AS-IS MARKET VALUE	**$380,000**	**$210,000**
	Rounded to nearest $0	to nearest $10,000

RECONCILIATION OF FINAL VALUE

The Analysis of Value Conclusions is the final step in the appraisal process and involves the weighing of the individual valuation techniques in relationship to their substantiation by market data, and the reliability and applicability of each valuation technique to the subject property. The following table summarizes the opinions of the As-Is Market Value of the subject property's fee simple interest. Based on the overall quality of the data and analyses, and considering the decision-making process of the typical buyer profile of the subject asset, the Cost Approach is deemed sufficient to render a credible opinion of value.

My opinion of value reflects current conditions and the likely actions of market participants as of the date of value. It is based on the available information gathered and provided to us, as presented in this report, and does not predict future performance. Changing market or property conditions can and likely will have an effect on the subject's value.

ADDRESS	VALUE TYPE	INTEREST APPRAISED	DATE OF VALUE	VALUE
2015 E. Hatchway St.	As-Is Market Value	Fee Simple	October 8, 2019	$380,000
13320 S. Willowbrook St.	As-Is Market Value	Fee Simple	October 8, 2019	$200,000
13139 S. Aranbe St.	As-Is Market Value	Fee Simple	October 8, 2019	$210,000
2081/2083 E. Stockwell St.	As-Is Market Value	Fee Simple	October 8, 2019	$160,000
TOTAL VALUE	**AS-IS MARKET VALUE**	**FEE SIMPLE**	**October 8, 2019**	**$950,000**

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I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions of the signer are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- The signer of this report has no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- David A. Williams, MAI has performed no services, as an appraiser or in any other capacity regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- The signer is not biased with respect to the property that is the subject of this report or to the parties involved with this assignment.
- The engagement in this assignment was not contingent upon developing or reporting predetermined results.
- The compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice* and the *Code of Professional Ethics and Standards of Professional Appraisal* Practice of the Appraisal Institute.
- David A. Williams, MAI inspected the property that is the subject of this report.
- No one provided significant real property appraisal assistance to appraiser signing this certification.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- As of the date of this report David A. Williams, MAI completed the continuing education program for Designated Members of the Appraisal Institute.
-



October 19, 2019
Date

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This appraisal is subject to the following assumptions and limiting conditions:

- The appraiser may or may not have been provided with a survey of the subject property. If further verification is required, a survey by a registered surveyor is advised.
- We assume no responsibility for matters legal in character, nor do we render any opinion as to title, which is assumed to be marketable. All existing liens, encumbrances, and assessments have been disregarded, unless otherwise noted, and the property is appraised as though free and clear, under responsible ownership, and competent management.
- The exhibits in this report are included to assist the reader in visualizing the property. We have made no survey of the property and assume no responsibility in connection with such matters.
- Unless otherwise noted herein, it is assumed that there are no encroachments, zoning, or restrictive violations existing in the subject property.
- The appraiser assumes no responsibility for determining if the property requires environmental approval by the appropriate governing agencies, nor if it is in violation thereof, unless otherwise noted herein.
- Information presented in this report has been obtained from reliable sources, and it is assumed that the information is accurate.
- This report shall be used for its intended purpose only, and by the party to whom it is addressed. Possession of this report does not include the right of publication.
- The appraiser may not be required to give testimony or to appear in court by reason of this appraisal, with reference to the property in question, unless prior arrangements have been made therefore.
- The statements of value and all conclusions shall apply as of the dates shown herein.
- There is no present or contemplated future interest in the property by the appraiser which is not specifically disclosed in this report.
- Without the written consent or approval of the author neither all, nor any part of, the contents of this report shall be conveyed to the public through advertising, public relations, news, sales, or other media. This applies particularly to value conclusions and to the identity of the appraiser and the firm with which the appraiser is connected.
- This report must be used in its entirety. Reliance on any portion of the report independent of others, may lead the reader to erroneous conclusions regarding the property values. Unless approval is provided by the author no portion of the report stands alone.
- The valuation stated herein assumes professional management and operation of the buildings throughout the lifetime of the improvements, with an adequate maintenance and repair program.
- The liability of Colliers International Valuation & Advisory Services, its principals, agents, and employees is limited to the client. Further, there is no accountability, obligation, or liability to any third party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussions. The appraiser is in no way responsible for any costs incurred to discover or correct any deficiency in the property.
- The appraiser is not qualified to detect the presence of toxic or hazardous substances or materials which may influence or be associated with the property or any adjacent properties, has made no investigation or analysis as to the presence of such materials, and expressly disclaims any duty to note the degree of fault. Colliers International Valuation & Advisory Services and its principals, agents, employees, shall not be liable for any costs, expenses, assessments, or penalties, or diminution in value, property damage, or

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personal injury (including death) resulting from or otherwise attributable to toxic or hazardous substances or materials, including without limitation hazardous waste, asbestos material, formaldehyde, or any smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, solids or gasses, waste materials or other irritants, contaminants or pollutants.

- The appraiser assumes no responsibility for determining if the subject property complies with the *Americans with Disabilities Act* (*ADA*). Colliers International Valuation & Advisory Services, its principals, agents, and employees, shall not be liable for any costs, expenses, assessments, penalties or diminution in value resulting from non-compliance. This appraisal assumes that the subject meets an acceptable level of compliance with *ADA* standards; if the subject is not in compliance, the eventual renovation costs and/or penalties would negatively impact the present value of the subject. If the magnitude and time of the cost were known today, they would be reduced from the reported value conclusion.
- An on-site inspection of the subject property was conducted. No evidence of asbestos materials on-site was noted. A Phase 1 Environmental Assessment was not provided for this analysis. This analysis assumes that no asbestos or other hazardous materials are stored or found in or on the subject property. If evidence of hazardous materials of any kind occurs, the reader should seek qualified professional assistance. If hazardous materials are discovered and if future market conditions indicate an impact on value and increased perceived risk, a revision of the concluded values may be necessary.
- A detailed soils study was not provided for this analysis. The subject's soils and sub-soil conditions are assumed to be suitable based upon a visual inspection, which did not indicate evidence of excessive settling or unstable soils. No certification is made regarding the stability or suitability of the soil or sub-soil conditions.
- This analysis assumes that the financial information provided for this appraisal, including rent rolls and historical income and expense statements; accurately reflect the current and historical operations of the subject property.

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Engagement Letter
Legal Description
Valuation Glossary
Qualifications of Appraiser
Qualifications of Colliers International Valuation & Advisory Services

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PROFESSIONAL SERVICE AGREEMENT

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Colliers INTERNATIONAL

October 3, 2019

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Kirk Michael
Chief Financial Officer
Suburban Water Systems
12535 Reed Road
Sugar Land, TX 77478

RE: Appraisal of Four Properties Formerly Owned by Sativa Water District, Compton, CA

Mr. Michael,

Thank you for considering Colliers International Valuation & Advisory Services, LLC for the assignment identified in the below stated Professional Service Agreement. Please sign one copy of the agreement and return it to me, thereby indicating your authorization for us to proceed with this assignment and your acceptance of the attached Terms and Conditions.

PROFESSIONAL SERVICE AGREEMENT **("Agreement")**	
Project	Four Former Sativa-Owned Properties ("Property")
Locations	2015 East Hatchway Street (APN: 6155-017-900) 13320 South Willowbrook Avenue (APN: 6154-010-900) 13139 South Aranbe Street (APN: 6155-017-900) 2081/2083 E. Stockwell Street (APNs: 6155-015-900 & 901)
Project Description	The subject is comprised of four properties, which are improved with water wells. In addition, one of the four is improved with an office building and another with a storage shed.
Parties	Colliers International Valuation & Advisory Services, LLC ("CIVAS") and Suburban Water Systems (herein at times referred to as ("Client")
Intended User	The appraisal will be prepared for the Suburban Water Systems. Intended users include the Client. No other users are intended. **It should be noted that if this engagement is directly with the owner of the Property, the Appraisal will not be accepted by federally insured lenders due to FIRREA Compliance, limiting the use of this report. Should this potentially impact your source of lenders, we recommend engagement be directed by a Federally Insured Lender.**
Intended Use	The report to be performed under this Agreement ("Appraisal") is intended only for use as an aid to internal decision-making regarding acquisition of the Property. The report is not intended for any other use.
Type of Appraisal	CIVAS will produce an Appraisal Report in which the appraiser's analysis and conclusions will be summarized within the document.

Colliers International Valuation & Advisory Services, and certain of its subsidiaries, is an independently owned and operated business and a member firm of Colliers International Property Consultants, an affiliation of independent companies with over 500+ offices throughout more than 63 countries worldwide.

Rights Appraised	Fee Simple Interest
Date of Value	Date of inspection
Scope of Work	CIVAS and/or its designated affiliate will provide the Appraisal in accordance with USPAP, the Code of Ethics and Certifications Standards of the Appraisal Institute, and State Licensing Laws. CIVAS will research relevant market data and perform analysis to the extent necessary to produce credible appraisal results. Based on our discussions with the Client, the Client has requested the following valuation scenarios: As Is. CIVAS anticipates developing the following valuation approaches: › Sales Comparison Approach › Cost Approach (as necessary) Valuation of the wells, their productivity and any going concern value is beyond the scope of this assignment. This appraisal assignment is limited to the valuation of the land and improvements on two properties: the office and the shed. If continued use of either is considered legally non-permissible, we will omit the Cost Approach and instead include demolition fees in the respective land values. The scope of work will be included in the Appraisal. A copy of the Assumptions and Limiting Conditions, which appear in the Appraisal, is available upon request.
Delivery	A verbal indication of value (range) will be delivered within two days following receipt of the signed engagement letter and retainer. The Draft Appraisal report will be delivered no later than October 18, 2019. The Final Appraisal will be delivered three (3) days after completion of client review and authorization to deliver final report(s).
Professional Fee	$5,200
Expenses	Fees include all associated expenses.
No. of Reports	One (1) Electronic Draft Appraisal and One (1) Electronic Final Appraisal. No printed copies will be delivered to the client. If hard copies are requested, an additional printing and delivery charge of $100 per copy will be charged. All proceeds from printing and delivery charges will be donated to Make-A-Wish® to provide memorable experiences and life-changing wishes for children with critical illnesses.
Retainer	A retainer of 50% of the fee is due prior to commencement of the assignment. The remaining balance of 50% is due and payable upon notification of completion of the appraisal.
Payment Terms	The payment in full is due prior to delivery of the appraisal. Final payment is due and payable within five (5) business days upon delivery of the electronic copy of the Final Appraisal or within thirty (30) days of your receipt of our Draft Appraisal, whichever is sooner. If a Draft Appraisal is requested, the fee is considered earned upon delivery of our Draft Appraisal.
Acceptance Date	These specifications are subject to modification if this Agreement is not accepted within three (3) business days from the date of this letter.

Terms and Conditions
The attached Terms and Conditions are deemed a part of this Agreement as though set forth in full herein.

Reliance Language

The Appraisal is for the sole use of the Client; however, Client may provide only complete, final copies of the Appraisal report in its entirety (but not component parts) to third parties who shall review such reports in connection with the stated Intended Use. CIVAS is not required to explain or testify as to appraisal results other than to respond to the Client for routine and customary questions. Please note that our consent to allow the Appraisal prepared by CIVAS or portions of such Appraisal, to become part of or be referenced in any public offering, the granting of such consent will be at our sole and absolute discretion and, if given, will be on condition that CIVAS will be provided with an Indemnification Agreement and/or Non-Reliance letter, in a form and content satisfactory to CIVAS, by a party satisfactory to CIVAS. CIVAS hereby expressly grants to client the right to copy the Appraisal and distribute it to employees of client and to your accountants/auditors in its entirety (but not component parts) without the need to provide CIVAS with an Indemnification Agreement and/or Non-Reliance letter.

If you have questions regarding the enclosed, please feel free to contact me. CIVAS appreciates this opportunity to be of service to you on this assignment and looks forward to serving you. If you have additional questions, please contact us.

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I, Kirk Michael, Chief Financial Officer of Suburban Water Systems, agree to the above stated terms and authorize Colliers International Valuation & Advisory Services, LLC to prepare the above referenced appraisal.

_____ Date: _____

Kirk Michael
Chief Financial Officer
Suburban Water Systems

Respectfully,

Colliers International Valuation & Advisory Services, LLC

David A. Williams, MAI, AI-GRS
Valuation Services Director
Colliers International
Direct +1 213.417.3319
Mobile +1 818.915.3791
dave.a.williams@colliers.com

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TERMS AND CONDITIONS

"T&C"

1) The Appraisal will be subject to Colliers International Valuation & Advisory Services, LLC's ("CIVAS") Assumptions and Limiting Conditions that are incorporated into each appraisal, and any Extraordinary Assumptions and Hypothetical Conditions that may be incorporated into each appraisal.
2) Any capitalized, non-defined words shall have the same meaning as defined in the Agreement to which these T&Cs are attached.
3) Client is defined as the party signing the Agreement and shall be responsible for payment of the fees stipulated in the Agreement. Payment of the fee for the Appraisal is not contingent on the appraised value(s) or the outcome of the report(s). Additional fees will be charged on an hourly basis for any work that may exceed the scope of this proposal, including performing additional valuation scenarios, additional research, and conference calls, meetings, deposition preparation, deposition, trial testimony or travel that may exceed the time allotted by CIVAS for an assignment of this nature. If CIVAS is requested to cease working on the Appraisal for any reason prior to the completion of the appraisal(s), CIVAS will be entitled to bill the Client for the time spent to date at CIVAS' hourly rates for the personnel involved. The Client will be billed a minimum $500 or at a rate of $250 per hour for associate time, $400 per hour for valuation services director, $500 per hour for managing director, and $600 per hour for executive managing director. If the Client delays completion of the assignment beyond ninety (90) days, the fee may be renegotiated. This may result in the total fee exceeding the original agreed fee agreed upon cost.
4) Client agrees to pay all fees and expenses, including attorney's fees, incurred by CIVAS in connection with the collection or attempted collection of the fees and expenses. In the event Client fails to make payments when due and payable, the amount due shall bear interest at 1.5% per month or the maximum rate permitted in the state in which the CIVAS office executing the Agreement is located, whichever is lesser.
5) The fee is due upon delivery of the final report or within thirty (30) days of your receipt of the draft report, whichever is sooner. If a draft is requested, the fee is considered earned upon delivery of our draft report.
6) In the event that either party commences any legal action relating to the provisions of the Agreement, including collection, the prevailing party shall be entitled to its actual attorneys' fees and costs. The Agreement shall be governed by and construed in accordance with the laws of the state where the CIVAS office executing the Agreement is located. The venue of any action arising out of the Agreement shall be the county where the CIVAS office executing the Agreement is located. Client will have up to thirty (30) days from receipt of the Draft Appraisal to review and communicate its review to CIVAS. CIVAS reserves the right to bill Client for additional appraisal efforts that may arise from the Client not responding within with this time period.
7) CIVAS does not make any representation or warranty, express or implied, as to the accuracy or completeness of the information or the state of affairs of the Property furnished to CIVAS by Client.
8) CIVAS shall have no responsibility for legal matters, questions of survey or title, soil or subsoil conditions, engineering, or other similar technical matters. The Appraisal will not constitute a survey of the Property analyzed.
9) Client shall provide CIVAS with such materials with respect to the Appraisal as requested by CIVAS and which are in the possession or under the control of Client. Client shall provide CIVAS with sufficient access to the Property to be analyzed and hereby grants permission for entry, unless discussed in advance to the contrary.
10) The data gathered in the course of the Appraisal (except data furnished by Client) and the Appraisal prepared pursuant to the Agreement are, and will remain, the property of CIVAS. With respect to data provided by Client, such data shall be confidential, and CIVAS shall not disclose any information identified as confidential furnished to CIVAS. Notwithstanding the foregoing, CIVAS is authorized by Client to disclose all or any portion of the Appraisal and the related data to appropriate representatives of the Appraisal Institute if such disclosure is required to enable CIVAS to comply with the Bylaws and Regulations of such Institute as now or hereafter in effect.
11) Unless specifically noted, CIVAS does not assume any duty to analyze or examine the Property or adjacent property for the possible presence of toxic and/or hazardous substances or materials (including but not exclusive to asbestos, PCB transformers, or other toxic, hazardous, or contaminated substances and/or underground storage tanks (hazardous material), or the cost of encapsulation or removal thereof) and accepts no liability regarding the issue. If such materials exist, CIVAS defers to the expertise of professionals specifically trained in analyzing the cost to remediate, which will not be a part of the appraisal fee proposal. The Appraisal will contain a comprehensive disclaimer to this effect.
12) CIVAS understands that there is no major or significant deferred maintenance in the Property which would require the expertise of a professional cost estimator or contractor. If such repairs are needed, the estimates are to be prepared by others, and are not a part of the fee contemplated in the Agreement.
13) Client acknowledges that CIVAS is being retained hereunder as an independent contractor to perform the services described herein and nothing in the Agreement shall be deemed to create any other relationship between Client and CIVAS. The Agreement shall be deemed concluded and the services hereunder completed upon delivery to Client of the Appraisal discussed herein.
14) Client agrees that its only remedy for losses or damages relating to the Agreement shall be limited to the amount of the appraisal fee paid by the Client and in no circumstances shall CIVAS be liable for any losses or damages in excess of this amount. Should the Client, or any other entitled party, make a claim against CIVAS, its directors, officers, employees and other affiliates and shareholders, relating to this engagement or the appraisal(s), the maximum damages recoverable from CIVAS, its directors, officers, employees and other affiliates and shareholders, shall be the amount of funds actually collected by CIVAS under the Agreement, and no claim shall be made for any consequential or punitive damages.
15) If CIVAS or any of its employees receives a subpoena or other judicial notification to produce documents or provide testimony involving the Appraisal in connection with a lawsuit or related proceeding, CIVAS will notify the Client of receipt of the subpoena or notification. However, if CIVAS is not part of the lawsuit or proceedings, Client agrees to compensate CIVAS for the professional

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time required and to reimburse CIVAS for the expenses incurred in responding to any such subpoena or judicial notification, including any attorneys' fees, as they are incurred. CIVAS is to be compensated at the prevailing hourly rates of the personnel responding to the subpoena or command for testimony.

16) If expert witness testimony is required in connection with the Appraisal, the following hourly rates will apply. The Client will be billed at the rate of $250 per hour for associate time, $400 per hour for valuation services director, $500 per hour for managing director, and $600 per hour for executive managing director. The hourly billings pertain to court preparation, waiting and travel time, document review and preparation (excludes appraisal report) and all meetings related to court testimony.

17) Client shall indemnify and hold CIVAS, its parent, subsidiaries, affiliates, its officers, directors, employees and agents ("CIVAS Indemnities"), fully harmless against all losses, damages, claims, and expenses of any kind whatsoever (including costs and reasonable attorneys' fees), sustained or incurred by a third party as a result of the negligence or intentional acts or omissions of Client (including any failure to perform any duty imposed by law), any misrepresentation, distortion or if Client fails to provide complete and accurate information to CIVAS, for which recovery is sought against the CIVAS Indemnities by that third party; however, such obligation to defend and indemnify shall not apply to the extent caused by the negligent act or willful misconduct of CIVAS. Client shall indemnify and hold CIVAS Indemnities harmless from any claims, expenses, judgments or other items or costs arising as a result of the Client's failure or the failure of any of the Client's agents to provide a complete copy of the Appraisal to any third party. LIMITATION OF LIABILITY. EXCEPT FOR THE INDEMNIFICATION PROVISION ABOVE, ANYTHING IN THE AGREEMENT TO THE CONTRARY NOTWITHSTANDING, UNDER NO CIRCUMSTANCES WHATSOEVER SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, PUNITIVE, OR INCIDENTAL DAMAGES OF ANY KIND WHATSOEVER.

18) The Appraisal and the name Colliers International Valuation & Advisory Services may not be used in any marketing or investment material or offering memoranda without CIVAS' prior written consent. CIVAS, its employees and appraisers have no liability to any recipients of any prepared material, and disclaim all liability to any party other than the Client.

19) Unless CIVAS consents in writing, the Appraisal cannot be used by any party or for any purpose other than the Client for the purposes specified in the Agreement. Should the Client provide a copy of this Appraisal to any person or entity not authorized by CIVAS in writing, Client hereby agrees to hold CIVAS, its directors, officers, employees and other affiliates and shareholders, harmless from all damages, expenses, claims and costs, including any attorney's fees. The Client acknowledges that any opinions and conclusions expressed by the professionals of CIVAS pursuant to the Agreement are made as employees and not as individuals. CIVAS' responsibility is limited to the Client, and the use of the Appraisal or related product by third parties shall be solely at the risk of the Client and/or third parties.

20) The use of this appraisal shall be used only for the purpose as set forth in the Intended Use section of the Agreement. In the event that the client wishes to use this report or portions of this report for any other purpose such as, to become part of or be referenced in, any offering or other material intended for the review of others, or to be submitted to others, will be at the Client's sole and absolute discretion and, if given, will be on condition that CIVAS will be provided with an Indemnification Agreement and/or Non-Reliance letter, in a form and content satisfactory to CIVAS and the Client, by a party satisfactory to CIVAS and the Client. CIVAS does consent to Client submission of the complete Appraisal to rating agencies, loan participants or your accountants/auditors without the need to provide us with an Indemnification Agreement and/or Non-Reliance letter.

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David A. Williams, MAI, AI-GRS

VALUATION SERVICES DIRECTOR
Valuation & Advisory Services

dave.a.williams@colliers.com

EDUCATION AND QUALIFICATIONS

Member, Appraisal Institute

Board Member, IRWA Chapter 1

B.Sc. Boston University

STATE CERTIFICATIONS

California

Hawaii

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David A. Williams is a Valuation Services Director with Colliers International Valuation & Advisory Services, located in the Los Angeles and Bakersfield offices.

Mr. Williams has performed appraisals for a wide variety of property types, primarily throughout Southern and Central California. Projects include the valuation of regional malls, high-rise office buildings, business parks, proposed apartments and residential subdivisions. Mr. Williams specializes in right of way/condemnation, appraising for rail, transmission line and road corridors in California, Oregon, New Mexico and Hawaii..

Mr. Williams has been deposed and has testified as an expert witness in jury trials.

EXPERIENCE

Valuation Services Director, Colliers
January 2014 – present

Senior Analyst, Overland, Pacific & Cutler – October 2012-December 2013

Senior Analyst, Integra Realty Resources, Los Angeles – February 2010-August 2012

Senior Analyst, CB Richard Ellis, Los Angeles – February 2005-December 2010

PROFESSIONAL AFFILIATIONS AND ACCREDITATIONS

Member – Appraisal Institute, August 2014

Reviewer Designation (AI-GRS) – Appraisal Institute 2019

Board Member – International Right of Way Association (IRWA), Chapter 1 since 2016

APPRAISAL INSTITUTE COURSES

USPAP 15-Hour

USPAP 7-Hour

Basic Income Capitalization

Advanced Income Capitalization

Advanced Sales Comparison & Cost Approaches

Appraisal of Nursing Facilities

General Appraiser Market Analysis and Highest & Best Use

Report Writing and Valuation Analysis

Advanced Applications

Business Practices and Ethics

General Demonstration Appraisal Report Writing Seminar

Appraising the Appraisal: Appraisal Review – General

Valuation of Conservation Easements

OTHER RELATED COURSES

Appraisal Principles & Procedures

Appraising Estates Subject to IRS Regulations

Appraising Estates Subject to IRS Regulations

48th-50th Annual Litigation Seminars

Appraisal Institute Litigation Workshop

PROFESSIONAL SERVICE

Chair, Appraisal Institute Hearing Committee

Chair, IRWA Chapter 1 Newsletter

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REPRESENTATIVE CLIENTS AND PROJECTS

Client: Honolulu Area Rapid Transit (HART) – Leading valuation team for the acquisition of real property for the construction of an overhead rail line in Honolulu.

Client: BNSF Railroad – Valuation of multiple parcels to expand existing right-of-way in Belen, New Mexico.

Client: California Department of Transportation (CALTRANS) – Widening of US Highway 395 -- subcontracted by Epic Land Solutions to value 49 parcels along US Highway 395 in Adelanto and Victorville. Primary issues were highway access and landlocked remainder parcels.

Client: Greenberg, Glusker/Starpoint Capital – Ground rent reset contingent upon the highest value of the following: value as-is, current highest & best use and highest & best use as of lease commencement. Predominant issue was understanding why the punitive lease escalations were written and agreed to by the lessee.

Client: High Speed Rail/Epic Land Solutions – Approximately two dozen agricultural properties in Wasco, Kern County. Appraisal problems included re-routing of irrigation and harvesting lanes, well estimates, crop yields, and allocation to the leased fee/leasehold positions per the Caltrans Right of Way Manual, Chapter 7.

Client: City of Murrieta/Epic Land Solutions – Valued three agricultural properties impacted by a right of way project. Appraisal problems included assessing the impact of Riverside County's Multiple Species Habitation Conservation Plan (MSHCP).

Client: Rutan & Tucker, LP – Valued damages on a 200-acre agricultural property in Hinkley, CA posed by the re-routing of Highway 58. Appraisal problems included valuation of arable versus non-arable land, and warranted research of water rights and its market per acre foot.

Client: Sullivan, Workman & Dee, LP -- Analyzed damages to 800 acres of land in Hinkley, CA posed by the re-rerouting of Highway 58. Appraisal problems included path of development and access points.

Client: Fox, Rothchild, LP – Valued a 62-acre Superfund site in Rialto, CA. Appraisal problems included determining a range of value for the property as remediated and in its as-is condition giving that the final EPA report had yet to be issued.

Client: Demitriou, Del Guercio, Springer & Francis, LP -- Analyzed damages to a 40,000 SF industrial property posed by the expansion of a primary arterial in Walnut, CA. Appraisal problems included an analysis of lost rent, diminished access, security and utility and the leaseability of the space during the construction period.

Client: SANBAG -- I-15 & I-215 Devore Freeway Interchange Project. Provided appraisal for acquisition of an aerial easement utilized by a freeway billboard sign.

Client: City of Bellflower -- Appraised the vacation of a portion of a city street with a cul-de-sac for a lot tie with an adjacent city-owned parcel for possible sale to a mixed-use developer. Also appraised a right of way acquisition for road widening that included an automobile dealership. Multiple scenarios included demolishing the building and using a cut-and-face technique to save the building.

Client: U.S. Government -- Performed complex highest and best use analyses for fee acquisitions by public agencies. Appraisal problems included multiple zonings on site, functional and external obsolescence, growth corridors and federally-owned (unzoned) areas, e.g., Vandenberg AFB and March ARB.

Valuation Glossary

Valuation & Advisory Services

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Unless specified otherwise, these definitions were extracted from the following sources or publications:

The Dictionary of Real Estate Appraisal, Sixth Edition, Appraisal Institute, Chicago, Illinois, 2015 *(Dictionary).*

Uniform Standards of Professional Appraisal Practice, 2018-2019 Edition (USPAP).

The Appraisal of Real Estate, Fourteenth Edition, Appraisal Institute, Chicago, Illinois, 2013 *(14th Edition)*.

Absolute Net Lease

A lease in which the tenant pays all expenses including structural maintenance, building reserves, and management; often a long-term lease to a credit tenant. *(Dictionary)*

Ad Valorem Tax

A real estate tax based on the assessed value of the property, which is not necessarily equivalent to its market value. *(14th Edition)*

Aggregate of Retail Values (ARV)

The sum of the separate and distinct market value opinions for each of the units in a condominium; subdivision development, or portfolio of properties, as of the date of valuation. The aggregate of retail values does not represent the value of all the units as sold together in a single transaction; it is simply the total of the individual market value conclusions. Also called *sum of the retail values*. *(Dictionary)*

Arm's-length Transaction

A transaction between unrelated parties who are each acting in his or her own best interest. *(Dictionary)*

As-Is Market Value

The estimate of the market value of real property in its current physical condition, use, and zoning as of the appraisal date. *(Dictionary)*

Assessed Value

The value of a property according to the tax rolls in ad valorem taxation; may be higher or lower than market value, or based on an assessment ratio that is a percentage of market value. *(14th Edition)*

Average Daily Room Rate (ADR)

In the lodging industry, the net rooms revenue derived from the sale of guest rooms divided by the number of paid occupied rooms. *(Dictionary)*

Band of Investment

A technique in which the capitalization rates attributable to components of an investment are weighted and combined to derive a weighted-average rate attributable to the total investment. *(Dictionary)*

Cash-Equivalent Price

The price of a property with nonmarket financing expressed as the price that would have been paid in an all-cash sale. *(Dictionary)*

Common Area

The total area within a property that is not designed for sale or rental but is available for common use by all owners, tenants, or their invitees, e.g., parking and its appurtenances, malls, sidewalks, landscaped areas, recreation areas, public toilets, truck and service facilities. *(Dictionary)*

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Contract Rent

The actual rental income specified in a lease. *(14th Edition)*

Cost Approach

A set of procedures through which a value indication is derived for the fee simple interest in a property by estimating the current cost to construct a reproduction of (or replacement for) the existing structure, including an entrepreneurial incentive; deducting depreciation from the total cost; and adding the estimated land value. Adjustments may then be made to the indicated fee simple value of the subject property to reflect the value of the property interest being appraised. *(14th Edition)*

Curable Functional Obsolescence

An element of depreciation; a curable defect caused by a flaw in the structure, materials, or design, which can be practically and economically corrected. *(Dictionary)*

Debt Coverage Ratio (DCR)

The ratio of net operating income to annual debt service, which measures the relative ability of a property to meet its debt service out of net operating income; also called *debt service coverage ratio (DSCR)*. *(Dictionary)*

Deferred Maintenance

Items of wear and tear on a property that should be fixed now to protect the value or income-producing ability of a property. (*Dictionary)*

Depreciation

In appraisal, a loss in property value from any cause; the difference between the cost of an improvement on the effective date of the appraisal and the market value of the improvement on the same date. *(Dictionary)*

Direct Costs

Expenditures for the labor and materials used in the construction of improvements; also called *hard costs*. *(Dictionary)*

Discounted Cash Flow (DCF) Analysis

The procedure in which a discount rate is applied to a set of projected income streams and a reversion. The analyst specifies the quantity, variability, timing, and duration of the income streams and the quantity and timing of the reversion, and discounts each to its present value at a specified yield rate. *(Dictionary)*

Discount Rate

A rate of return on capital used to convert future payments or receipts into present value; usually considered to be a synonym for *yield rate*. *(Dictionary)*

Disposition Value

The most probable price that a specified interest in property should bring under the following conditions:

1. Consummation of a sale within a specified time, which is shorter than the typical exposure time for such a property in that market.

2. The property is subjected to market conditions prevailing as of the date of valuation.

3. Both the buyer and seller are acting prudently and knowledgeably.

4. The seller is under compulsion to sell.

5. The buyer is typically motivated.

6. Both parties are acting in what they consider their best interests.

7. An adequate marketing effort will be made during the exposure time.

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8. Payment will be made in cash in U.S. dollars (or the local currency) or in terms of financial arrangements comparable thereto.

9. The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

This definition can also be modified to provide for valuation with specified financing terms. *(Dictionary)*

Easement

The right to use another's land for a stated purpose. Access or right-of-way easements may be acquired by private parties or public utilities. Governments may be the beneficiaries of easements placed on privately owned land that is dedicated to conservation, open space, or preservation. *(14th Edition)*

Economic Life

The period over which improvements to real property contribute to property value. *(Dictionary)*

Effective Age

The age of property that is based on the amount of observed deterioration and obsolescence it has sustained, which may be different from its chronological age. *(Dictionary)*

Effective Date

The date on which the appraisal or review opinion applies (SVP) *(Dictionary)*

Effective Gross Income (EGI)

The anticipated income from all operations of the real estate after an allowance is made for vacancy and collection losses and an addition is made for any other income. *(Dictionary)*

Effective Gross Income Multiplier (EGIM)

The ratio between the sale price (or value) of a property and its effective gross income. *(Dictionary)*

Effective Rent

The rental rate net of financial concessions such as periods of free rent during the lease term and above or below-market tenant improvements (TIs). *(14th Edition)*

Eminent Domain

The right of government to take private property for public use upon the payment of just compensation. The Fifth Amendment of the U.S. Constitution, also known as the *takings clause*, guarantees payment of just compensation upon appropriation of private property. *(Dictionary)*

Entrepreneurial Incentive

The amount an entrepreneur expects to receive for his or her contribution to a project. Entrepreneurial incentive may be distinguished from entrepreneurial profit (often called *developer's profit*) in that it is the expectation of future profit as opposed to the profit actually earned on a development or improvement. *(Dictionary)*

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Entrepreneurial Profit

A market-derived figure that represents the amount an entrepreneur receives for his or her contribution to a project and risk; the difference between the total cost of a property (cost of development) and its market value (property value after completion), which represents the entrepreneur's compensation for the risk and expertise associated with development. An entrepreneur is motivated by the prospect of future value enhancement (i.e., the entrepreneurial incentive). An entrepreneur who successfully creates value through new development, expansion, renovation, or an innovative change of use is rewarded by entrepreneurial profit. Entrepreneurs may also fail and suffer losses. *(Dictionary)*

Excess Land

Land that is not needed to serve or support the existing improvement. The highest and best use of the excess land may or may not be the same as the highest and best use of the improved parcel. Excess land has the potential to be sold separately and is valued separately. *(Dictionary)*

Excess Rent

The amount by which contract rent exceeds market rent at the time of the appraisal; created by a lease favorable to the landlord (lessor) and may reflect unusual management, unknowledgeable or unusually motivated parties, a lease execution in an earlier, stronger rental market, or an agreement of the parties. Due to the higher risk inherent in the receipt of excess rent, it may be calculated separately and capitalized or discounted at a higher rate in the income capitalization approach. *(14th Edition)*

Expense Stop

A clause in a lease that limits the landlord's expense obligation, which results in the lessee paying any operating expenses above a stated level or amount. *(Dictionary)*

Exposure Time

The estimated length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; Comment: Exposure time is a retrospective opinion based on an analysis of past events assuming a competitive and open market. *(Dictionary)*

External Obsolescence

A type of depreciation; a diminution in value caused by negative external influences and generally incurable on the part of the owner, landlord, or tenant. The external influence may be temporary or permanent. *(Dictionary)*

Extraordinary Assumption

An assignment-specific assumption as of the effective date regarding uncertain information used in an analysis which, if found to be false, could alter the appraiser's opinions or conclusions. Uncertain information might include physical, legal, or economic characteristics of the subject property; or conditions external to the property, such as market conditions or trends; or the integrity of data used in an analysis. An extraordinary assumption may be used in an assignment only if:

- It is required to properly develop credible opinions and conclusions;
- The appraiser has a reasonable basis for the extraordinary assumption;
- Use of the extraordinary assumption results in a credible analysis; and
- The appraiser complies with the disclosure requirements set forth in USPAP for extraordinary assumptions. (USPAP)

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Fair Market Value

In nontechnical usage, a term that is equivalent to the contemporary usage of *market value*.

As used in condemnation, litigation, income tax, and property tax situations, a term that is similar in concept to market value but may be defined explicitly by the relevant agency. (*Dictionary*)

Feasibility Analysis

A study of the cost-benefit relationship of an economic endeavor. *(USPAP)*

Fee Simple Estate

Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power and escheat. *(Dictionary)*

Floor Area Ratio (FAR)

The relationship between the above-ground floor area of a building, as described by the zoning or building code, and the area of the plot on which it stands; in planning and zoning, often expressed as a decimal, e.g., a ratio of 2.0 indicates that the permissible floor area of a building is twice the total land area. *(Dictionary)*

Functional Obsolescence

The impairment of functional capacity of improvements according to market tastes and standards. *(Dictionary)*

Functional Utility

The ability of a property or building to be useful and to perform the function for which it is intended according to current market tastes and standards; the efficiency of a building's use in terms of architectural style, design and layout, traffic patterns, and the size and type of rooms. (*Dictionary*)

Furniture, Fixtures, and Equipment (FF&E)

Business trade fixtures and personal property, exclusive of inventory. *(Dictionary)*

Going-concern

An established and operating business having an indefinite future life. *(Dictionary)*

Going-concern Value

An outdated label for the market value of all the tangible and intangible assets of an established and operating business with an indefinite life, as if sold in aggregate; more accurately termed the *market value of the going concern or market value of the total assets of the business. (Dictionary)*

Gross Building Area (GBA)

Total floor area of a building, excluding unenclosed areas, measured from the exterior of the walls of the above-grade area. This includes mezzanines and basements if and when typically included in the market area of the type of property involved. *(Dictionary)*

Gross Leasable Area (GLA) - Commercial

Total floor area designed for the occupancy and exclusive use of tenants, including basements and mezzanines; measured from the center of joint partitioning to the outside wall surfaces. *(Dictionary)*

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Gross Living Area (GLA) - Residential

Total area of finished, above-grade residential area; calculated by measuring the outside perimeter of the structure and includes only finished, habitable, above-grade living space. (Finished basements and attic areas are not generally included in total gross living area. Local practices, however, may differ.) *(Dictionary)*

Highest & Best Use

The reasonably probable use of property that results in the highest value. The four criteria that the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity. The use of an asset that maximizes its potential and that is possible, legally permissible, and financially feasible. The highest and best use may be for continuation of an asset's existing use or for some alternative use. This is determined by the use that a market participant would have in mind for that asset when formulating the price that it would be willing to bid (IVS). *(Dictionary)*

Hypothetical Condition

A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis. Hypothetical conditions are contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis. *(USPAP)*

Income Capitalization Approach

In the income capitalization approach, an appraiser analyzes a property's capacity to generate future benefits and capitalizes the income into an indication of present value. The principle of anticipation is fundamental to this approach. Techniques and procedures from this approach are used to analyze comparable sales data and to measure obsolescence in the cost approach. (*14th Edition)*

Incurable Functional Obsolescence

An element of depreciation; a defect caused by a deficiency or superadequacy in the structure, materials, or design that cannot be practically or economically corrected as of the effective date of the appraisal. *(Dictionary)*

Indirect Costs

Expenditures or allowances for items other than labor and materials that are necessary for construction, but are not typically part of the construction contract. Indirect costs may include administrative costs, professional fees, financing costs and the interest paid on construction loans, taxes and the builder's or developer's all-risk insurance during construction, and marketing, sales, and lease-up costs incurred to achieve occupancy or sale. Also called *soft costs*. *(Dictionary)*

Insurable Replacement Cost

The cost estimate, at current prices as of the effective date of valuation, of a substitute for the building being valued, using modern materials and current standards, design and layout for insurance coverage purposes guaranteeing that damaged property is replaced with a new property (i.e., depreciation is not deducted). *(Dictionary)*

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Interim Use

The temporary use to which a site or improved property is put until a different use becomes maximally productive. *(Dictionary)*

Investment Value

The value of a property to a particular investor or class of investors based on the investor's specific requirements. Investment value may be different from market value because it depends on a set of investment criteria that are not necessarily typical of the market. *(Dictionary)*

Liquidation Value

The most probable price that a specified interest in real property should bring under the following conditions:

1. Consummation of a sale within a short time period.
2. The property is subjected to market conditions prevailing as of the date of valuation.
3. Both the buyer and seller are acting prudently and knowledgeably.
4. The seller is under extreme compulsion to sell.
5. The buyer is typically motivated.
6. Both parties are acting in what they consider to be their best interests.
7. A normal marketing effort is not possible due to the brief exposure time.
8. Payment will be made in cash in U.S. dollars (or the local currency) or in terms of financial arrangements comparable thereto.
9. The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

This definition can also be modified to provide for valuation with specified financing terms. *(Dictionary)*

Leased Fee Interest

The ownership interest held by the lessor, which includes the right to receive the contract rent specified in the lease plus the reversion right when the lease expires. *(Dictionary)*

Leasehold Interest

The right held by the lessee to use and occupy real estate for a stated term and under the conditions specified in the lease. *(Dictionary)*

Legally Nonconforming Use

A use that was lawfully established and maintained, but no longer conforms to the use regulations of its current zoning; also known as a *grandfathered use*. *(Dictionary)*

Market Area

The geographic region from which a majority of demand comes and in which the majority of competition is located. Depending on the market, a market area may be further subdivided into components such as primary, secondary, and tertiary market areas. *(Dictionary)*

Market Rent

The most probable rent that a property should bring in a competitive and open market reflecting all conditions and restrictions of the lease agreement, including permitted uses, use restrictions, expense obligations, term, concessions, renewal and purchase options, and tenant improvements (TIs). *(14th Edition)*

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Market Study

An analysis of the market conditions of supply, demand, and pricing for a specific property type in a specific area. (*Dictionary)*

Market Value (Interagency Guidelines)

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. buyer and seller are typically motivated;

2. both parties are well informed or well advised, and acting in what they consider their own best interests;

3. a reasonable time is allowed for exposure in the open market;

4. payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and

5. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

(Interagency Appraisal and Evaluation Guidelines, December 10, 2010, Federal Register, Volume 75 Number 237, Page 77472)

Marketability Analysis

The study of how a specific property is expected to perform in a specific market. A marketability analysis expands on a market analysis by addressing a specific property.*(Dictionary)*

Neighborhood Analysis

The objective analysis of observable or quantifiable data indicating discernible patterns of urban growth, structure, and change that may detract from or enhance property values; focuses on four sets of considerations that influence value: social, economic, governmental, and environmental factors. *(Dictionary)*

Net Operating Income (NOI)

The actual or anticipated net income that remains after all operating expenses are deducted from effective gross income but before mortgage debt service and book depreciation are deducted. Note: This definition mirrors the convention used in corporate finance and business valuation for EBITDA (earnings before interest, taxes, depreciation, and amortization). *(14th Edition)*

Obsolescence

One cause of depreciation; an impairment of desirability and usefulness caused by new inventions, changes in design, improved processes for production, or external factors that make a property less desirable and valuable for a continued use; may be either functional or external. *(Dictionary)*

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Off-site Costs

Costs incurred in the development of a project, excluding on-site costs such as grading and construction of the building and other improvements; also called *common costs* or *off-site improvement costs*. *(Dictionary)*

On-site Costs

Costs incurred for the actual construction of buildings and improvements on a particular site. *(Dictionary)*

Overage Rent

The percentage rent paid over and above the guaranteed minimum rent or base rent; calculated as a percentage of sales in excess of a specified breakeven sales volume. *(14th Edition)*

Overall Capitalization Rate (OAR)

The relationship between a single year's net operating income expectancy and the total property price or value. *(Dictionary)*

Parking Ratio

The ratio of parking area or parking spaces to an economic or physical unit of comparison. Minimum required parking ratios for various land uses are often stated in zoning ordinances.*(Dictionary)*

Potential Gross Income (PGI)

The total income attributable to property at full occupancy before vacancy and operating expenses are deducted. *(Dictionary)*

Potential Gross Income Multiplier (PGIM)

The ratio between the sale price (or value) of a property and its annual potential gross income. *(Dictionary)*

Present Value (PV)

The value of a future payment or series of future payments discounted to the current date or to time period zero. *(Dictionary)*

Prospective Opinion of Value

A value opinion effective as of a specified future date. The term does not define a type of value. Instead, it identifies a value opinion as effective at some specific future date. An opinion of value as of a prospective date is frequently sought in connection with projects that are proposed, under construction, or under conversion to a new use, or those that have not achieved sellout or a stabilized level of long-term occupancy. *(Dictionary)*

Qualitative Adjustment

An indication that one property is superior, inferior, or the same as another property. Note that the common usage of the term is a misnomer in that an adjustment to the sale price of a comparable property is not made. Rather, the indication of a property's superiority or inferiority to another is used in relative comparison analysis, bracketing, and other forms of qualitative analysis. *(Dictionary)*

Quantitative Adjustment

A numerical (dollar or percentage) adjustment to the indicated value of the comparable property to account for the effect of a difference between two properties on value. *(Dictionary)*

Rentable Area

The amount of space on which the rent is based; calculated according to local practice. *(Dictionary)*

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Replacement Cost

The estimated cost to construct, at current prices as of a specific date, a substitute for a building or other improvements, using modern materials and current standards, design, and layout. *(Dictionary)*

Reproduction Cost

The estimated cost to construct, at current prices as of the effective date of the appraisal, an exact duplicate or replica of the building being appraised, using the same materials, construction standards, design, layout, and quality of workmanship and embodying all the deficiencies, superadequacies, and obsolescence of the subject building. *(Dictionary)*

Retrospective Value Opinion

A value opinion effective as of a specified historical date. The term *retrospective* does not define a type of value. Instead, it identifies a value opinion as being effective at some specific prior date. Value as of a historical date is frequently sought in connection with property tax appeals, damage models, lease renegotiation, deficiency judgments, estate tax, and condemnation. Inclusion of the type of value with this term is appropriate, e.g., "retrospective market value opinion." *(Dictionary)*

Sales Comparison Approach

The process of deriving a value indication for the subject property by comparing sales of similar properties to the property being appraised, identifying appropriate units of comparison, and making adjustments to the sale prices (or unit prices, as appropriate) of the comparable properties based on relevant, market-derived elements of comparison. The sales comparison approach may be used to value improved properties, vacant land, or land being considered vacant when an adequate supply of comparable sales is available. *(Dictionary)*

Scope of Work

The type and extent of research and analysis in an appraisal or appraisal review assignment. Scope of work includes, but is not limited to:

The extent to which the property is identified;

The extent to which tangible property is inspected;

The type and extent of data researched; and

The type and extent of analysis applied to arrive at opinions or conclusions. *(USPAP)*

Shopping Center Types

Neighborhood Shopping Center: The smallest type of shopping center, generally with a gross leasable area of between 30,000 and 100,000 square feet. Typical anchors include supermarkets. Neighborhood shopping centers offer convenience goods and personal services and usually depend on a market population support of 3,000 to 40,000 people.

Community Shopping Center: A shopping center of 100,000 to 400,000 square feet that usually contains one junior department store, a variety store, discount or department store. A community shopping center generally has between 20 and 70 retail tenants and a market population support of 40,000 to 150,000 people.

Regional Shopping Center: A shopping center of 300,000 to 900,000 square feet that is built around one or two full-line department stores of approximately 200,000 square feet each plus small tenant spaces. This type of center is typically supported by a minimum population of 150,000 people.

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Shopping Center Types (cont.)

Super-Regional Center: A large center of 600,000 to 2.0 million square feet anchored by three or more full-line department stores. This type of center is typically supported by a population area of 300,000 people. *(14th Edition)*

Superadequacy

An excess in the capacity or quality of a structure or structural component; determined by market standards. *(Dictionary)*

Surplus Land

Land that is not currently needed to support the existing use but cannot be separated from the property and sold off for another use. Surplus land does not have an independent highest and best use and may or may not contribute value to the improved parcel. *(Dictionary)*

Tenant Improvements (TIs)

1. Fixed improvements to the land or structures installed for use by a lessee.

2. The original installation of finished tenant space in a construction project; subject to periodic change for succeeding tenants. *(Dictionary)*

Triple Net Lease

An alternative term for a type of net lease. In some markets, a net net net lease is defined as a lease in which the tenant assumes all expenses (fixed and variable) of operating a property except that the landlord is responsible for structural maintenance, building reserves, and management. Also called *NNN*, *triple net lease*, or *fully net lease*. *(Dictionary)*

Usable Area

The area that is actually used by the tenants measured from the inside of the exterior walls to the inside of walls separating the space from hallways and common areas. *(Dictionary)*

Useful Life

The period of time over which a structure or a component of a property may reasonably be expected to perform the function for which it was designed. *(Dictionary)*

Vacancy and Collection Loss

A deduction from potential gross income (PGI) made to reflect income deductions due to vacancies, tenant turnover, and non-payment of rent; also called *vacancy and credit loss* or *vacancy and contingency loss*. *(Dictionary)*

Yield Capitalization

A method used to convert future benefits into present value by 1) discounting each future benefit at an appropriate yield rate, or 2) developing an overall rate that explicitly reflects the investment's income pattern, holding period, value change, and yield rate. *(Dictionary)*



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EDUCATION AND QUALIFICATIONS

Member, Appraisal Institute

Board Member, IRWA Chapter 1

B.Sc. Boston University

STATE CERTIFICATIONS

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David A. Williams is a Valuation Services Director with Colliers International Valuation & Advisory Services, located in the Los Angeles and Bakersfield offices.

Mr. Williams has performed appraisals for a wide variety of property types throughout California, New Mexico, Oregon and Hawaii. Projects include regional malls, high-rise office buildings, business parks, proposed apartments and residential subdivisions. Core competencies are highest and best use analysis, right of way/condemnation and litigation support. Assignments have included the valuation of water rights, environmental contamination and agriculture (orchards/cropland). He has been in multiple arbitrations for market rent resets, for both buildings and land.

Mr. Williams has been deposed and has testified as an expert witness in jury trials.

EXPERIENCE

Valuation Services Director, Colliers
January 2014 – present

Senior Analyst, Overland, Pacific & Cutler
October 2012 – December 2013

Senior Analyst, Integra Realty Resources, Los Angeles – February 2010-August 2012

Senior Analyst, CB Richard Ellis, Los Angeles – February 2005-December 2010

PROFESSIONAL AFFILIATIONS AND ACCREDITATIONS

Member – Appraisal Institute, August 2014

Reviewer Designation (AI-GRS) – Appraisal Institute 2019

Board Member – International Right of Way Association (IRWA), Chapter 1 since 2016

APPRAISAL INSTITUTE COURSES

Valuation of Conservation Easements

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Chair, Appraisal Institute Hearing Committee

Chair, IRWA Chapter 1 Newsletter

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REPRESENTATIVE CLIENTS AND PROJECTS

Client: Google, Inc. – Ground lease arbitration with NASA (Federal Government) – market rent reset in a flood zone. Considerations include anticipated construction finishing costs and water retention ponds.

Client: Honolulu Area Rapid Transit (HART) – Leading valuation team for the acquisition of real property for the construction of an overhead rail line in Honolulu.

Client: BNSF Railroad – Valuation of multiple parcels to expand existing right-of-way in Belen, New Mexico.

Client: California Department of Transportation (CALTRANS) – Widening of US Highway 395 -- subcontracted by Epic Land Solutions to value 49 parcels along US Highway 395 in Adelanto and Victorville. Primary issues were highway access and landlocked remainder parcels.

Client: Greenberg, Glusker/Starpoint Capital – Ground rent reset contingent upon the highest value of the following: value as-is, current highest & best use and highest & best use as of lease commencement. Predominant issue was understanding why the punitive lease escalations were written and agreed to by the lessee.

Client: High Speed Rail/Epic Land Solutions – Approximately two dozen agricultural properties in Wasco, Kern County. Appraisal problems included re-routing of irrigation and harvesting lanes, well estimates, crop yields, and allocation to the leased fee/leasehold positions per the Caltrans Right of Way Manual, Chapter 7.

Client: State of Qatar – Client was looking to acquire a single-tenant building in Beverly Hills. Appraisal problems included valuing the premium, if any, of the Richard Meier re-design and the impacts of the Metro Purple Line extension, which identified the subject as a full take for a construction yard.

Client: City of Murrieta/Epic Land Solutions – Valued three agricultural properties impacted by a right of way project. Appraisal problems included assessing the impact of Riverside County's Multiple Species Habitation Conservation Plan (MSHCP).

Client: Rutan & Tucker, LP – Valued damages on a 200-acre agricultural property in Hinkley, CA posed by the re-routing of Highway 58. Appraisal problems included valuation of arable versus non-arable land, and warranted research of water rights and its market per acre foot.

Client: Fox, Rothchild, LP – Valued a 62-acre Superfund site in Rialto, CA. Appraisal problems included determining a range of value for the property as remediated and in its as-is condition giving that the final EPA report had yet to be issued.

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REPRESENTATIVE CLIENTS AND PROJECTS

Client: Demitriou, Del Guercio, Springer & Francis, LP -- Analyzed damages to a 40,000 SF industrial property posed by the expansion of a primary arterial in Walnut, CA. Appraisal problems included an analysis of lost rent, diminished access, security and utility and the leaseability of the space during the construction period.

Client: Bank of the West – Valued a proposed surgical center for a construction loan. Appraisal problem related to the high cost of construction that could only be supported via an analysis of the surgery center market and the anticipated effects of the Affordable Care Act.

Client: C-III Asset Management -- Performed leasehold valuation with possessory interest. Appraisal problems included city-held land and tenant construction loans based on the value of the tenant's lease payment schedule.

Client: SANBAG -- I-15 & I-215 Devore Freeway Interchange Project. Provided appraisal for acquisition of an aerial easement utilized by a freeway billboard sign.

Client: LADWP -- Provided appraisal to value the acquisition of 2,300 acres of Kern County desert land with full entitlements for the construction of a 230 mW utility-scale, photovoltaic solar generating facility. Subsequently, developed a market rent analysis for a regional utility company to evaluate leasing a portion of the site to a private energy consortium. Involved extensive analysis on the viability of utility-scale solar power projects.

Client: City of Covina – Valuation of two development sites subject to the city purchasing a portion of each for public use.

Client: City of Bellflower -- Appraised the vacation of a portion of a city street with a cul-de-sac for a lot tie with an adjacent city-owned parcel for possible sale to a mixed-use developer. Also appraised a right of way acquisition for road widening that included an automobile dealership. Multiple scenarios included demolishing the building and using a cut-and-face technique to save the building.

Client: Mountains, Recreation & Conservation Authority (MRCA) -- Appraised 400 acres of Simi Hills land with an extensive highest and best use analysis on subdivisions versus luxury estate development.

Client: U.S. Government -- Performed complex highest and best use analyses for fee acquisitions by public agencies. Appraisal problems included multiple zonings on site, functional and external obsolescence, growth corridors and federally-owned (unzoned) areas, e.g., Vandenberg AFB and March ARB.

Business, Consumer Services & Housing Agency

BUREAU OF REAL ESTATE APPRAISERS

REAL ESTATE APPRAISER LICENSE

David A. Williams

has successfully met the requirements for a license as a residential and commercial real estate appraiser in the State of California and is, therefore, entitled to use the title:

"Certified General Real Estate Appraiser"

This license has been issued in accordance with the provisions of the Real Estate Appraisers' Licensing and Certification Law.

BREA APPRAISER IDENTIFICATION NUMBER: AG 035639

Effective Date: November 17, 2018
Date Expires: November 16, 2020

Jim Martin, Bureau Chief, BREA

3041080

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Real estate valuations play a pivotal role in today's business climate. An accurate and well supported opinion of property value can mean the difference between reaching a critical goal—securing a loan, closing a sale, reporting to investors, choosing the best asset—or failing to achieve it altogether.

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INFORMATION

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Attachment 8

1st and 5th Year Results of Operations

Suburban Water Systems
Sativa Water System Acquisition

Projected Results of Operations Year 1 and Year 5 ($ in Thousands)

	Suburban Water Systems*		Sativa Water System		Combined Water Companies	
	Y1 **	Y5 ***	Y1 **	Y5 ***	Y1 **	Y5 ***
Operating Water Revenues	$98,927.1	$120,404.4	$2,299.5	$2,588.6	$101,226.5	$122,993.0
Operating Expenses	$59,888.4	$72,890.3	$574.3	$488.9	$60,462.7	$73,379.2
Depreciation	$13,152.6	$16,008.0	$336.3	$409.4	$13,488.9	$16,417.4
General Taxes	$2,872.5	$3,496.1	$177.8	$216.4	$3,050.3	$3,712.5
Total Exp. Before Income Taxes	$75,913.5	$92,394.5	$1,088.4	$1,114.6	$77,001.9	$93,509.1
Income Taxes (Fed & State)	$5,098.2	$6,205.0	$283.6	$345.1	$5,381.7	$6,550.1
Total Expenses	$81,011.6	$98,599.5	$1,372.0	$1,459.8	$82,383.6	$100,059.3
Net Operating Revenue	$17,915.4	$21,804.9	$927.5	$1,128.8	$18,842.9	$22,933.8

*Current authorized plus projected amount in 5 Year Forecast

**Does not include any increase due to the Sativa acquisition since it is requested that rates are increased in Test Year 2024 of the next GRC

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Attachment 9

Draft Customer Notices

Para más información en cómo este cambio impactará su factura, llame al 626-543-2640.

DRAFT NOTICE OF APPLICATION
SUBURBAN WATER SYSTEM'S REQUEST TO PURCHASE THE SATIVA LOS ANGELES WATER DISTRICT
APPLICATION [A.XX-XX-XXX]

Why am I receiving this notice?
On August __, 2021, Suburban Water Systems (Suburban) filed its Application for an Order Authorizing Purchase of Utility Assets (A.XX-XX-XXX) with the California Public Utility Commission (CPUC).

Los Angeles County Water District has approved the sale of the Sativa Los Angeles County Water District (Sativa) to Suburban. Before the sale is completed, the CPUC must also review and approve the sale.

Why is Suburban requesting authorization to purchase Sativa?

- Suburban has significant experience providing water service in the Los Angeles Metropolitan area; therefore, customers in Sativa will benefit from costs, rates, etc. being spread over a larger customer base, as well as being serviced by experienced engineers, scientists, managers and water treatment and distribution operators.
- Customers will have access to Suburban online payment options, web self-service account management tools, and the option of paperless billing.
- Suburban proposes to offer a low-income discount program for qualifying customers and water conservation programs that provide numerous alternatives to help reduce water consumption.

How could this affect my water bill?
If the acquisition is approved by the CPUC and the acquisition closes not later than December 31, 2023, at the time the acquisition closes Sativa's current flat rates for residential service will be reduced to $62.00 per month.

If the acquisition closes after December 31, 2023, upon closing Sativa customers will be subject to the Whittier/La Mirada Service Area Zone 1 Commission approved rates and charges in effect at that time, converted to flat rates until the time that meters are installed.

Subsequent potential rate increases will be addressed through a General Rate Case (GRC) process. Suburban expects to file its next GRC in January of 2023, for rates to take effect in 2024. As requested in this Application, Suburban is proposing that Sativa be consolidated into the Whittier/La Mirada Service Area for operational purposes.

For comparative purposes, a chart is provided below. The chart shows the estimated average monthly residential bill based on Sativa Los Angeles County Water District's current rates and the same bills after consolidation with Suburban.

COMPARISON OF TOTAL RESIDENTIAL BILL IF RATE CONSOLIDATION WERE TO OCCUR AT CLOSING PER ASSET PURCHASE AGREEMENT				
Service Area	**Avg. Res. Usage/Mo. (ccf)**	**Estimated Total Bill in 2022**	**2022 Change in Estimated Bill**	**Estimated Total Bill After Consolidation**
San Jose Hills	13	$71.99	$0.91	$72.90
Whittier/La Mirada	13	$67.67	$1.04	$68.71
Sativa	N/A	$67.84	$5.84	$62.00

How does the rest of this process work?
This application will be assigned to a CPUC Administrative Law Judge who will consider proposals and evidence presented during the formal hearing process. The Administrative Law Judge will issue a proposed decision that may adopt Suburban's application, modify it, or deny it. Any CPUC Commissioner may sponsor an alternate decision with a different outcome. The proposed decision, and any alternate decisions, will be discussed and voted upon by the CPUC Commissioners at a public CPUC Voting Meeting.

Parties to the proceeding are currently reviewing Suburban's application, including the Public Advocates Office, which is an independent consumer advocate within the CPUC that represents customers to obtain the lowest possible rate for service consistent with reliable and safe service levels. For more information regarding the Public Advocates Office, please call 1-415-703-1584, email PublicAdvocatesOffice@cpuc.ca.gov, or visit **PublicAdvocates.cpuc.ca.gov**.

Where can I get more information?
Contact Suburban

Website: http://www.swwc.com/suburban
Phone: (626) 543-2531
Email: San Jose Hills Service Area: sanjosehills@swwc.com;
Whittier/La Mirada Service Area: whittierlamirada@swwc.com
A copy of the Application and any related documents may also be reviewed at **[insert website link]**.

Contact CPUC
Please visit **apps.cpuc.ca.gov/c/A[PROCEEDING NUMBER without dashes or periods]** to submit a comment about this proceeding on the CPUC Docket Card. Here you can also view documents and other public comments related to this proceeding. Your participation by providing your thoughts on Suburban's request can help the CPUC make an informed decision.

If you have questions about CPUC processes, you may contact the CPUC's Public Advisor's Office at:

Phone: **1-866-849-8390** (toll-free) or **1-415-703-2074**
Email: Public.Advisor@cpuc.ca.gov
Mail: CPUC Public Advisor's Office
505 Van Ness Avenue
San Francisco, CA 94102

Please reference **Application A.XX-XX-XXX** in any communications you have with the CPUC regarding this matter.

Sincerely,

_____
Sativa Los Angeles County Water District

Para más información en cómo este cambio impactará su factura, llame al 626-543-2640.

DRAFT NOTICE OF APPLICATION
SUBURBAN WATER SYSTEM'S REQUEST TO PURCHASE THE SATIVA LOS ANGELES WATER DISTRICT
APPLICATION [A.XX-XX-XXX]

Why am I receiving this notice?
On August __, 2021, Suburban Water Systems (Suburban) filed Application A.XX-XX-XXX with the California Public Utilities Commission ("CPUC"). The application seeks CPUC approval of Suburban's acquisition of Sativa Los Angeles County Water District's (Sativa's) assets, permission for Suburban to service Sativa's customers, and consolidation of those customers immediately for operational purposes as part of Suburban's Whittier/La Mirada Service Area.

Why is Suburban requesting authorization to purchase Sativa?

- Sativa includes approximately 1,600 customers located within a residential area in the unincorporated community of Willowbrook and three small non-contiguous areas within the City of Compton. The system consists of water delivery pipelines, water appurtenances, hydrants, service laterals, interconnections, hydropneumatics tanks, chemical dosing equipment, groundwater wells, office, equipment, and storage buildings, and other facilities and properties necessary to provide domestic water service.
- The integration of the Sativa system into Suburban's systems is expected to create greater economies of scale and synergies, which would benefit both existing customers and Sativa customers over time.
- The acquisition helps to ensure the provision of safe and reliable water service for Sativa and Suburban customers now and in the future.

How could this affect my water bill?
The average residential Suburban customer is not expected to see any rate or bill impact from the purchase of Sativa Water until January 1, 2024.

If this purchase is approved, Suburban will, in a future General Rate Case (GRC), seek to consolidate its Sativa customers with Suburban's Whittier/La Mirada Service Area for ratemaking purposes. Potential rate increases will be addressed in future GRCs. Suburban recently filed its current GRC in March of 2020 for rates to take effect in 2021 and expects to file its next GRC in January 2023, for rates to take effect in 2024. You will receive notice of the GRC proceedings.

How does the rest of this process work?

This application will be assigned to a CPUC Administrative Law Judge who will consider proposals and evidence presented during the formal hearing process. The Administrative Law Judge will issue a proposed decision that may adopt Suburban's application, modify it, or deny it. Any CPUC Commissioner may sponsor an alternate decision with a different outcome. The proposed decision, and any alternate decisions, will be discussed and voted upon by the CPUC Commissioners at a public CPUC Voting Meeting.

Parties to the proceeding are currently reviewing Suburban's application, including the Public Advocates Office, which is an independent consumer advocate within the CPUC that represents customers to obtain the lowest possible rate for service consistent with reliable and safe service levels. For more

information regarding the Public Advocates Office, please call 1-415-703-1584, email PublicAdvocatesOffice@cpuc.ca.gov, or visit **PublicAdvocates.cpuc.ca.gov**.

Your participation by providing your thoughts on Suburban's request can help the CPUC make an informed decision.

Where can I get more information?

Contact Suburban

Website: http://www.swwc.com/suburban
Phone: (626) 543-2531
Email: San Jose Hills Service Area: sanjosehills@swwc.com;
Whittier/La Mirada Service Area: whittierlamirada@swwc.com
A copy of the Application and any related documents may also be reviewed at **[insert website link]**.

Contact CPUC

Please visit **apps.cpuc.ca.gov/c/A[PROCEEDING NUMBER]**to submit a comment about this proceeding on the CPUC Docket Card. Here you can also view documents and other public comments related to this proceeding.

If you have questions about CPUC processes, you may contact the CPUC's Public Advisor's Office at:

Phone: **1-866-849-8390** (toll-free) or **1-415-703-2074**
Email: Public.Advisor@cpuc.ca.gov
Mail: CPUC Public Advisor's Office
505 Van Ness Avenue
San Francisco, CA 94102

Please reference **Application A.XX-XX-XXX** in any communications you have with the CPUC regarding this matter.

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Attachment 10

Minimum Data Requirements

1. **Estimate the potential monthly incremental cost impact on existing and acquired customers following the actual results of the Buyer's most recently authorized tariffs.**
   Upon Suburban's acquisition of Sativa, there will be no monthly incremental cost impact on existing customers. Immediately upon acquisition, Suburban will reduce Sativa customers' monthly bills by 8.5% from $67.84 to $62.00. Additionally, eligible Sativa's customers will be able to take advantage of Suburban's Customer Assistance Program. This will further reduce the monthly bills of eligible low-income customers by $7.39 each month.

   a. **If a Buyer has pending request before the Commission to change rates, it must also calculate the above using data as proposed in its pending request.**
      N/A

2. **If the Buyer is seeking authority to increase the acquired system's rates to a certain level, please state the basis for the targeted rate and period of time for such targeted rate to be implemented.**
   N/A

3. **Provide the annual depreciation expense using the proposed rate base of the acquired assets. If the exact depreciation expense is not available, provide the best estimate of the annual depreciation expense. Show how the depreciation expense is calculated.**
   See attachment R.17-06-024_03. Annual Depreciation Calculation

4. **Provide an estimate of the annual revenue requirement of the system proposed to be acquired. Provide the assumptions for the annual revenue requirement, including expected rate of return, expected depreciation expense, O&M expenses, etc.**
   See the Direct Testimony of Robert Kelly, Attachment 1, column "(c)".

5. **Other than the revenue requirement data requested above, separately identify all other approved and/or intended impacts to customer bills (i.e., surcharges, passthrough fees, etc.).**
   Like most municipal water agencies subject to Proposition 218, Sativa lacks a low-income customer rate assistance program. Given the small size of Sativa's system, such a program would likely be very difficult, if not impossible, to implement. Sativa customers would normally not become eligible to participate in Suburban's low-income program until completion of Suburban's next general rate case on January 2, 2024. Considering the Commission's interest in assisting low-income customers, particularly during the COVID-19 public health emergency and in light of the current economic challenges, Suburban recommends expediting the eligibility for Sativa customers. Suburban requests authorization to allow Sativa customers to apply for the Low Income Rate Assistant program (LIRA) program and enroll if they meet the eligibility criteria immediately after closing of this transaction. Suburban does not anticipate the need for changes to its current LIRA surcharge at this time. The low-income surcharge applies to all non-low-income customers in Suburban's service areas. Suburban requests similar treatment to that provided California American Water in Advice Letter 1307-W.

   Suburban will apply the UF surcharge to Sativa customers as required by Public Utility Code Section 433. Additionally, Sativa customers within the City of Compton will be subject to the city's Utility Users Tax Ordinance.

6. **Provide a listing of any entities that currently receive free service from the acquired utility.**
   None

7. **If the acquired utility has increased rates in the last year, please state the date of the increase and provide a copy of the new rate schedule and the total annual revenues projected under the new rates.**
   Sativa has not increased rates in the past year.

8. **Are there any leases, easements, and access to public rights-of-way that Buyer expects to be needed in order to provide service which will not be conveyed at closing? If yes, identify when the conveyance will take place and whether there are expected to be additional costs involved.**
   No.

9. **Provide a breakdown of the estimated transaction and closing costs. Provide invoices to support any transaction and closing costs that have already been incurred.**
   See Attachment R.17-06-024_09. Transaction Costs

10. **Describe known and anticipated general expense savings and efficiencies under Buyer's ownership. State the basis for assumptions used in developing these savings and efficiencies and provide all supporting documentation for the assumptions.**
    Being part of a larger organization provides Suburban's customers with greater economies of scale for shared corporate services such as information technology, payroll, treasury, and strategic leadership. It also provides redundancy and access to more professional knowledge and experience. For example, in the event of an earthquake and the potential loss of Suburban's customer service call center, customer calls would be diverted to the Texas call center to maintain excellent customer care which is extremely critical when customers are in crisis. Suburban's support services are provided from the headquarters located in Covina, CA. There are customer service offices that include payment stations in West Covina and in La Mirada. These offices also host field operations employees. By leveraging its existing workforce, Suburban will be able to spread its fixed cost of a greater number of customers, thereby lowering the cost per share for customers. Further evidence of the savings and efficiencies provided by this acquisition can be found in the testimonies of Robert Kelly, Jorge Lopez and William Russell Bryden.

11. **Provide a copy of the Seller's request for proposals (if there was one) and any accompanying exhibits with respect to the proposed sale of the water system or water system assets.**
    See Attachment R.17-06-024_11. Sativa's Request for Proposal

12. **Provide a copy of the response to the request for proposals (if there was one) of the Buyer for the purchase of the acquired water system or water system assets.**
    See Attachment R.17-06-024_12. Sativa Suburban Proposal Vol 1 – FINAL – 2019.11.10

13. **For each Utility Valuation Expert (UVE) providing testimony or exhibits, please provide the following:**
    a. **A list of valuations of utility property performed by the UVE in the last two years;**
       Mark Rodriguez - See Attachment R.17-06-024_13.a. List of Utility Property Valuations_MRV

b. A list of appraisals of utility property performed by the UVE in the last two years;
Mark Rodriguez - See Attachment R.17-06-024_13.b. List of Utility Property Appraisals_MRV

Rodney T. Smith (Stratecon):
- "Economic Valuation of Laguna Water's Edwards Groundwater Permits and Carrizo/Wilcox Groundwater Rights", February 26, 2020 for Southwest Water Company
- "Updated Valuation Opinion Regarding Central Basin Adjudicated Groundwater Rights" February 18, 2021 updating September 30, 2019 opinion for Southwest Water Company

c. A list of all dockets in which the UVE submitted testimony to a public utility commission or regulatory authority related to the acquisition of utility property in the last two years;
Mark Rodriguez - See Attachment R.17-06-024_13.c. Testimony Experience_M.Rodriguez

Rodney T. Smith (Stratecon):
- *Westlake Farms v. County Sanitation District No. 2 for Los Angeles County*, Superior Court of California, County of San Luis Obispo, Case No. 16CV-0244 (deposition testimony) on behalf of County Sanitation District regarding the market value of Central Valley water.

d. An electronic copy of or electronic link to written testimony in which the UVE testified on public utility fair value acquisitions in the past two years.

Mark Rodriguez - See Attachment R.17-06-024_13.d. MRV Testimony_Water System Fair Value

14. Explain each discount rate used in the appraisals and valuations, including explanations of the capital structure, cost of equity and cost of debt. State the basis for each input. Provide all sources, documentation, calculations and/or workpapers used in determining the inputs.
See the Direct Testimony of Mark Rodriguez (MR Valuation Consulting, LLC) and Application Attachment 5.
See the Direct Testimony of Rodney Smith (Stratecon, Inc.)

15. Explain whether the appraisal/valuation used replacement cost or reproduction cost and why that methodology was chosen.
The appraisal completed by MR Valuation Consulting, LLC covers both replacement cost and reproduction cost. Section 2720(b) of the Public Utilities Code references reproduction cost. That statute also cites to Section 820 of the Evidence Code, which refers to both reproduction cost and replacement cost. D.99-10-064 references replacement cost.

16. Explain the basis for any comparable acquisitions used in the appraisal/valuation including the purchase price and number of customers for each comparable acquisition.
N/A

17. Are there any outstanding compliance issues, including but not limited to water quality violations, that the Seller's system has pending with the Board's Division of Drinking Water? If yes, provide the following information:
Yes. Sativa is currently subject to a compliance order issued by the Division of Drinking Water, Compliance Order No. 04_22_18R_002.

a. Identify the compliance issue(s);
The Compliance Order alleges that the Sativa system meets neither Maximum Day Demand nor Peak Hourly Demand as required by 22 CCR Section 64454; the system does not meet the California Waterworks standards for pressure and flushing velocity; the system delivers water exceeding the secondary maximum contaminant levels for manganese and color, as well as having overall poor aesthetic qualities.

b. Provide an estimated date of compliance;
Manganese and Color: See the testimony of William Russell Bryden for estimated date of compliance.
MDD, Pressure, Flushing: See the testimony of Jorge Lopez for estimated dates of compliance.

c. **Explain Buyer's anticipated or actual plan for remediation**;
See Response to MDR 21(c)

d. Provide Buyer's estimated costs for remediation; and,
See Response to MDR 21(c)

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.
The costs of remediating some of these deficiencies are addressed in the valuation, specifically the improvements constructed by the County of Los Angeles prior to Closing were addressed through functional obsolescence and/or excluded from proposed rate base to the extent funded with grants.

18. Are there any outstanding compliance issues that the Seller's system has pending with the US Environmental Protection Agency? If yes, provide the following information:
No.

a. Identify the compliance issue(s);
N/A

b. Provide an estimated date of compliance;
N/A

c. Explain Buyer's anticipated or actual plan for remediation;
N/A

d. Provide Buyer's estimated costs for remediation; and,
N/A

e. Indicate whether the cost of remediation was or is anticipated to be factored into either or both fair market valuation appraisals offered in this proceeding.

N/A

19. Provide copies of all notices of a proposed acquisition given to affected customers.
The notices are included as Attachment 9 to the application.

20. Provide copies of all disclosures and customer notices required by Pub. Util. Code § 10061 related to the sale and disposal of utilities owned by municipal corporations.
N/A

21. Describe other requests to be included in the application, including but not limited to requests for approval of:

a. Consulting, transition of service, water wholesaling, or other agreements;
N/A

b. Interim rate increases outside of a general rate case proceeding or other special rate treatment (e.g., CPI-U rate increases, or rate increases under Class C/D requirements);
Suburban will be requesting Sativa customers' water rates be reduce from $67.84 to $62 until January 1, 2024, at which time Suburban requests that Sativa customers be placed on the same rates and rate schedules as Suburban's Whittier/La Mirada service area.

c. Facilities construction;
The table below lists the capital improvements Suburban intends to undertake as necessary to bring the Sativa Water System into compliance with the DDW Permit following the closing. This list is for planning purposes only and the actual implementation of such capital improvements will be subject to DDW approval and Commission approval in a future GRC proceeding.

Project Description	Total
Misc. System Replacements (Services, Valves, Hydrants, Pipes)	522,800
SCADA Integration	75,000
Steel Reservoir	725,032
Site 4 Pump Station	497,283
Well 3 Transfer Switch and Mobile Generator	190,000
Stockwell Pipeline	917,000
Vesta Pipeline	534,000
Willowbrook Pipeline	1,277,000
Jack and Bore	535,000
Wilmington Pipeline	107,000

Wayside Pipeline	234,000
Vesta Pipeline	310,000
Lucien Pipeline	183,000
Meter purchase and installation	851,932
Drill and Equip Well 6	1,500,000
Total	**$8,459,047**

d. Memorandum or Balancing Accounts.

Memorandum Accounts
Suburban requests the following memorandum accounts:

- Environment Improvements and Compliance Issues for Acquisitions Memorandum Account ("EICIAMA").
- Sativa Transaction Cost Memorandum Account ("STCMA").

Balancing Account

- Suburban requests a Sativa Production Cost Balancing Account ("SPCBA").

22. Identify the ratepayer benefits that accrue to current ratepayers of the system being acquired due to this transaction.

The purchase increases Sativa customers' long-term access to safe and reliable water services at affordable rates. Suburban's size, position in the industry, and the proximity of Suburban's Whittier/La Mirada service area will allow Suburban to efficiently meet water quality, reliability, and customer service standards.

Suburban's access to financial resources and ability to spread investment over a large customer base ensure that investments needed can be made and ensure that safe and reliable service to Sativa's customers will be provided.

Suburban's large and specialized workforce and nearby service areas allow for expanded customer service options and for more effective assistance in emergency situations. In addition, after the acquisition, customers in the Sativa service area would have access to online self-service for many services, paperless billing, multiple payment channels, and call centers that have multi-language capability. Sativa customers also will have access to Suburban's wide-ranging conservation programs, that include free water-saving devices such as showerheads and hose nozzles, and if requested visits by Suburban staff to homes and businesses to review water use and identify ways to save water.

23. Identify all actions the applicant has taken with governmental agencies related to obtaining required permits and/or approvals to effectuate the acquisition.

Annual Unified Program Facility Permit (issued by LACFD)
State Water Resource Control Board DDW Permit

On May 25th, 2021, Suburban and the County of Los Angeles met with representatives of DDW and discussed the content and timing of the change of ownership application. The application will be filed in coordination with the permit to install and operate a manganese treatment plant.

24. **Provide all workpapers that support the testimony for each of the witnesses that accompany the application, in native format where possible.**
Supporting workpapers, if required, are attached to each witnesses' testimony.

SUPPLEMENTAL INFORMATION

1. **A list of recommended, proposed or required capital improvements to the acquired water system known at the time of the application, with cost estimates, if available;**

Project Description	Total
Misc. System Replacements (Services, Valves, Hydrants, Pipes)	522,800
SCADA Integration	75,000
Steel Reservoir	725,032
Site 4 Pump Station	497,283
Well 3 Transfer Switch and Mobile Generator	190,000
Stockwell Pipeline	917,000
Vesta Pipeline	534,000
Willowbrook Pipeline	1,277,000
Jack and Bore	535,000
Wilmington Pipeline	107,000
Wayside Pipeline	234,000
Vesta Pipeline	310,000
Lucien Pipeline	183,000
Meter purchase and installation	851,932
Drill and Equip Well 6	1,500,000
Total	**$8,459,047**

2. **If applicable, supporting documentation for the designation of Disadvantaged Community; and;**
Sativa's service area is within census tracts 6037541300, 6037541400, and 6037541500. These tracts have been designated by the California Environmental Protection Agency (CalEPA) as disadvantaged.

See attachment R.17-06-024_Sup 2. Disadvantaged Community

3. **If applicable, documents required by Pub. Util. Code Section 10061(c).**
   N/A

R.17-06-024_03. Annual Depreciation Calculation

Suburban Water Systems
Sativa Water System Acquisition
Annual Depreciation Expense

CPUC Account	Account Category	MRV Fixed Asset Register	Description	Reproduction Cost New Less Depreciation	Yearly Depreciation	Allocation of Consideration Paid	Yearly Depreciation (Consideration Paid)
303	Land	Distribution Infrastructure	Private Easements	130,000	-	81,648	-
303	Land	Facilities	Land	881,000	-	553,325	-
304	Structures & Improvements	Facilities	Building & Land Improvements	613,379	23,623	385,242	14,837
307	Wells	Well Infrastructure	Well No. 2	792,131	39,607	497,509	24,875
307	Wells	Well Infrastructure	Well No. 3	670,340	33,517	421,017	21,051
307	Wells	Well Infrastructure	Well No. 4	141,689	17,711	88,990	11,124
307	Wells	Well Infrastructure	Well No. 5	1,600,488	61,557	1,005,210	38,662
311	Pumping / Electrical Equipment	Well Infrastructure	Pumping / Electrical Equipment (Well No. 2)	152,311	12,693	95,661	7,972
311	Pumping / Electrical Equipment	Well Infrastructure	Pumping / Electrical Equipment (Well No. 3)	152,311	12,693	95,661	7,972
311	Pumping / Electrical Equipment	Well Infrastructure	Pumping / Electrical Equipment (Well No. 5)	-	-	-	-
320	Water Treatment Equipment	Well Infrastructure	Chlorine Treatment Equipment (Well No. 2)	27,811	2,318	17,467	1,456
320	Water Treatment Equipment	Well Infrastructure	Chlorine Treatment Equipment (Well No. 3)	27,811	2,318	17,467	1,456
320	Water Treatment Equipment	Well Infrastructure	Chlorine Treatment Equipment (Well No. 5)	-	-	-	-
330	Reservoirs, Tanks, & Standpipes	Facilities	Hydropneumatic Tanks	397,615	33,135	249,728	20,811
331	Water Mains & Valves	Distribution Infrastructure	Water Mains (Non-PVC)	2,897,172	56,279	1,819,611	35,347
331	Water Mains & Valves	Distribution Infrastructure	Water Mains (PVC)	1,975,595	43,091	1,240,801	27,064
331	Water Mains & Valves	Distribution Infrastructure	Water Valves	203,225	13,548	127,638	8,509
333	Water Services & Meters - Cu	Distribution Infrastructure	Water Services	627,213	104,536	393,930	65,655
335	Hydrants	Distribution Infrastructure	Hydrants	326,944	40,868	205,342	25,668
339	Other Equipment	Facilities	Kubota L39TL & Ingersoll Rand 185	36,610	9,298	22,993	5,840
339	Other Equipment	Well Infrastructure	Generator - Trailer Mounted	28,718	28,718	18,037	18,037
N/A	Water Rights	N/A	Water Rights	7,105,517	-	4,462,723	-
Grand Total				18,787,879	535,508	11,800,000	336,333

R.17-06-024_09. Transaction Costs

Suburban Water Systems
Sativa Water System Acquisition
Transaction Costs
As of July 31, 2021

Vendor Name	Amount
MR VALUATION CONSULTING LLC	273,698
ORTEGA STRATEGIES GROUP	96,784
NOSSAMAN LLP	26,232
STRATECON INC	14,838
COLLIERS INTERNATIONAL VALUATION	2,600
GREEN ENVIRONMENTAL MANAGEMENT	2,500
ORANGE COAST TITLE-BUILDER SERVICES	2,000
VCHECK GLOBAL LLC	1,547
ALLIANT CONSULTING INC	1,128
ENVIRONMENTAL DATA RESOURCES	424
FEDEX	40
Craig Gott	22
Grand Total	**421,812**

INVOICE FOR SERVICES RENDERED

COLLIERS INTERNATIONAL
VALUATION & ADVISORY SERVICES
26791 Network Place
Chicago, IL 60673-1267
MAIN +1 213 417 3313
FAX +1 604 602 7021
WEB www.colliers.com

Colliers INTERNATIONAL

CLIENT

Suburban Water Systems
Attn: Kirk Michael
12535 Reed Road
Sugar Land, TX 77478

Please reference Job Number **LAX190431** when remitting

SUBJECT PROPERTY

Four Former Sativa-Owned Properties
2015 East Hatchway Street
Compton, CA 90222

JOB INFORMATION

Job Number	LAX190431
Invoice Number	LAX190431
Invoice ID	243847
Invoice Date	10/21/2019
Federal Tax ID	41-2227433
Office	Los Angeles

INVOICE AMOUNT

Appraisal Job Fee	$5,200.00
Hourly Fees	$0.00
Expenses	$0.00
State Tax	$0.00
Invoice Total	$5,200.00
Payments	$2,600.00
Retainers/Credits	
Balance Due	**$2,600.00**

COMMENTS

Coding
P-000190. SATIVA

Please deduct payment amounts already submitted from the balance on this invoice.

Please remit all payments to
Colliers International Valuation & Advisory Services
26791 Network Place
Chicago, IL 60673-1267

For any questions about this invoice
Accounts Receivables Department
Phone +1 213 417 3313
Fax +1 604 602 7021
Email clarissa.sandoval@colliers.com

Wire Instructions

JP Morgan Chase Bank, NA
Chicago, IL
70-2322/719
Account Name: Colliers International Valuation & Advisory Services, LLC
Account No. 899559074
ABA No. 021000021
ACH Payment Transit Routing Number: 071000013
Swift code for International Wires ONLY: CHASUS33
Please include job/invoice number in addenda/memo payment information

Late Charges: At the option of Colliers International Valuation & Advisory Services (CIVAS), any amount past due shall bear simple interest at the annual rate of eighteen percent (18%), or 1.5% monthly, provided that in no event shall such interest rate exceed the highest legal interest rate for business loans. Further, to partially compensate CIVAS for banking, administrative and accounting costs, Client shall pay to CIVAS a fee of $50.00 (which may be increased from time to time) per occurrence for any check received for payments under this Statement that is not immediately honored for any reason whatsoever (including, without limitation, insufficient funds), which fee shall be in addition and without limitation to any other amounts claimed by CIVAS.

SouthWest Water Company

VH 101288

EMPLOYEE EXPENSE REPORT

EMPLOYEE LEGAL NAME: Craig Gott | TITLE: General Manager | DATE: 02/15/19

ADDRESS OR OFFICE TO SEND CHECK: 1325 N Grand Ave., Ste. 100, Covina, CA | AP AUDITOR: [signature] | DATE: 2/18

BUSINESS PURPOSE			TRAVEL EXPENSES					EMPLOYEE MEALS (read instructions for clarification)				CELL	TOTAL
DATE FROM	DATE TO	PURPOSE OF TRIP OR EXPENSE DETAIL	AIRFARE	CAR RENT/ TAXI/RAIL	LODGING	PARKING & TOLLS	Wi-Fi	BREAK-FAST	LUNCH	DINNER	MEALS ON PREMISES	CELL PHONE	
											(See tab)		0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
													0.00
TOTAL			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

RECEIVED
FEB 18 2019

Description	G/L Code	Cost Center	Amount
Mileage	610080	60000039	0.00
Airfare/Car Rental,Taxi, Rail, Bus	610070	60000039	0.00
Lodging	610030	60000039	0.00
Parking & Tolls	610090	60000039	0.00
Wi-Fi & Cell Phone Allowance	611045	60000039	0.00
Employee Meals & Meals on Premises *(100%)*	610060	60000039	0.00
Entertainment/Business Meeting Expenses/Tips *(50%)*	610040	60000039	23.10
****AP ONLY**** SEE MISCELLANEOUS GL CODING PAGE FOR CODING IF THE AMOUNT FIELD IS POPULATED.			22.00
Total Should Equal "TOTAL REIMBURSEMENT"			$45.10

1900124346 *TOTAL MILEAGE PAGE (See Mileage Form Page):*	0.00
1900020854 *TOLLS (See Mileage Form Page):*	0.00
TOTAL BUSINESS MEETINGS (See Entertainment/Business Meetings Page):	23.10
✓ *TOTAL MISCELLANEOUS GL CODING (See Miscellaneous GL Codings Page):*	22.00
✓	
TOTAL REIMBURSEMENT	$45.10

Signature [signature] Date 2/14/19.

Manager / Supervisor Approval [signature] Date 2/19/19

SouthWest Water Company

ENTERTAINMENT/BUSINESS MEETING EXPENSES/TIPS (50%)

Date	Place & Type of Expense	Business Reason	Name & Title of Persons Present	Amount
02/12/19	Lunch-The Flame Broiler, Glendora, CA	Leadership Mtg.	J. Lopez, Dir. Engineering-J. Padilla, VP Serv. Ops.	23.10
			TOTAL	$23.10

SouthWest Water Company

MISCELLANEOUS GL CODING

Date	Vendor	Cost Center	GL Account	GL Description	Business Reason	Amount
			613060	Training & Seminars		
			650135	Office Supplies		
			613080	Professional Dues (personal)		
			650040	Dues & Subscriptions		
			613070	Uniforms		
02/13/19	PCA	P-000190.STA	610090	Parking/Tolls	LAFCO/Sativa Mtg.	22.00
					TOTAL	$22.00

Chris

THE FLAME BROILER

J. Lopez
J. Padilla
Leadership
Mtg

1311 S Grand Ave #140
Glendora, CA 91740
(626) 852-7770

Server: Aricka — Station: 3

Order #: 356547 — Dine In

>> SETTLED <<

1 HF/HF B	7.55
BROWN	
0	
VG AND RICE	
1 TOFU B	7.55
BROWN	
0	
VG AND RICE	
1 Mini Ck / reg drink	5.99
VG AND RICE	
Bar Subtotal:	0.00
Food Subtotal:	21.09
Tax 1:	2.01
TOTAL:	**$23.10**
Check Tendered:	23.10
CHANGE:	0.00

>> Ticket #: 17 <<

Created: 2/12/2019 12:11:45 PM
SETTLED: 2/12/2019 12:12:45 PM

LAFCO Salive

PCA
555 WEST TEMPLE
LOS ANGELES, CA

PAY-ON-FOOT	39
RECEIPT:	38874
PERSONELL:	15845
TRANSACTION:	67106
SNR:	01 015 0111261
IN:	13.02.19 08:00
P.AT:	13.02.19 10:35
HOURLY TICKET	
FEE:	22.00 USD
PAID:	22.00 USD

Sale
Amount: 22.00 USD

Cardholder copy
Date: 02/13/19 10:34:18
Term ID: 00019427
Card Type: US
PAN xxxxxxxxxxxx8068
Entry Type: Swipe
Req Ref: 00019427-000097
Trans Ref: 67106
Auth Code: 08324D
Result: 00

APPROVED

Cardholder not verified

RECEIVED
DEC - 5 2019
SWWC-FSC-AP

Approved
Chris Heinrich
12/4/19

GL: 658010
WBS: P-000190.SAT

INVOICE

EDR
6 Armstrong Road, 4th floor
Shelton, CT 06484
Phone: 855.337.5126
Fax: 888.322.4793
paymybill.edrnet.com

Invoice #: **INV01436089**

Account #: 7012107 SouthWest Water Company

Bill To:	**Ship To:**	Order Date:	10/9/2019
	Chris Heinrich	Invoice Date:	10/10/2019
12535 Reed Road	12535 Reed Road	Order #:	5822146
Sugar Land,, TX 77478	Sugar Land,, TX 77478		

Property Info	Project #	PO #	Package	Item	Tax	Fee
Sativa, 1, Compton, CA 90222	NA	NA	EDR PropertyTracker™ Standard Pk			$395.00
				Radius Map With Geo	Y	
				Certified Sanborn Map Rpt	Y	
				Historical Topo Map	Y	
				Aerial Photo Search	Y	
				City Directory Report	Y	
				EDR PropertyTracker ™	Y	
				Online Sanborn Report Viewer	N	

1010 1900136841

Sales Tax: $28.58

Payable Upon Receipt **Total Amount:** ~~$423.58~~

Remit Payment To :	Pay By Credit Card:	ACH / Wire Transfers:
EDR PO Box 414176 Boston, MA 02241-4176	paymybill.edrnet.com	Bank of America Routing #: 111000012 Account #: 3756450736 Please contact Accounts Receivable prior to wiring funds.

Federal Tax ID# : 82-4819768
Please remember to include invoice numbers and amounts with your payments. Thank you for your business.

FedExOffice

467 N Azusa Ave
West Covina, CA 91791-1348
Tel: (626) 966-4850

11/11/2019 7:03:12 PM PST
Trans.: 3482 Branch: 3195
Register: 005 Till:D3122236
Team Member: William W.
Customer: Beatriz Reviere

DEPOSIT ON ORDER

3195005348 2

Order Number: 319502L1M
Order Due Date: 11/11/2019

Sub-Total	40.43
Total	40.43
Deposit Paid	40.43
Estimated Tax	3.51

(Tax will be recalculated at the applicable rate at time of tender.)

Balance Due	0.00

********** PURCHASE **********
APPROVED

Total: $40.43
Card Type: VISA
Card Entry: CHIP
Acct #: **********6195
Approval Code: 078041
********** EMV PURCHASE **********
App Label: VISA CREDIT
Mode: Issuer
AID: A0000000031010
TVR: 0000008000
IAD: 06010A03A02002
TSI: E800
ARC:
AC: 8AD281CA8984A07B
CVM: 5E0000

Total Tender	40.43
Change Due	0.00

3195005348 2

P-000190.SAT

G/L 650135

Company - 1010

Sativa Proposal Binding

GREEN ENVIRONMENTAL MANAGEMENT

PO Box 2212, Sisters, OR 97759 Phone: 541-549-1966

BILL TO:

Mr. Chris Heinrich
SouthWest Water Company
12535 Reed Road
Sugar Land, Texas 77478

RECEIVED
MAR - 1 2021
Per _____

INVOICE # 124898
DATE: 9/14/2020
TERMS: Due On Re...
P.O. NO. Nathan Au

PROPERTY ADDRESS:

Four SouthWest Water Co. Properties
Compton, California 90222
(See below for full addresses)

HGA Tax I.D. 33-6121706

DESCRIPTION	AMOUNT
Phase I Site Assessment	2,500.00
2015 East Hatchway Street 13320 South Willowbrook Avenue 13139 South Aranbe Avenue 2081 and 2083 East Stockwell Street Compton, California 90222	
Approved Chris Heinrich 3/1/21	
GL: 658010 WBS: P-000190.SAT	
1010 1900161329	

All invoices that are 30 days past due are subject to a 1.5% per month finance charge.

Total $2,500.00

MR VALUATION CONSULTING, LLC

INVOICE

August 27, 2020

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-A

RETAINER – Billing on account for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System by Suburban Water Systems. The Sativa Water System is located in Compton, California.

Professional Fee:	$ 63,750.00
Direct Expenses:	4,000.00
Overhead (@ 3 percent):	1,912.50
Total:	**$ 69,662.50**

Please note:
Currency: US Dollars
Terms: Due by August 31, 2020

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

CHASE Quick Pay

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MRV

MR VALUATION CONSULTING, LLC

RECEIVED
SEP 29 2020
ACCOUNTS PAYABLE

INVOICE

September 28, 2020

Coding: 1010 658040 / P-000190.SAT

Joseph Park

D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

09/28/2020

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-B

Billing on account for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System by Suburban Water Systems. The Sativa Water System is located in Compton, California.

Professional Fee:	$ 44,625.00
Direct Expenses:	1,500.00
Overhead (@ 3 percent):	1,339.00
Total:	**$ 47,464.00**

Please note:
Currency: US Dollars
Terms: Due by September 28, 2020

1900152933

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

CHASE Quick Pay

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MR VALUATION CONSULTING, LLC

INVOICE

October 22, 2020

Coding: 1010 658040 / P-000190.SAT

Joseph Park

D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

11/04/2020

RECEIVED

NOV 04 2020

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-C

Billing for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System in Compton, California by Suburban Water Systems. This invoice includes manhours to value the private easements.

Professional Fee:	$ 27,424.00
Overhead (@ 3 percent):	822.72
Total:	**$ 28,246.72**

Please note:
Currency: US Dollars
Terms: Due by October 26, 2020

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

CHASE Quick Pay

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

1900154854

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MR VALUATION CONSULTING, LLC

INVOICE

RECEIVED
NOV 30 2020
ACCOUNTING

November 18, 2020

Coding: 1010 658040 / P-000190.SAT

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

11/30/2020

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-D

Billing for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System in Compton, California by Suburban Water Systems. This time and expenses invoice is for manhours expended from November 1, 2020 through November 18, 2020.

Mark Rodriguez ($425 x 9.5 hours):	$ 4,037.50
Ryan Lehnau ($275 x 30.5 hours):	8,387.50
Expenses:	660.10
Overhead (@ 3 percent):	372.75
Total:	**$ 13,457.85**

Please note:
Currency: US Dollars
Terms: Due by November 25, 2020

190015082

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

CHASE Quick Pay

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MR VALUATION CONSULTING, LLC

INVOICE

December 11, 2020

Coding: 1010 658040 / P-000190.SAT

Joseph Park

D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

12/29/2020

RECEIVED

DEC 29 2020

ACCOUNTS PAYABLE

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-E

Billing for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System in Compton, California by Suburban Water Systems. This time and expenses invoice is for manhours expended from November 19, 2020 through December 11, 2020.

Mark Rodriguez ($425 x 21 hours):	$ 8,925.00
Mark Pomykacz ($425 x 2 hours):	850.00
Ninive Gomes ($350 x 19 hours):	5,225.00
Katherine Tantinan ($350 x 3 hours):	825.00
Ryan Lehnau ($275 x 30 hours):	8,250.00
Overhead (@ 3 percent):	722.25
Total:	**$ 24,797.25**

1100157603

Please note:
Currency: US Dollars
Terms: Due by December 16, 2020

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

CHASE Quick Pay

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MR VALUATION CONSULTING, LLC

INVOICE

JAN 04 RECD

January 4, 2021

Coding: 1010 658040 / P-000190.SAT

Joseph Park

D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

01/04/2021

Tim Miller
Associate General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Re: Invoice #: SUB-001-F

Billing for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System in Compton, California by Suburban Water Systems. This time and expenses invoice is for manhours expended from December 11, 2020 through December 31, 2020.

Mark Rodriguez ($425 x 10.0 hours):	$	4,250.00
Ryan Lehnau ($275 x 22.0 hours):		6,050.00
Overhead (@ 3 percent):		309.00
Total:	**$**	**10,300.00**

Please note:
Currency: US Dollars
Terms: Due by January 15, 2021

1900158078

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

CHASE Quick Pay

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

MR VALUATION CONSULTING, LLC

INVOICE

Coding: 1010 658040 / P-000190.SAT

May 28, 2021

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks
06/10/2021

Tim Miller
General Counsel
Suburban Water Systems
1325 North Grand Avenue, Suite 100
Covina, CA 91724

Craig Gott
FE1613867268O8B3BAA39C0FB6235BB0 contractworks
06/10/2021

Re: Invoice #: SUB-001-G

Billing for professional consulting services to provide valuation advisory services to support the acquisition of the Sativa Water System in Compton, California by Suburban Water Systems. This time and expenses invoice is for work performed from January 1, 2021 through May 25, 2021.

Mark Rodriguez (77.0 hours x $425/hour):	$ 32,725.00
Ninive Gomes (36.0 hours x $350/hour):	15,300.00
Ryan Lehnau (78.0 hours x $275/hour):	21,450.00
Land Appraisal (Update New Acquisition Date):	3,750.00
Direct Expenses:	4,460.17
Overhead (@ 3 percent):	2,084.25
Total:	**$ 79,769.42**

Please note:
Currency: US Dollars

Terms: Due by June 7, 2021

To send payment by check:

MR Valuation Consulting, LLC
5 Professional Circle, Suite 208
Colts Neck, NJ 07722

EIN 22-3702437

1800166878

CHASE Quick Pay

For Wire / Automated Clearing House:

JPMorgan Chase Bank
290 Route 34, Colts Neck, NJ 07722
ABA Routing: 021000021
Account: 783393051

For International Wire Transfers use:

Swift (or BIC) Code: CHASUS33

To pay via QuickPay with Zelle use the following email: QuickPay@MRValuation.com

If you have any questions or require any additional information, please feel free to contact us at 1-732-780-6000 or through mrv@mrvaluation.com. Thank you for your business!

3 pages

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

RECEIVED
NOV 18 2019
SWWC-FSC-AP

INVOICE

November 8, 2019

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0005
Invoice: 502248
MAM

Re: Response to Sativa Water District RFP

Fees for Professional Services Rendered through 10/31/19:	9,006.00
Disbursements made to your Account through 10/31/19:	118.50
Total Due on Bill:	**$9,124.50**

Coding: 1010 658040 / P-000190.SAT

William K. Bix
B3A17977DCBADC2E0C1B30DD0F4D4EE2 contractworks

11/13/2019

1010 1900135790

*** Remittance Address: ***
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS65
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

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JUL 07 2020
ACCOUNTING

INVOICE

June 24, 2020

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 510691
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 05/31/20:	5,582.50
5% Discount:	-279.13
Total Fees:	5,303.37
Disbursements made to your Account through 05/31/20:	299.23
Total Due on Bill:	**$5,602.60**

Coding: 1010 658040 / P-000190.SAT

William K. Dix
B3A17377DCBADC2E0C1B30DD0F4D4EE2 contractworks

07/07/2020

1800148790

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
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Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

RECEIVED
JUL 29 2020
ACCOUNTS PAYABLE

July 16, 2020

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 511565
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 06/30/20:	5,365.00
5% Discount:	-268.25
Total Fees:	5,096.75
Disbursements made to your Account through 06/30/20:	135.56
Total Due on Bill:	**$5,232.31**

Coding: 1010 658040 / P-000190.SAT

William K. Six
B3A17377DCBADC2E0C1B30DD0F4D4EE2 contractworks

07/28/2020

1900148966

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS65
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

RECEIVED
AUG 20 20
ACCOUNTING

August 12, 2020

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client:	190586
Matter:	0008
Invoice:	512470
LAD1	

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 07/31/20:	1,522.50
5% Discount:	-76.13
Total Fees:	1,446.37
Disbursements made to your Account through 07/31/20:	0.00
Total Due on Bill:	**$1,446.37**

Coding: 1010 658040 / P-000190.SAT

William K. Six
B3A17377DCBADC2E0C1B30DD0F4D4EE2 contractworks

08/19/2020

190015105|

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS65
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

September 22, 2020

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client:	190586
Matter:	0008
Invoice:	513782
	LAD1

Re: CPUC Approval of Purchase of Sativa Water System

RECEIVED
OCT 06
ACCOUNTING

Fees for Professional Services Rendered through 08/31/20:	870.00
5% Discount:	-43.50
Total Fees:	826.50
Disbursements made to your Account through 08/31/20:	0.00
Total Due on Bill:	**$826.50**

Coding: 1010 658040 / P-000190.SAT

William K. Dix
83A17377DC8ADC2E0C1B30DD0F4D4EE2 contractwork

10/05/2020

1900153195

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS65
Beneficiary: Nossaman, LLP
Client Name & File Number: (invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

November 2, 2020

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 514446
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 09/30/20:	1,232.50
5% Discount:	-61.63
Total Fees:	1,170.87
Disbursements made to your Account through 09/30/20:	0.00
Total Due on Bill:	**$1,170.87**

Coding: 1010 658040 / P-000190.SAT

William K. Dix
B3A17377DC8ADC2E0C1B30DD0F4D4EE2 contractworks

11/03/2020

1100154810

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS65
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

January 21, 2021

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 517969
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 12/31/20:	72.50
5% Discount:	-3.63
Total Fees:	68.87
Disbursements made to your Account through 12/31/20:	0.00
Total Due on Bill:	**$68.87**

Coding: 1010 658040 / P-000190.SAT

1900159952

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

02/01/2021

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS6S
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

February 24, 2021

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 519047
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

RECEIVED
FEB 26 REC'D
ACCOUNTING DEPT

Fees for Professional Services Rendered through 01/31/21:	223.50
5% Discount:	-11.18
Total Fees:	212.32
Disbursements made to your Account through 01/31/21:	0.00
Total Due on Bill:	**$212.32**

Coding: BD 1010 658040 / P-000190.SAT

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

02/26/2021

Craig Gott
FE161386726808B9BAA39C0FB8235BB0 contractworks

02/26/2021

190016232

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS6S
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

1007627

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

April 29, 2021

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 521207
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 03/31/21:	298.00
5% Discount:	-14.90
Total Fees:	283.10
Disbursements made to your Account through 03/31/21:	0.00
Total Due on Bill:	**$283.10**

MAY 05

1500144778

Coding: 1010 658040 / P-000190.SAT

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

05/05/2021

Craig Gott
FE161386726808B3BAA39C0FB6235BB0 contractworks

05/05/2021

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS6S
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax Identification No.
95-2219542

INVOICE

May 12, 2021

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 521879
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

Fees for Professional Services Rendered through 04/30/21:	1,937.00
5% Discount:	-96.85
Total Fees:	1,840.15
Disbursements made to your Account through 04/30/21:	0.00
Total Due on Bill:	**$1,840.15**

RECEIVED
JUL 05 RECD

PAY

OUTSTANDING INVOICES

Date	Invoice No	Amount	Payments Received	Remaining Balance	
04/29/21	521207	283.10	0.00	283.10	
TOTAL OF PRIOR OUTSTANDING INVOICES					**283.10**
TOTAL NOW DUE					**2,123.25**

1800166457

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS6S
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

NOSSAMAN LLP

ATTORNEYS AT LAW

777 South Figueroa Street
34th Floor
Los Angeles, CA 90017
T 213.612.7800
F 213.612.7801

Tax identification No.
95-2219542

INVOICE

June 28, 2021

Joseph Park
General Counsel
Suburban Water Systems
1325 N. Grand Ave. Suite 100
Covina, CA 91724-4044

Client: 190586
Matter: 0008
Invoice: 523292
LAD1

Re: CPUC Approval of Purchase of Sativa Water System

RECEIVED
JUN 29 2021
ACCOUNTING DEPT

Fees for Professional Services Rendered through 05/31/21:	447.00
5% Discount:	-22.35
Total Fees:	424.65
Disbursements made to your Account through 05/31/21:	0.00
Total Due on Bill:	**$424.65**

Coding: 1010 658040 / P-000190.SAT

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks
06/28/2021

Craig Gott
FE16138672680883BAA39C0FB6235BB0 contractworks
06/28/2021

1900147874

***** Remittance Address: *****
Nossaman LLP ***
777 South Figueroa Street
34th Floor
Los Angeles, CA 90017

Wire/ACH Instructions:
Wells Fargo Bank
420 Montgomery Street
San Francisco, CA 94104
Routing Number (Wire Transfer): 121000248
Routing Number (ACH): 122000247
Account Number: 4123806820
Swift Code (for international wires): WFBIUS6S
Beneficiary: Nossaman, LLP
Client Name & File Number: (Invoice Number)

Orange Coast Title Company - Builder Services
1551 N. Tustin Avenue, Suite 300 - Centralized Billing
Santa Ana, CA 92705
Unit 66

Invoice

Suburban Water Systems
12535 Reed Road
Sugar Land, TX 77478

Attn: Dan Medina
Reference: Sativa LA WD
Phone No.: 281-207-5909
Fax No.:

Invoice Date: July 24, 2020
Invoice No.: 140-2137903-66_1
Order Number: 140-2137903-66

Property Address: 13139 South Aranbe Avenue
Compton, CA 90222

County: Los Angeles
Sales Rep(s): House House

Underwriter: N/A

Date	Description	Reference	Liability	Fee
07/24/20	Preliminary Report		0.00	2,000.00
			TOTAL	$2,000.00

If you should have questions, please contact the undersigned. We appreciate your business and would like to "Thank you!"

Cordially,
Helen Johnson
Title Officer

658055
P-0001981.SAT

Craig Gott 10/19/2020
FE161386726808B3BAA39C0FB6235BB0 contractworks

19001537 94

V# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

RECEIVED
SEP 10 2018
ACCOUNTS PAYABLE

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1283
DATE 08/20/2018
DUE DATE 09/19/2018
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	July 15-31, 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	3,750.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$3,750.00**

658060

P-000190. Sat
1010037

1900116534

Return Check to Exhibit

Thank you for your business!

V# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

RECEIVED
FEB 04 2019
ACCOUNTS PAYABLE

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1285
DATE 09/01/2018
DUE DATE 10/01/2018
TERMS Net 30

1010 658060

P.000190.SAT

ACTIVITY	ACTIVITY	AMOUNT
Consulting	August 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	08.08.18 Mileage LAFCO Meeting - 3108 La Sombra Way, Fullerton, CA 92835 to/from 500 W Temple St, Los Angeles, CA 90012	26.16
	08.08.18 LAFCO Meeting Parking	25.00
	08.14.18 Southwest Airlines Los Angeles to Sacramento	177.98
	08.15.18 AVIS RENT-A-CAR 1 Sacramento and San Francisco (50% of rental charges)	183.30
Sales	*08.14.18 Sacramento Parking*	12.00
	08.14.18 IMPARK00370342A San Francisco Parking	18.00
	08.15.18 LAX AIRPORT LOT P 6 Sacramento and San Francisco	35.00
	08.14.18 Mileage - 3108 La Sombra Way, Fullerton, CA 92835 to 101-117 World Way, Los Angeles, CA 90045	18.75

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,996.19**

1900123775

APPROVED
FEB 04 2019
Craig Gott

Thank you for your business!

corp VH 1011121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

RECEIVED
OCT 01 2018
ACCOUNTS PAYABLE

INVOICE # 1296
DATE 10/01/2018
DUE DATE 10/31/2018
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	September 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	09.12.18 Ortega- AUTO PARK 14-GRAND AVE - LAFCO Meeting Parking	20.00
	09.2018 Suburban Water Systems- Ortega Mileage (93.8 miles @ .545/mile) (Detail attached)	51.12
	Suburban Water Systems - Peralta Gailey September Mileage - 09.20.18 Travel to/from OSG to 1421 North Wilmington Ave, Compton, CA . 2519 E. Candlewood Avenue, Orange, CA AB 1577 meeting (53 miles @ .535/mile)	28.89

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,600.01**

658060
P-000190.SAT
10/1/18
1800117456

Thank you for your business!

conv A ✓ J# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

RECEIVED
FEB 04 2019
ACCOUNTS PAYABLE

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1308
DATE 11/01/2018
DUE DATE 12/01/2018
TERMS Net 30

658060

Coff 1010 P. 000190. SAT

ACTIVITY	ACTIVITY	AMOUNT
Consulting	October 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	Oct 2018 Suburban Water Systems- Ortega Mileage 10.10.18 1370 N. Brea Blvd, Fullerton CA to/from 166-182 N Grand Ave, Los Angeles, CA - LA Water Quality Control Board (45.5 miles) 10.11.18 1370 N. Brea Blvd, Fullerton, CA to/from 268-332 East Cesar E Chavez Avenue, Los Angeles, CA 90012 - LAFCO Meeting (50.6 miles)	53.46
	10.11.18 AUTO PARK 14-GRAND AVE - LAFCO Parking	20.00
	10.11.18 ABM UNION STATION WEST 10 - LA Regional Water Quality Control Board Parking	16.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,589.46**

APPROVED
FEB 04 2019
Craig Gott

1900123776

Thank you for your business!

J# 1011121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

INVOICE

RECEIVED
DEC 10 2018
ACCOUNTS PAYABLE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1319
DATE 12/02/2018
DUE DATE 01/01/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	November 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	11.14.18 Suburban Water Systems- Ortega Mileage 300 E Chapman Ave, Orange, CA 92866 to 221 N. Los Angeles St., Los Angeles, CA to 3108 La Sombra Way, Fullerton, CA 92835 (65.9 miles)	35.92
	11.14.18 AUTO PARK 14-GRAND AVE - LAFCO Parking	20.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,555.92**

658060
P-000170.SAT
Co 1010

Craig Gott
FE161386726808B3BAA39C0FB6235BB0 contractworks.

Craig Gott **12/10/2018**

1900120500

Thank you for your business!

Corp ✓

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
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V# 011121

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Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1330
DATE 12/31/2018
DUE DATE 01/30/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	December 2018 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	12.12.18 Suburban Water Systems- Ortega Mileage -December LAFCO Meeting 1370 N Brea Blvd, Fullerton, CA to/from 255 E Temple St, Los Angeles, CA (59.1 miles @ $ .545/mile)	32.21

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,532.21**

658060
P.000190.SAT
1010

APPROVED
JAN 08 2019
Craig Gott

1900121980

Return check to Beatriz

Thank you for your business!

Comm ✓ SuburbanInvoices@swwc.com
V# 101121

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1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

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FEB 04 2019
ACCOUNTS PAYABLE

ORTEGA STRATEGIES GROUP

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BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1338
DATE 02/03/2019
DUE DATE 03/05/2019
TERMS Net 30

1010 658060
P. 000190. SAT

ACTIVITY	ACTIVITY	AMOUNT
CONSULTING	January 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	01.2019 Suburban Water Systems - 01.03.19 3108 La Sombra Way, Fullerton, CA 92835 Christopher Columbus Transcontinental Hwy & I-10 & San Bernardino Fwy, West Covina, CA 91791 - Consultation with Del Rio MWC (36.1 miles @ $.58/mile =$20.94) -01.09.19 3108 La Sombra Way, Fullerton, CA 92835 to/from 401-443 W Temple St, Los Angeles, CA 90012 - LAFCO (48.6/mile @ $.58/mile = $28.19)	49.13

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,549.13**

APPROVED
FEB 04 2019
Craig Gott

1900123777

Thank you for your business!

Corp ✓ V#1011121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
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Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

RECEIVED
APR 04 2019
ACCOUNTS PAYABLE

INVOICE # 1350
DATE 03/02/2019
DUE DATE 04/01/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	February 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	02.13.19 Suburban Water Systems- Ortega Mileage (54.9 miles @ $ .58/mile) 3108 La Sombra Way, Fullerton, CA 92835 to/from 401-443 W Temple St, Los Angeles, CA 90012 - LAFCO Meeting	31.84
	02.13.19 PCAM ARCHDIOCESE - LAFCO Parking	22.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,553.84**

Vendor #1011121

Coding: 1010 658060 P.000190.SAT

1900126338

Craig Gott
FE161386726808B3BAA39C0FB6235BB0 contractworks.

04/04/2019

✓ Beatriz

Thank you for your business!

Corp ✓ V# 1011121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

Invoice

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

RECEIVED
APR 04 2019
ACCOUNTS PAYABLE

INVOICE # 1364
DATE 04/03/2019
DUE DATE 05/03/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	March 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	7,500.00
	03.13.19 Suburban Water Systems- Ortega Mileage (54.9 miles @ $ .58/mile) 3108 La Sombra Way, Fullerton, CA 92835 to/from 401-443 W Temple St, Los Angeles, CA 90012 - LAFCO Meeting	31.84

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,531.84**

Vendor #1011121

Coding: 1010 658060 P.000190.SAT

✓ Burton

Craig Gott
FE1613867268088B3BAA39C0FB6235BB0 contractworks.

1900126339

Thank you for your business!

V# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

Invoice

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1370
DATE 05/04/2019
DUE DATE 06/03/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	April 2019 - Government and Media Relations Services In connection to Company's proposed acquisition of the Sativa system	7,500.00

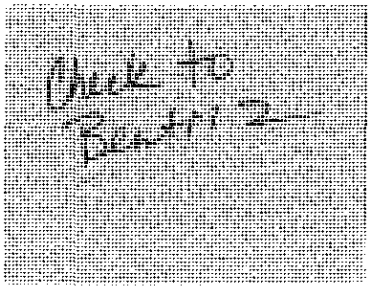
Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$7,500.00**

APPROVED
MAY 21 2019
Craig Gott

658060
P-000190, SAT

1900128223



Thank you for your business!

V# 1011121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

Invoice

RECEIVED
JUN 10 2019
PAYABLES

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1380
DATE 06/02/2019
DUE DATE 07/02/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	May 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	2,500.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$2,500.00**

658060
P 000190.SAT

1900128951

Thank you for your business!

VI# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
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adan@ostrategiesgroup.com
www.ostrategiesgroup.com

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Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

RECEIVED
JUL 02 2019
AMOUNT PAYABLE

INVOICE # 1395
DATE 07/02/2019
DUE DATE 08/01/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	June 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	2,500.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$2,500.00**

Craig Hott
FE161386726B08B3BAA39C0FB62358B0 contractworks

07/05/2019

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JUL 08 2019

658060
P-000190.SAT

1900130059

Thank you for your business!

VH 1011121

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Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

Invoice

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

AUG 02 2019

INVOICE # 1401
DATE 08/01/2019
DUE DATE 08/31/2019
TERMS Net 30

ACTIVITY	ACTIVITY	AMOUNT
Consulting	July 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	2,500.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$2,500.00**

#1010 658060
P-000190.SAT

8/5/19

1900131625

Thank you for your business!

V# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 238
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

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INVOICE

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SEP 03 2019
ACCOUNTS PAYABLE

BILL TO
Richard Rich
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1411
DATE 09/02/2019
DUE DATE 10/02/2019
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	August 2019 - Government and Media Relations Services in connection to Company's proposed acquisition of the Sativa system	2,500.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$2,500.00**

9/3/19

658060
P-000190.SAT

1900132606

Thank you for your business!

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Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

V# 1011121

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Craig Gott
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1499
DATE 05/06/2020
DUE DATE 06/05/2020
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	April 2020 - Support with acquisition of water systems in the Central Basin (Details attached)	3,750.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N. Brea Blvd. Ste 238
Fullerton, CA 92835

BALANCE DUE **$3,750.00**

Craig Gott
FE161386726808B3BAA39C0FB6235BB0 contractworks

05/07/2020

658060
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Beatriz

1900145987

Thank you for your business!

Ortega Strategies Group
1370 N. Brea Blvd., Suite 134
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

10/11 21

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Craig Gott
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

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INVOICE # 1609
DATE 05/01/2021
DUE DATE 05/31/2021
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	Feb 2021 - Support for Sativa Project (Detail attached)	900.00
	Feb 20201 - Support for Sativa Project (Detail attached)	1,387.50

Please make check payable to Ortega Strategies Group and mail to:
1370 N Brea Blvd., Ste. 134
Fullerton, CA 92835

BALANCE DUE **$2,287.50**

Craig Gott 05/03/2021
FE1613867268088B3BAA39C0FB6235BB0 contractworks

658060
P-000190.SAT

1800164717

Thank you for your business!

Ortega Strategies Group
1370 N. Brea Blvd., Suite 134
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

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INVOICE

BILL TO
Craig Gott
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

RECEIVED
MAY 04 2021
ACCOUNTS PAYABLE

INVOICE # 1610
DATE 05/01/2021
DUE DATE 05/31/2021
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	March 2021 - Support for Sativa Project (Detail attached)	2,775.00
	March 20201 - Support for Sativa Project (Detail attached)	750.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N Brea Blvd., Ste. 134
Fullerton, CA 92835

BALANCE DUE **$3,525.00**

Craig Gott **05/03/2021**
FE1613867268808B3BAA39C0FB6235BB0 contractworks

658060
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1900164716

Thank you for your business!

Ortega Strategies Group
1370 N. Brea Blvd., Suite 134
Fullerton, CA 92835
(714) 449-3397
adan@ostrategiesgroup.com
www.ostrategiesgroup.com

V# 101121

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ACCOUNTS PAYABLE

BILL TO
Craig Gott
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1628
DATE 06/06/2021
DUE DATE 07/06/2021
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	April 2021 - Support for Sativa Project (Detail attached)	1,950.00
	April 20201 - Support for Sativa Project (Detail attached)	675.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N Brea Blvd., Ste. 134
Fullerton, CA 92835

BALANCE DUE **$2,625.00**

658060
P.000190. SAT

Craig Gott
FE1613867266083BAA39C0FB6235BB0 contractworks

06/07/2021

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Thank you for your business!

V# 101121

Ortega Strategies Group
1370 N. Brea Blvd., Suite 134
Fullerton, CA 92835
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adan@ostrategiesgroup.com
www.ostrategiesgroup.com

ORTEGA STRATEGIES GROUP

INVOICE

BILL TO
Craig Gott
Suburban Water Systems
1325 N Grand Ave Ste 100
Covina, CA 91724
United States

INVOICE # 1641
DATE 07/12/2021
DUE DATE 08/11/2021
TERMS Net 30

ACTIVITY	DESCRIPTION	AMOUNT
Consulting	May 2021 - Support for Sativa Project (Detail attached)	637.50
Consulting	June 2021 - Support for Sativa Project (Detail attached)	1,050.00
	June 2021 - Support for Sativa Project (Detail attached)	750.00

Please make check payable to Ortega Strategies Group and mail to:
1370 N Brea Blvd., Ste. 134
Fullerton, CA 92835

BALANCE DUE **$2,437.50**

658060
P-000190.SAT

Craig Gott
FE16138672680893BAA39C0FB6235BB0 contractworks

07/15/2021

1900168663

Thank you for your business!

STRATECON INC.

Invoice

Coding: 1010 658040 / P-000190.SAT

Joseph Park
D1F8FA1C6B5D7325E9A594D3AD835C44 contractworks

February 28, 2021

Tim Miller
Southwest Water Company
Via email: tmiller@swwc.com

03/16/2021

Craig Hott
FE1613967268088B3BAA39C0FB6235BB0 contractworks

Project: Updated Valuation of Central Basin Groundwater Rights 03/16/2021
Period: February 2021

For Professional Services per attached breakdown

Summary of February Invoice Due: Upon Receipt		
Rod Smith	9.75 hours @ $450 per hour	$4,387.50
Marta Weismann (Dir. of Research)	3 hours @ $150 per hour	$450.00
Total amount due this invoice		**$4,837.50**

Summary of Outstanding Invoices		
None		$0.00
Total amount due from Outstanding Invoices		**$0.00**
Grand Total Due		**$4,837.50**

1f00162251

Remit payment to:

Stratecon Inc.
3400 Inland Empire Blvd, Suite 101
Ontario, CA 91764

Tax ID 95-3883154
Payments past due will be charged a 1.5% per month late fee

STRATECON INC.

4 pages

Inv.# 093019

RECEIVED
OCT - 7 2019
SWWC-FSC-AP

Invoice

September 30, 2019

Approved
Chris Heinrich
10/7/19

GL: 658010
CC: P-000190.SAT
Vendor #: 1011517

Chris Heinrich
Director of Business Development
SouthWest Water Company
12535 Reed Rd.
Sugar Land, TX 77478
Phone 281.207.5906
E-mail cheinrich@swwc.com

Project: Valuation of Central Basin Adjudicated Groundwater Rights
Period: September 2019

For Professional Services per attached breakdown

Summary of September Invoice *Due: Upon Receipt*	
Per agreement	$10,000.00
Total amount due this invoice	**$10,000.00**

Summary of Outstanding Invoices	
None	$0.00
Total amount due from Outstanding Invoices	**$0.00**
Grand Total Due	**$10,000.00**

1010 1900133983

Remit payment to:

Stratecon Inc.
3400 Inland Empire Blvd, Suite 101
Ontario, CA 91764

Tax ID 95-3883154
Payments past due will be charged a 1.5% per month late fee

V# 1010891

5670 Wilshire Blvd. Ste 1530 Los Angeles, CA 90036 888-740-0747

SOUTHWEST WATER COMPANY

07/19/2018
Page 1/1

Invoice # 23059

07/11/2018 **Reference: ORTEGA, JR., ADAN**

ADAN ORTEGA ASSOCIATES, INC. D/B/A ORTEGA STRATEGIES GROUP (CA)	LIMITED DUE DILIGENCE	$595.00
ORTEGA, JR., ADAN	LIMITED DUE DILIGENCE	$595.00
ORTEGA, JR., ADAN - RUSH	RUSH ASAP SURCHARGE + 30%	$357.00
	Case Total:	**$1,547.00**

RECEIVED

AUG 23 2018

ACCOUNTS PAYABLE

Pay by Credit Card

Card #: _____

Expiration: _____/_____ CVV Code: _____

Billing Zip Code: _____

Card Type: _____

Initial to Approve Charges: _____

If paying by CC, Fax to 805-642-5368 or
scan and email to orders@vcheckglobal.com

Payments due upon receipt.
Please make checks payable to VCHECK GLOBAL.
Tax ID 46-1651362
Remit to address at top of invoice.

8/22/18

658055
60000039

Copy of Check to Beatriz

190011596 8
190001828 1

R.17-06-024_11. Sativa’s Request for Proposal

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

MARK PESTRELLA, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

September 11, 2019

IN REPLY PLEASE
REFER TO FILE: BRC-2

REQUEST FOR PROPOSALS
FOR THE TRANSFER OR SALE OF SATIVA WATER SYSTEM
RFP NUMBER: BRC0000114

The Los Angeles County (County) Public Works is considering the transfer or sale of the physical facilities, operational assets, operational liabilities and water rights associated with their Sativa Water System (Sativa System). Public Works invites interested bidders to submit a Proposal for the Sativa System.

Proposals must be addressed and submitted to the Public Works, 900 South Fremont Avenue, Alhambra, California 91803, **CASHIER'S OFFICE, located on the Mezzanine Level, on/or before 2 p.m., October 9, 2019.** Envelopes should be marked: "Request for Proposals for the Transfer or Sale of Sativa Water System. RFP Number BRC0000114." **Proposals received after the deadline will not be accepted.**

Mandatory Pre-Proposal Conference:

A pre-proposal conference to answer questions concerning the project will be held on **Monday, September 23, 2019, at 8:30 a.m.**, at the Public Works Building located at 900 South Fremont Avenue, Alhambra, CA 91803 in Conference Room B. If your firm is attending, it is strongly encouraged that a confirmation email is sent to the Contract Administrator listed below by September 22, 2019.

Please be advised due to visitors parking lot closure, plan for an additional 30-45 minutes to find parking. The second level of the HQ parking structure will be made available for visitor parking.

After the meeting, bidders may proceed to the Sativa System for an optional tour of the facilities, stating at 2:00 p.m. Information will be provided at the pre-proposal conference. Parking is limited near the Sativa System office, so carpooling is highly recommended.

"Doing Business with Public Works" Website Registration:

All interested proposers for this RFP are strongly encouraged to register at https://dpw.lacounty.gov/contracts/Opportunities.aspx. Only those firms registered for this RFP through the Public Works website will receive automatic notification when any update to this RFP is made. **County does not have an obligation to notify any proposers other than through the Public Works website automatic notification system.**

Doing Business with Small Business:

The County provides many benefits for firms that are certified through the County's Local Small Business Enterprise (LSBE) Program. Eligible firms, prime contractors and subcontractors are strongly encouraged to participate, and receive benefits available only to LSBE's such as price preference during solicitation process, when applicable, and the LSBE Prompt Payment Program, which ensures payment within 15 days of receipt of an undisputed invoice for goods or services. To learn more about the LSBE program and certification requirements follow this link: http://osb.lacounty.gov/Certifications.htm.

Follow-us on Twitter:

We encourage you to follow-us on Twitter @LACoPublicWorks for information on Public Works and instant updates on contracting opportunities and solicitations.

Proposers must submit questions in writing and request information for this solicitation by September 27, 2019. If you have any questions regarding this Request for Proposals, you may contact Ms. Erayna Chang at (626) 300-2325, or by e-mail at eqchang@dpw.lacounty.gov.

Very truly yours,

MARK PESTRELLA
Director of Public Works

JOSE QUEVEDO
Assistant Deputy Director
Business Relations and Contracts Division

JQ:ec

REQUEST FOR PROPOSALS

FOR THE TRANSFER OR SALE OF SATIVA WATER SYSTEM

RFP NUMBER: BRC0000114

COUNTY OF LOS ANGELES
PUBLIC WORKS
BUSINESS RELATIONS AND CONTRACTS DIVISION
900 SOUTH FREMONT AVENUE, 8TH FLOOR
ALHAMBRA, CALIFORNIA 91803
TELEPHONE: (626) 300-2325
EMAIL: EQCHANG@DPW.LACOUNTY.GOV

REQUEST FOR PROPOSALS
FOR THE TRANSFER OR SALE OF SATIVA WATER SYSTEM

TABLE OF CONTENTS

1. Introduction and Overview
2. Bidder’s Notebook
3. General Conditions
4. Format of Proposal
5. Evaluation Criteria

EXHIBIT

A. Bidder's Notebook

REQUIRED FORMS

- Non-Collusion Declaration
- Avoidance of Conflict of Interest Certificate
- Proposer's EEO Certification Form
- Familiarity with the County Lobbyist Ordinance Certification

ATTACHMENT

1. Proposal Bid Sheet

REQUEST FOR PROPOSALS

FOR THE TRANSFER OR SALE OF SATIVA WATER SYSTEM

1. INTRODUCTION AND OVERVIEW

1.1 General

The Los Angeles County (County) Public Works (Public Works) is considering the transfer or sale of the physical facilities, operational assets, operational liabilities and water rights associated with their Sativa Water System (Sativa System). Public Works invites interested Bidders to submit a Proposal for the Sativa System, which is characterized in a separate Bidder's Notebook (Exhibit A).

The Bidder's Notebook describes the Sativa System inventory of physical facilities, revenue, expense, regulatory submittals, agreements, water rights, and other information ancillary to the operation of the Sativa System. Information on the Sativa System operation is provided for the most recent five years, to the extent information is available. The Bidder's Notebook provides further information regarding the limitations and potential accuracy of this information.

1.2 Consultant Selection

County will select a successful Proposer based on highest rated proposal, which represents the best value to County, regardless of race, creed, color, or gender. The successful Proposer is also referred to as the Consultant/Contractor/Bidder in this document.

1.3 Processing of this RFP will be handled in the following manner:

1.3.1 An initial pass/fail evaluation will be made for each proposal to determine whether the mandatory requirements required by Section 4, are included in each proposal. Proposers that pass the initial pass/fail evaluation will be submitted to the Evaluation Committee for evaluation and rating. The County may also utilize the services of appropriate experts to assist in the evaluation process.

1.3.2 All proposals will be evaluated by the Evaluation Committee who may recommend a Proposer for award of agreement. Public Works reserves the right to conduct oral interviews with up to three (3) of the high ranked Proposers or as appropriate and in the interests of the public and the ratepayers in the territory of the Sativa System. The oral presentations will be evaluated by the Evaluation Committee, who will combine the scores from the written proposals with the scores from the oral interviews (if conducted) to recommend a Proposer for award. The recommendation for selection will be made without regard to race, creed, color, or gender.

1.3.3 Public Works, at its sole discretion, reserves the right to reject any and all Proposals or waive minor deficiencies, irregularities, or technicalities in any proposal, if determined to be in the interests of the public and the ratepayers in the territory of the Sativa System.

1.3.4 When the recommendation by the Evaluation Committee is approved by Public Works, the highest ranked Proposer will be invited to negotiate an Agreement for submission to the Board of Supervisors for its consideration and possible approval. If a satisfactory Agreement cannot be negotiated, the County may, at its sole discretion, begin contract negotiations with the next highest rated Proposer who submitted a proposal, as determined by the County. The County reserves the right to negotiate the terms, conditions, and price of the Proposal(s), in the sole discretion of the County, to achieve the most beneficial program and price in the interests of the public and the ratepayers in the territory of the Sativa System. The County, in its sole discretion, may limit the negotiation, if any, to one or more responsive and responsible Proposers in accordance with the evaluation criteria set forth in this RFP. The negotiation with the Proposers will not result in a change in the rating of the Proposers. In the event that additional elements, changes, or enhancements to existing elements contained in this RFP may be required, Public Works reserves the right to negotiate with the proposer to cause these changes to be incorporated in the agreement. Nothing herein requires Public Works to proceed with the sale of the Sativa System or commits Public Works to any particular price or term.

1.3.5 Upon award of agreement by the Board of Supervisors, Public Works will process a Transfer or Sale Agreement to execute the contract. Additional Local and State approvals may be required prior to or as part of the completion of the transfer or sale.

1.3.6 Notwithstanding a recommendation of a department, agency, individual, or other, the Board of Supervisors retains the right to exercise its judgment concerning the selection of a Proposer and the terms of any resultant agreement, and to determine which Proposer best serves the interests of the public and the ratepayers in the territory of the Sativa System. The Board of Supervisors is the ultimate decision-making body and makes the final determinations necessary to arrive at a decision to award, or not award, a Transfer or Sale agreement.

1.4 RFP Schedule

A tentative RFP schedule is provided for information purposes only:

- Interviews (if conduct): October 2019
- Final Selection of a Consultant: November 2019
- Negotiation period: December 2020
- Public Works finalizes transfer/sale recommendation: January 2020
- Board of Supervisors considers/approves transfer/sale: January/February 2020

The County reserves the right to revise this schedule at any time during the selection process.

2. BIDDER'S NOTEBOOK

See Exhibit A.

3. GENERAL CONDITIONS

3.1 General Conditions

This RFP is a solicitation for proposals only, and is neither intended, nor to be construed as, an offer to enter into an agreement or engage in any formal competitive bidding or negotiation pursuant to any statute, ordinance, rule, or

regulation. Thus, the County reserves the unqualified right to cancel this RFP and to reject any or all proposals for any reason.

3.2 County's Responsibilities

County is responsible only what is expressly stated in this RFP or any future addenda, also referred to as notices, that may be issued to this RFP. County is not responsible for, and shall not be bound by, any representations otherwise made by any individual acting or purporting to act on its behalf.

3.3 Cost of Proposal

The County shall not in any way be liable or responsible for any costs incurred in connection with the preparation, submittal, or presentation of any proposal submitted in response to this request.

3.4 Compliance with RFP

Responses to this RFP shall be made according to the specifications and instructions contained herein. Failure to adhere to RFP instructions may be cause for rejection of any proposal.

3.5 Truth and Accuracy of Representations

Substantially false, misleading, incomplete, or unresponsive statements and/or failure to adhere to the format herein described may be sufficient cause for rejection. The evaluation and determination of the fulfillment of the above requirement shall be in the County's sole judgment and shall be final.

3.6 Contract Execution

The resultant agreement of this RFP shall be negotiated with the selected firm. If an agreement cannot be reached, the County may exercise the option of negotiating and awarding the agreement to the next highest rated Proposer.

3.7 Acceptance of Terms and Conditions

Proposers understand and agree that submittal of a proposal will constitute acknowledgment and acceptance of, and a willingness to comply with, all of the terms, conditions, and criteria contained in this RFP, including attachments thereto. Any and all parts of the submitted proposal may

become part of any resultant agreement between the selected Proposer and the County.

3.8 County's Changes to RFP

County reserves the right to interpret or change any provisions of this RFP at any time prior to the proposal submittal date. Such interpretations or changes shall be in the form of addenda (or also referred to as Notice) to this RFP. Such addenda will be made available to each person or organization who has registered through the Public Works "Doing Business with DPW" website for this RFP at http://dpw.lacounty.gov/general/contracts/opportunities/. Should such addenda require additional information not previously requested, a Proposer's failure to address the requirements of such addenda may result in the Proposal found non-responsive and/or the Proposer non-responsible.

3.9 Proposer Changes to Proposal

Until the proposal submission deadline, errors in proposals may be corrected by submitting a request in writing to withdraw the proposal and by submission of a replacement proposal with the mistakes corrected. Corrections will not be accepted once the deadline for submission of proposals has passed.

3.10 Consistency with Laws

Any agreement entered into by the Proposer shall be consistent with applicable federal, state, and local laws.

3.11 Notice to Proposers Regarding the Public Records Act

Responses to this solicitation shall become the exclusive property of the County. Absent extraordinary circumstances, at such time as (a) with respect to the recommended bidder's/proposer's bid/proposal, Public Works completes agreement negotiations and obtains a letter from an authorized officer of the recommended bidder/proposer that the negotiated agreement is a firm offer of the recommended bidder/proposer, which shall not be revoked by the recommended bidder/proposer pending the department's completion of the process under the applicable protest policy as set forth in this RFP and approval by the Board of Supervisors and (b) with respect to all other bidders/proposers, Public Works recommends the recommended

bidder/proposer(s) to the Board and such recommendation appears on the Board agenda, bids/proposals submitted in response to this solicitation become a matter of public record, with the exception of those parts of each bid/proposal which are justifiably defined by the bidder/proposer as business or trade secrets, and plainly marked as "Trade Secret," "Confidential," or "Proprietary."

The County shall not, in any way, be liable or responsible for the disclosure of any such record or any parts thereof, if disclosure is required or permitted under the California Public Records Act or otherwise by law. **A blanket statement of confidentiality or the marking of each page of the bid/proposal as confidential shall not be deemed sufficient notice of exception. The bidders/proposers must specifically label only those provisions of their respective bid/proposal which are "Trade Secrets," "Confidential," or "Proprietary" in nature.**

In the event the County is required to defend an action on a Public Records Act request for any of the aforementioned documents, information, books, records, and/or contents of a proposal marked "confidential," "trade secrets," or "proprietary," Proposer agrees to defend and indemnify County from all costs and expenses, including reasonable attorneys' fees, incurred in connection with any action, proceedings, or liability arising in connection with the Public Records Act request.

3.12 Contact with County Employees

As of the issue date of this RFP and continuing until the final date for submittal of proposals, all Proposers are specifically directed not to hold meetings, conferences, or technical discussions regarding the RFP with County employees or agents. During the submittal period, questions regarding this RFP may be directed to the person indicated in the cover letter or e-mailed to:

Ms. Erayna Chang
County of Los Angeles Public Works
Business Relations and Contracts Division
900 South Fremont Avenue, 8th Floor
Alhambra, California 91803-1331
eqchang@dpw.lacounty.gov

Contact with any other County official, employee, or agent listed below during the submittal period regarding this RFP may be cause for immediate disqualification of the Proposer as determined in the sole discretion of the County.

DRP Engineering, Inc.
Stetson Engineers, Inc.
Harold Morgan
SAFNA Engineering and Consulting
CivilTec Engineering, Inc.
Tetra Tech, Inc.
Williams Pipeline Contractors, Inc.
Reliable Water Solutions

3.13 County of Los Angeles Lobbyist Ordinance

The County has enacted an ordinance regulating the activities of persons who lobby County officials. This Ordinance, referred to as the Lobbyist Ordinance, defines a County lobbyist and imposes certain registration requirements upon individuals meeting the definition. The complete text of the Ordinance can be found in County Code Chapter 2.160. In effect, each person, corporation, or other entity who seeks a County permit, license, franchise, or contract must certify compliance with the Ordinance. As part of this solicitation process, it is the responsibility of each Proposer to review the Ordinance independently as the text of said Ordinance is not contained within this RFP. Thereafter, each person, corporation, or other entity submitting a response to this RFP must certify that each County lobbyist, as defined by Los Angeles County Code Section 2.160.010 and each such County Lobbyist is not on the Executive Office's List of Terminated Registered Lobbyists by completing and submitting the Familiarity with the County Lobbyist Ordinance Certification, as part of their proposal.

3.14 Gratuities

It is improper for any County officer, employee, or agent to solicit consideration, in any form, from a Proposer with the implication, suggestion, or statement that the Proposer's provision of the consideration may secure more favorable treatment for the Proposer in the award of the contract or that the Proposer's failure to provide such consideration may negatively affect the County's consideration of the Proposer's submittal. A Proposer shall not

offer or give, either directly or through an intermediary, consideration, in any form, to a County officer, employee, or agent for the purpose of securing favorable treatment with respect to the award of the contract.

A Proposer shall immediately report an attempt by a County officer, employee, or agent to solicit such improper consideration. The report shall be made either to the Public Works' manager charged with the supervision of the employee or to the County Auditor-Controller's Employee Fraud Hotline at (800) 544-6861. Failure to report such a solicitation may result in the Proposer's submittal being eliminated from consideration.

Among other items, such improper consideration may take the form of cash, discounts, services, the provision of travel or entertainment, or tangible gifts.

3.15 Conflict of Interest

No County employee whose position in the County enables him/her to influence the selection of a Contractor for this RFP, or any competing RFP, nor any spouse of economic dependent of such employees, shall be employed in any capacity by a Proposer or have any other direct or indirect financial interest in the selection of a Contractor. Proposer shall certify that he/she is aware of and has read Section 2.180.010 of the Los Angeles County Code as state in the Avoidance of Conflict of Interest Certificate.

3.16 Proposals Submitted

Only one proposal from an individual, firm, partnership, corporation, or association may be submitted. Using the same or different names to submit additional proposals is not acceptable, and such proposals will not be considered. If the County has reasonable grounds for believing that any Proposer has an interest in more than one proposal for the work contemplated, the proposal may be rejected as nonresponsive and/or nonresponsible. If the County has reason to believe that collusion exists among the Proposers, the proposals will be rejected, and such Proposers and participants may be subject to debarment.

3.17 Protest Review Process

The County will handle and process any and all protests in connection with this RFP according to the County of Los Angeles Contracting Manual, Countywide Construction Contracting Policy Guidelines, No. P-05-04, "Bid

Protests", dated March 31, 2003. Proposers who wish to file a protest shall do so in accordance with the requirements specified in Construction Contracting Policy Guideline No. P-05-04, which can be found at http://dpw.lacounty.gov/general/bids/BidProtests.pdf.

3.18 Consultant Independence

The County Board of Supervisors has adopted a countywide policy, Board Policy No. 5.090, that prohibits any person, or any firm or any subsidiary of a firm [collectively "firm"] from submitting a bid or proposal in any County solicitation process where the person or firm, assisted in the development or preparation of the solicitation document(s). Neither Consultant nor any subsidiary of or subcontractor to Consultant shall participate in any way in any future solicitation conducted by County that includes or is based upon any solicitation document that is developed as a result of the services rendered by Consultant under this Agreement. As this prohibition applies to subcontractors of the Consultant, Consultant shall notify any subcontractors providing services under this Agreement of this prohibition before they commence work under this Agreement. Any response to a solicitation submitted by Consultant or by any subsidiary of or subcontractor to Consultant in violation of this provision shall be rejected by County. This provision shall survive the expiration or other termination of this Agreement.

4. FORMAT OF PROPOSAL

The response to this RFP shall be made according to the requirements set forth in this Section, both for content and for sequence. Noncompliance with these requirements or the inclusion of conditions, limitations, or misrepresentations, may be cause for rejection of the proposal.

Public Works does not assume responsibility for documents that are incorrectly submitted. It shall be the responsibility of the Consultant to confirm proper delivery and receipt by Public Works of a submitted proposal.

Proposals submitted in hard copy format shall include seven (7) complete bound copies AND one (1) electronic copy on a flash drive, of the proposal and related information and shall be submitted to:

County of Los Angeles Public Works
Cashier's Office
900 South Fremont Avenue, Mezzanine Level
Alhambra, California 91803-1331
Attention: Erayna Chang

PROPOSALS RECEIVED AFTER THE DEADLINE WILL NOT BE ACCEPTED.

4.1 Format of Proposal Summary

Proposal submittals shall be organized as indicated below. Specific requirements for each of the Consultant's proposal sections are included hereinafter. This requirement applies to proposals submitted in electronic and/or hard copy format.

4.1.1 Mandatory Contents

Part 1 - Cover Letter

Part 2 - Table of Contents

Part 3 – Technical Proposal

3A - Statement of Qualifications

3B – Financial Information

3C – Plan to Address Primary Issues of the Sativa System

Part 4 - Required Forms/Certifications

4.2 Specific Requirements for each Part and Section of the Proposal

4.2.1 Part 1

Cover Letter shall include: 1) proposer's attestation to its accuracy, signed by a representative authorized to execute binding legal documents on behalf of the proposer; 2) the name, title, address, telephone and email of the representative. If different from the preceding individual, please also provide the same information for the executive who has the authority to negotiate and execute an agreement on behalf of the utility; 3) an Executive Summary of the

proposal, including any exceptions or additional advantages that are not provided for in other sections. An exception is defined as the proposer's inability or unwillingness to respond to a specific request or question in this RFP. All exceptions must be identified and explained in the written response sections of the proposer's submittal.

4.2.2 Part 2

Table of Contents shall include an outline of the proposal, identified by sequential page number, and section title as described herein.

4.2.3 Part 3

The Technical Proposal section forms the basis for the review and scoring by the Evaluation Committee and shall be divided into three subparts:

3A - Statement of Qualifications

3B – Financial Information

3C – Plan to Address Primary Issues or Sativa System

4.2.3A Part 3A

Statement of Qualifications shall include the following information:

Section 1 – Organizational Information

A. Provide a general description and history of the organization of the Purchaser. If the organization is a corporation, identify the state and date of incorporation, and parent corporation. If a municipality or other public agency, identify the entity's manager, Public Works Director, and Water Utility Manager, as appropriate. Provide an organization chart for key personnel and the number of total employees in the water division. Provide an indication of the proximity of personnel to the Sativa System.

B. Provide the address of the organization's California headquarters and a brief description of the functions (including

administration, management, and operational support), which the headquarters provides to District system operations.

C. Identify the number and size (number of connections) of separate operating and rate making districts. Identify the proximity of such districts to the Sativa System.

D. Provide the name, address, email address, and phone number of the person or persons within the organization who will serve as point(s) of contact.

E. Provide any management audit report completed on the organization within the last four years.

Section 2 – Water Utility Management Experience

Generally describe your organization's experience in municipal utility management, including engineering, system design, economic and financial analysis, water rights and water supply.

A. Engineering. Provide profiles of primary engineering personnel. Describe In-house engineering capability and any local experience.

B. System Design. Describe practice and experience in utilizing automated technologies such as supervisory control and data acquisition systems (SCADA), advanced metering infrastructure (AMI) and geographic information systems (GIS).

C. Capital Improvements and Replacements. Include total size of capital planning for all California systems operated. Describe any recent innovations in planning, implementation, or financing. Provide short (2 years) and long term (5 years or more) capital improvement plans for the districts nearest to Sativa.

D. Water Quality Management. Describe examples of your organization’s state-of-the-art water treatment facilities and experience, particularly addressing high manganese levels. Provide information regarding capabilities of in-house and outsourced laboratory facilities and personnel.

E. Benchmarking. Provide any recent operating, maintenance or management benchmarking studies focusing on any southern California service areas, or for the organization as a whole.

F. Rate Management. Provide a recent example(s) of an innovation or change in system operations or management, which significantly lowered water rates for a service area.

G. Water Resources and Water Rights. Describe briefly your organization's experience with managing water resources and water rights. Give any recent examples of the securing of new or cheaper sources of water supplies for a service area.

Section 3 – Water Utility Operating Experience

Describe your organization's experience in operating municipal water facilities. As part of this response please include the following:

A. Identify all separate ratemaking service areas in Southern California together with the communities served. Include for each the number of connections and employees. Reference any recent operational awards or professional recognition received.

B. Identify preliminarily the most likely ratemaking district to be combined with the Sativa System (if any). Also, identify the most likely operating district to be combined with the Sativa System if different than the ratemaking district. If the purchaser intends to operate the Sativa System as a separate district for either operations or ratemaking, please state so. In the latter case (Sativa as a separate district), please provide the requested information in the items C, D, E, G, J and K below for the smallest southern California service area owned.

C. Provide the most recent three years of district PUC annual reports and most recent rate case decision for the service area identified in item B above, if a regulated utility. For a municipal buyer, please provide the current residential water service rates for the service area to be combined with.

D. Provide the most recent complete State Department of Water Resources, Division of Drinking Water (SWRCB) annual inspection report for the operating area identified in B above.

E. Provide annual reports prepared by the organization to the SWRCB, and to consumers, including Customer Confidence Reports, for the operating district identified in B above for the last three years.

F. Repair and Maintenance. Describe your view of systematic routine repair and maintenance; and the resources, cost and manpower that you dedicate to it. Describe briefly preventative maintenance programs.

G. Emergency Response Capability. Describe ability to provide 24-hour on-call response to emergency calls, including natural and man-made disasters. Provide an Emergency Response Plan (if available) for the operating district as identified in B above.

H. Safety and Risk Management. Identify all major employee, operational and environmental accidents or losses for southern California service areas for the last three years.

I. Water and Energy Conservation. Describe meter testing and replacement programs, water auditing and leak detection practices, and energy auditing and energy conservation.

J. Water Quality. Describe water quality activities, including routine testing, system changes due to water quality issues, any treatment operations, including blending, and any violations or corrective action plans for the operating district identified in B above.

K. Licenses and Certification. Provide a list of all Certified Treatment and Distribution Operators of the operating district proposed to be responsible for Sativa (per item B above) and their length of service at the District.

Section 4 – Customer Service Experience

Describe your experience in developing customer service programs and policies, including the following:

A. Identify the probable geographic location for utility receipt of customer payments, inquiries and complaints, both in person and by telephone.

B. Provide a brief description of the utility's customer service philosophy and how it is communicated throughout the organization.

C. Provide examples of recent service improvements and increase in customer satisfaction.

D. Briefly describe complaint resolution procedures and approach to regain a customer's confidence.

E. Describe how the utility informs customers of issues such as water usage, conservation programs and mandates, and similar subjects.

F. Provide any customer response surveys related to service or customer satisfaction performed in any of your service areas within the last four years.

4.2.3B Part 3B

Financial Information shall include the following information:

Section 1 – Proposal Bid Sheet

A. Complete the Attachment 1 – Proposal Bid Sheet.

B. Include all information and descriptions required to understand and evaluate the proposed amounts.

Section 2 – Financial Capabilities

A. Provide the most recent three years of stockholder reports or audited financial information regarding the organization.

B. Provide the most recent company annual report to the Public Utilities Commission, if a regulated utility.

C. Provide the most recent annual and current year's quarterly Securities and Exchange Commission filings of Form 10-Ks, if a publicly traded corporation.

D. Provide your organization's investment grade credit rating; and the company's Dun and Bradstreet identification number, if appropriate.

E. Provide a description of all revenue sources and collection processes.

4.2.3C Part 3C

The Plan to Address Primary Issues of Sativa System shall include the following information:

Section 1 – Governmental Submittal Requirements

Local Agency Formation Commission (LAFCO) Resolution No. 2019-O2RMD, authorizing the issuance of an RFP to identify a long-term water provider for the Sativa requires that all bidders include the following in their responses:

A. A projection of water rates following acquisition of the system for the first five (5) years of operation. Include historical information regarding rates in the surrounding area and likely operating district that Sativa is expected to join for comparison purposes.

B. Anticipated schedule for design, funding, and construction of capital projects as described in the Bidder's Notebook. Include a summary of projects to be completed within 2-years and 5-years from the date of sale.

C. A proposed schedule, identifying the key milestones and anticipated completion dates, for submittal, consideration, and approval of the Bidder's application to the California Public Utilities Commission (CPUC) to expand the Bidder's existing,

authorized service territory as currently approved by the CPUC, if applicable.

D. A community outreach program, defining how the successful bidder intends to communicate with Sativa ratepayers upon acquisition of the system and thereafter.

Section 2 – Transition Plan

Based on your experience, present a preliminary discussion of transition plan issues, which address, as a minimum, areas that are required to effect the transfer of service responsibilities. The description of these areas need not be extensive, but should demonstrate the purchaser's understanding of the tasks and steps typically required in such transfers. Include in the discussion proposed staffing and organizational responsibilities, including possible opportunities for retention of current operating and support staff. Also include the subject of billing and financial reporting transfers.

4.2.4 Part 4 - Required Forms/Certifications

Consultant shall complete, sign, and submit with the proposal, the certifications and forms listed below.

4.2.4.1 Non-Collusion Declaration

4.2.4.2 Avoidance of Conflict of Interest Certification

4.2.4.3 EEO Certification

4.2.4.4 Lobbyist Ordinance Affidavit

5. EVALUATION CRITERIA

5.1 Pass/Fail Requirements

A pass/fail evaluation will be made of the Proposal to determine whether the Mandatory Contents required by Sections 4.1 and 4.2 (Parts 1 to 4) are included in the Proposal. Failure to meet the mandatory pass/fail requirements and provide full and accurate information as required under this RFP may be cause for disqualifying the Proposal as non-responsive. The

determination of non-responsiveness shall be made solely at the discretion of the County, if it is determined to be in the interests of the public and the ratepayers in the territory of the Sativa System. Pass/fail criteria include the following:

5.1.1 The Proposal shall contain all information as required in Section 4.2, which lists the specific requirements for each Part of the Proposal.

5.1.2 The proposal shall include all required forms completed and signed as defined in Section 4.2.4 - Required Forms/Certifications.

5.2 Summary of Scoring

Proposals will be evaluated using a 150-point total cumulative score rating according to the following criteria:

- Part 3A - Qualifications (50 points)
- Part 3B - Financial (50 points)
- Part 3C - Plan to Address Primary Issues of Sativa System (50 points)

5.3 Public Works reserves the right to conduct oral interviews with up to three (3) of the high ranked Proposers or as appropriate and in the interests of the public and the ratepayers in the territory of the Sativa System. Should interviews be conducted, Proposers will be evaluated using a 75-point total cumulative score rating according to the following criteria:

- Presentation (30 points)
- Responsiveness to Direct Questions (45 points)

5.4 Should the County, in its sole discretion, conduct the oral interviews, as set forth under Section 5.3, the highest rated Proposer(s) from the total combined scoring from Sections 5.2 and 5.3 will be recommended to be awarded the contract in accordance with Section 1 of this RFP.

Americans with Disabilities Act (ADA) Information



Individuals requiring reasonable accessibility accommodations may request written materials in alternate formats, physical accessibility accommodations,

sign language interpreters or other reasonable accommodations by contacting our departmental Americans with Disabilities Act Coordinator at (626) 458-7337, from 7:30 a.m. to 5:00 p.m., Monday through Thursday (excluding holidays). Persons who are hearing impaired may make contact by first dialing the California Relay Service at 7-1-1. Requests should be made at least one week in advance to ensure availability. When making a reasonable accommodation request, please reference Business Relations and Contracts Division **[BRC-2]**.

ATTACHMENT 1

LOS ANGELES COUNTY PUBLIC WORKS

PROPOSAL BID SHEET

FOR

SATIVA LOS ANGELES COUNTY WATER SYSTEM (SATIVA SYSTEM)

A. Buyer Information (provide additional sheets, as necessary, for clarity)

1. Name of Potential Bidder: _____
2. Address: _____

   _____

   _____
3. Contact Person (Name / Position / Phone Number / e-mail address):

   _____

   _____

   _____

   _____
4. Type of Entity (corporation, private firm, municipal water district, etc.):

   _____

B. Price Proposal - Sativa System

1. Sativa System and its Assets $_____
2. Water Rights $_____

   ($_____/AF x _____ AF)

3. Exclusions/exceptions (Explain clearly and provide additional information on supplemental pages.) $_____

C. Total Price Proposal **$_____**

D. Alternative Purchase Plan (Please describe the proposed approach and Price Proposal using the same components included in Item B, above.)

_____

_____

_____

_____

_____

E. General Exceptions (if any)

_____

_____

_____

_____

_____

F. Comments

_____

_____

_____

R.17-06-024_12. Sativa Suburban Proposal Vol1 – Final – 2019.11.10

Proposal

Transfer or Sale of Sativa Water System
RFP Number: BRC0000114

Volume I



November 12, 2019

Contact: Craig Gott, General Manager

1325 N. Grand Ave., Suite 100 | Covina, CA 91724 | (P): 626-543-2554 | (F): 626-331-4848

Suburban
Water Systems
A SouthWest Water Company

1325 N. Grand Avenue
Suite 100
Covina, CA 91724-4044
Phone 626.543.2500
Fax 626.331.4848
www.swwc.com

November 12, 2019

VIA PERSONAL DELIVERY

County of Los Angeles Public Works Cashier's Office
900 South Fremont Avenue, Mezzanine Level
Alhambra, California 91803-1331
Attention: Erayna Chang

Subject: Proposal – Suburban Water Systems
Transfer or Sale of Sativa Water System; RFP Number: BRC0000114

Dear Ms. Chang,

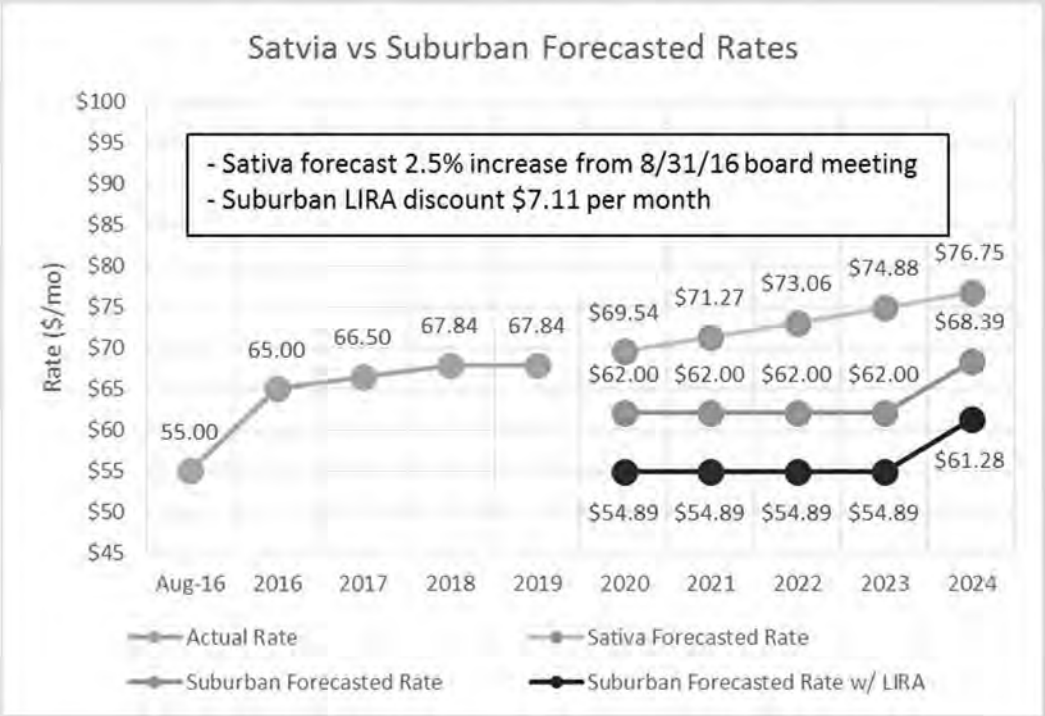
Please see attached to this cover letter Suburban Water Systems' proposal for the Transfer or Sale of Sativa Water System; RFP Number: BRC0000114.

EXECUTIVE SUMMARY: Suburban Water Systems ("Suburban") has the following goals for the Sativa system as the successful bidder:

- Provide Sativa customers with clean, safe, reliable, and affordable drinking water;
- Relieve the County from involvement in operating the system as soon as possible; and
- Leverage our talented operations and management capabilities over a larger customer base to achieve efficiencies that benefit both Sativa's and Suburban's customers.

Suburban offers **$17,000,000.00** to purchase the assets of the Sativa Water System ("Sativa") from Los Angeles County, subject to approval from the California Public Utilities Commission ("CPUC"). Further, Suburban offers to enter into an Operations and Maintenance ("O&M") agreement with the County as soon as possible after being selected as the successful bidder and would operate under this agreement for the period between the signing of the Asset Purchase Agreement and the closing of the transaction after CPUC approval of the acquisition.

Suburban proposes to – immediately upon acquisition – ***reduce*** Sativa customers' monthly bills by 8.5%, from $67.84 to $62.00, and to maintain those reduced monthly bills until December 31, 2023, when they will be aligned with Suburban's Whittier / La Mirada rates.



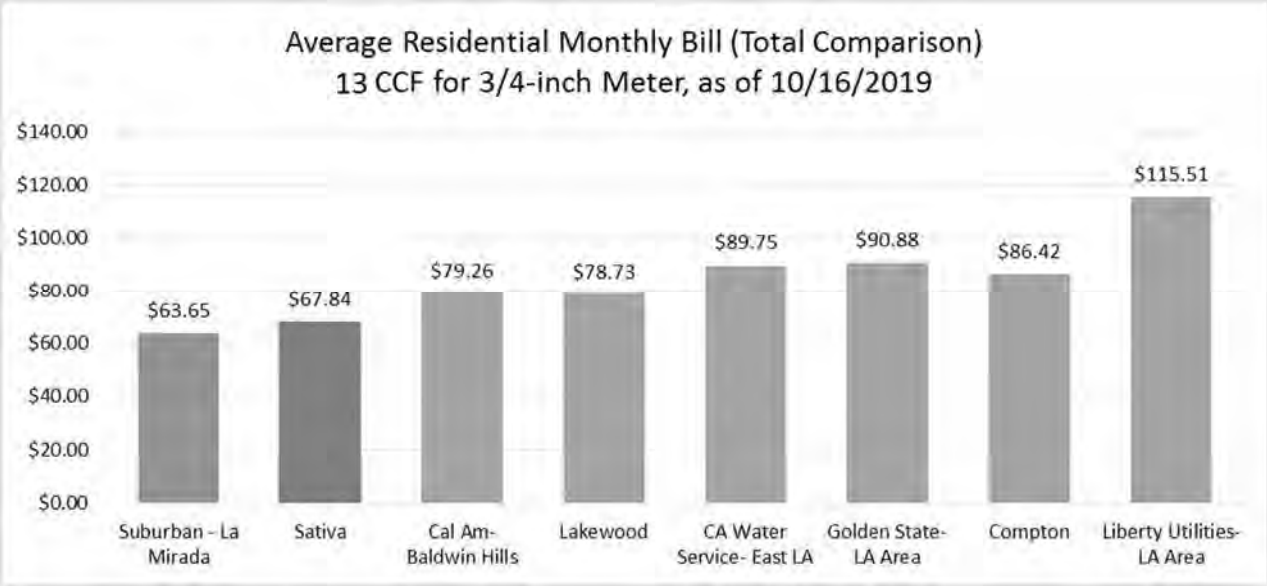
Suburban has the **experience** to make the capital investments and operations improvements required to provide Sativa customers with **clean, safe and reliable water**. Suburban's existing **low customer water rates** make it best suited to absorb the Sativa Water System while providing customers with **affordable** bills into the future. Suburban's experience and well qualified employees will provide quality water and service to Sativa by staying true to our core values:

- **Safety** – customer water quality, and employee and community safety;
- **Customer Care** – positive customer experience and affordability;
- **Employee Development** – empower and challenge employees to grow;
- **Environmental Stewardship** – safety of public health and the environment first, above all other objectives; and
- **Community Involvement** – long term partnerships in the communities we serve.

While Suburban's existing operations are not immediately adjacent to Sativa's water system, they are nearby and Suburban's employees are covering a similar service radius every day in its existing operations that span from Glendora in the north to La Mirada in the south. Suburban will provide the same great service to Sativa's customers.

Selecting Suburban Water Systems will continue the great work that the Los Angeles County Department of Public Works ("LACPW") team has done improving the quality of life for Sativa's

customers and provide Sativa's customers with affordable bills into the future. Specifically, Suburban can provide Sativa's customers the lowest rates.



Please note that the average monthly bill amount reflected in the above chart above does not include the $7.11 per month Low Income Rate Assistance ("LIRA") discount applicable to eligible Sativa customers.

Suburban is regulated by the California Public Utilities Commission ("CPUC") and everything we do is subject to modification over time at the direction of the commission. The responses in our proposal below represent our operations today, and are subject to change in the future.

EXCEPTIONS:

1. **CPUC Approval**. This Proposal, including all conditions, contingencies and exceptions, and any asset purchase agreement to be negotiated by Suburban and the County are subject to regulation by, and contingent upon approval by, the CPUC.

ATTESTATION: I, Craig Gott, General Manager of Suburban Water Systems, attest to the accuracy of the binding legal documents that comprise our proposal to purchase the Sativa Water System. Further, I attest that I have the authority to execute said binding documents, and have the authority to negotiate and execute an agreement on behalf of the utility.

My contact information is as follows:

Mr. Craig Gott
General Manager
1325 N. Grand Ave., Suite 100
Covina, CA 91724
(p): 626-543-2554
cgott@swwc.com

We at Suburban believe we are best suited and positioned to become the next stewards of the Sativa Water System, to provide quality water and service to all who are served by the system. We are optimistic that the Evaluation Committee will agree and invite Suburban to the next stage of the RFP process – to negotiate mutually acceptable terms of the definitive agreement that will govern the transfer of the system to Suburban. Please don't hesitate to contact me at at 626-543-2554 if you would like to discuss our proposal.

Regards,
Suburban Water Systems



Craig D. Gott, P.E.
General Manager

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Section 1 – Organizational Information

A.1. Suburban Water Systems' History

From Walnuts to Water: Suburban Water Systems' roots date back to 1925 when Able Garnier drilled a well on his 300-acre ranch in what is now the City of La Puente, California, seeking water for his vegetables and walnut trees. He struck a source of groundwater so plentiful that soon he had more than enough to meet his needs. Other ranchers noticed that Able's well continued to yield water abundantly while theirs were drying up. They appealed to Able for help and he readily agreed to share his water. When Able Garnier died in 1933, his son Camille took over the ranch and the water well.

Post-World War II: In 1946, Camille formed the San Jose Hills Water Company to begin selling water to neighboring farmers and ranchers on a formal business basis. As the post-War population boomed and more people settled in the San Gabriel Valley to make their homes, the company joined forces with other nearby water companies to serve more customers. In 1953, the assets of the water companies were consolidated to form Suburban Water Systems. In 1954, Suburban's parent company was incorporated as SouthWest Water Company. After Camille's passing in 1968, management of the company passed on to his son, Anton C. (Tony) Garnier, who led the company until his retirement in 2006.

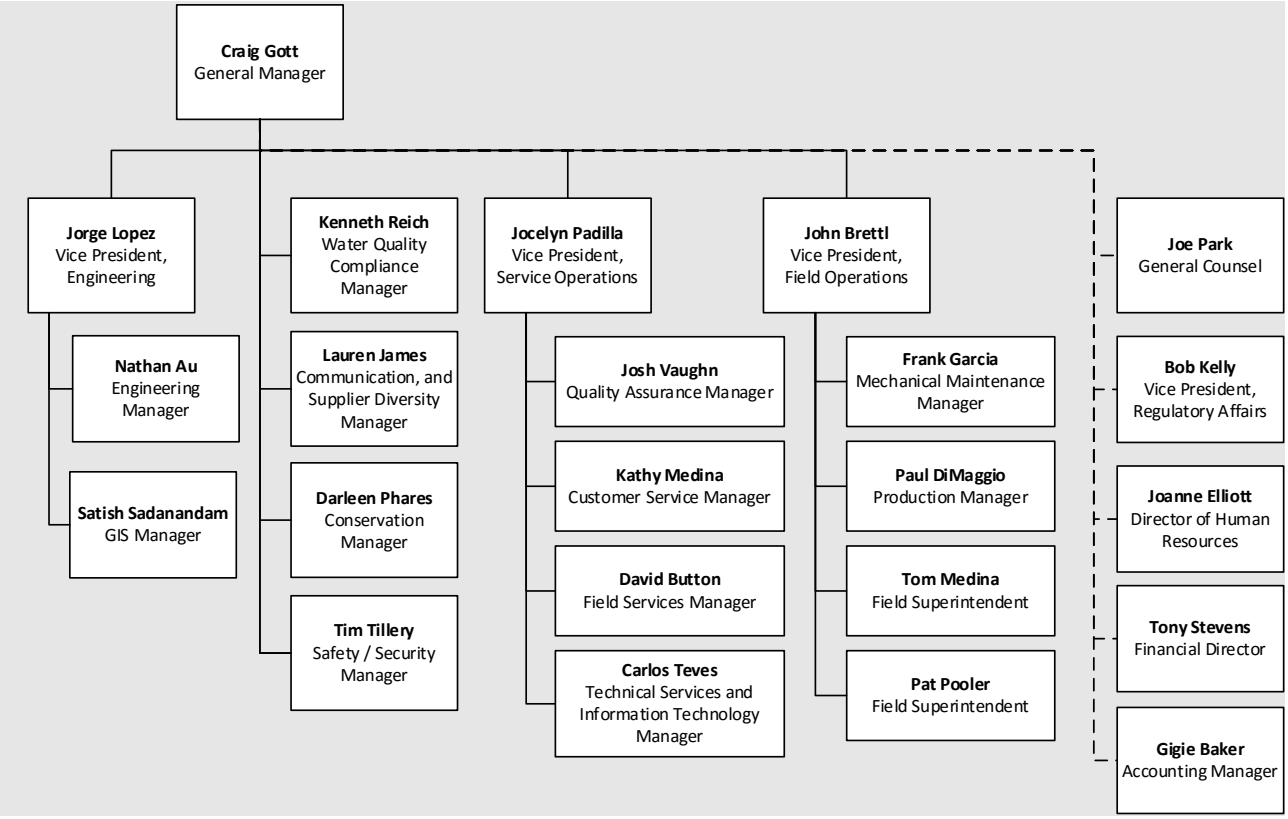
Today: Suburban is still the largest subsidiary of SouthWest Water Company ("SouthWest") that now owns and operates water and wastewater systems in California, Oregon, Texas, Oklahoma, Alabama, and South Carolina. Southwest's headquarters are located in Sugar Land (Houston), Texas. Being part of a larger organization provides Suburban's customers with greater economies of scale for shared corporate services such as information technology, payroll, treasury, and strategic leadership. It also provides redundancy and access to more professional knowledge and experience. For example, in the event of an earthquake and the potential loss of Suburban's customer service call center, customer calls would be diverted to the Texas call center.

A.2. Incorporation Details

State of Incorporation:	California
Date of Incorporation:	April 18, 1907
Parent Corporation:	SouthWest Water Company

A.3. Organization Chart of Key Personnel at Suburban Water Systems

Suburban has 133 employees that perform operations, administrative, and management functions for its San Jose Hills and Whittier/La Mirada water systems. The following organizational chart shows the structure of the leadership and management team.

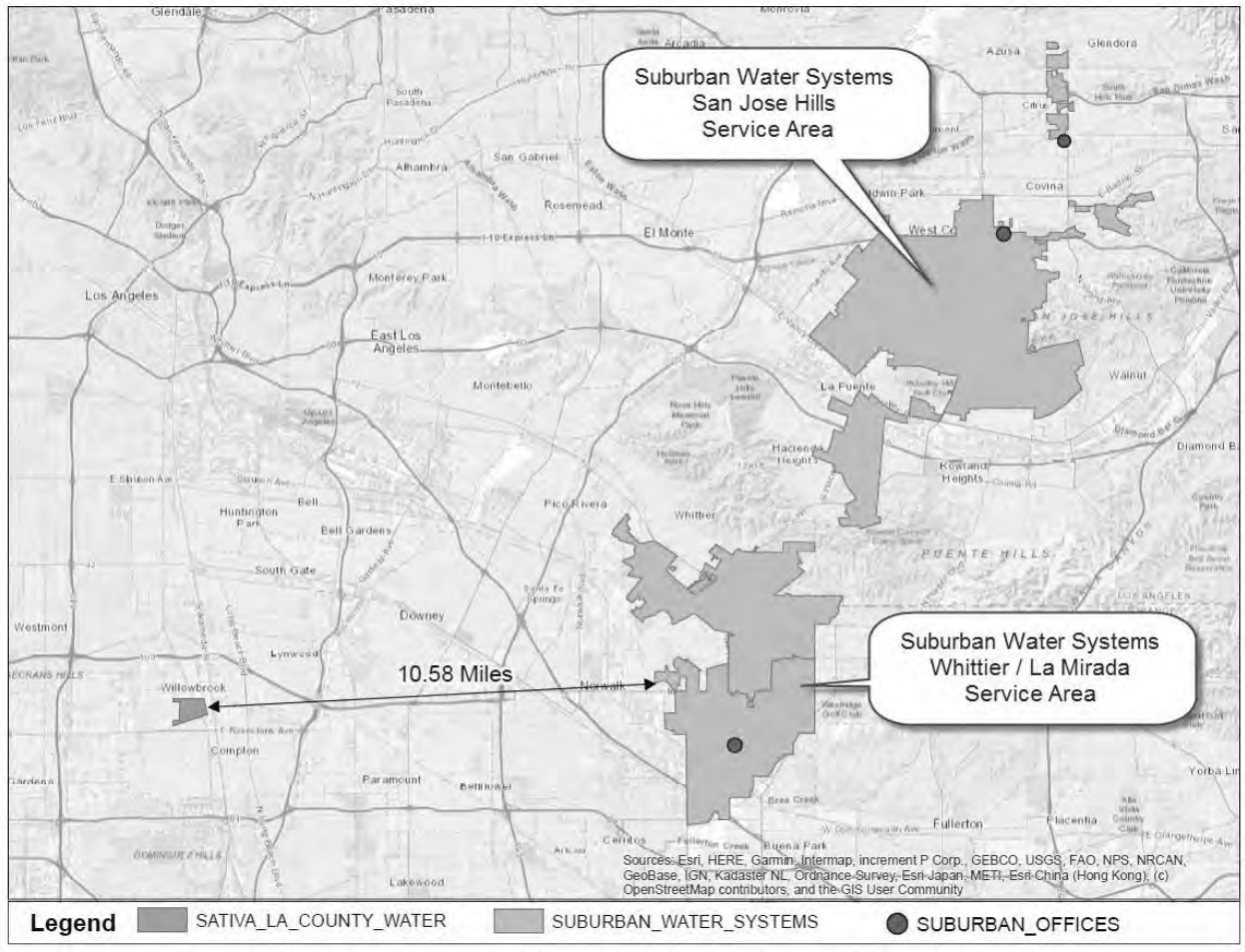


A.4. Proximity of Personnel to the Sativa System

If successful in acquiring the Sativa water systems, Suburban intends to retain the existing Sativa customer service office. This office will house a bilingual (Spanish/English) customer service representative to take payments and address concerns, and a bilingual (Spanish/English) field superintendent to perform field customer service and operations activities.

Suburban's 133 field and office employees operate and manage its existing Los Angeles County and Orange County operations. Suburban's support services are provided from the headquarters located in Covina (address provided in next section). Suburban has customer service offices that include payment stations in West Covina and in La Mirada. These offices also host field operations employees.

The below map shows the proximity of Suburban's service area to the Sativa service area, and the above-mentioned Suburban office locations.



B.1. Address of California Headquarters

Suburban Water Systems
1325 N. Grand Ave., Suite 100
Covina, CA 91724
(P): 626-543-2500
(F): 626-331-4848

B.1. Functions Headquarters Provides to District System Operations

The following is a brief description of the functions that the headquarters provides to district system operations; please note that Suburban's customer service functions are located in its West Covina and La Mirada offices:

Communication: Suburban's Communication Manager is responsible for both external and internal communication. Specifically, the Communication Manager coordinates meetings with local elected officials, and county and city staff to develop important relationships that help both Suburban and the municipalities run smoothly together.

Safety and Security: Suburban's Safety and Security Manager ensures that our employees have the training and resources required to perform their roles safely. This manager is also responsible for ensuring that our many plant sites have multiple layers of physical and electronic security (fencing, access control, monitoring, video surveillance, etc.) to protect our critical water system assets necessary for providing our customers with clean, safe and reliable water.

Conservation: Our Conservation Manager works to help our customers use water efficiently. This is achieved through the administration of various education, community involvement, water use efficiency, and rebate programs.

Engineering: Suburban's engineering team is primarily responsible for the planning, designing, permitting, contracting, and inspecting our capital investment program. The team also includes the Geographical Information Systems ("GIS") group that is responsible for managing data associated with Suburban's vast underground assets, above-ground assets, and coordinating modifications to the systems to accommodate new development. Engineering is responsible for contract management to ensure that vendors meet requirements for insurance and safety and is also responsible for Asset Management planning for identifying, assessing the condition of, and prioritizing the replacement of Suburban's assets.

Regulatory: Suburban's regulatory team ensures that we comply with CPUC regulations and requirements. This team manages our rate making process and regulatory filing requirements, which includes annual reports and a variety of advice letters and applications, including for acquisitions.

Accounting: Suburban's team of accounting professionals track expenses and capital investments to ensure accurate reporting to comply with CPUC requirements, meeting bond holder requirements, and providing timely information for financial management.

Billing Printing and Remittance: This group prints approximately 76,000 paper bills every month, folds and stuffs them, and marks them for postage and delivery to our customers. The same team receives checks and remittance coupons for processing customer payments.

Human Resources ("HR"): Suburban's HR team is responsible for recruiting, interviewing, onboarding, evaluating, and developing employees as well as managing and overseeing a variety of employee benefits programs.

Information Technology ("IT"): Suburban's IT team provides desktop, network, and phone system support to its office and field employees. Suburban's parent, SouthWest Water Company ("SouthWest"), provides Enterprise Resource Planning ("ERP") software and network administration support from its Sugar Land (Houston) office.

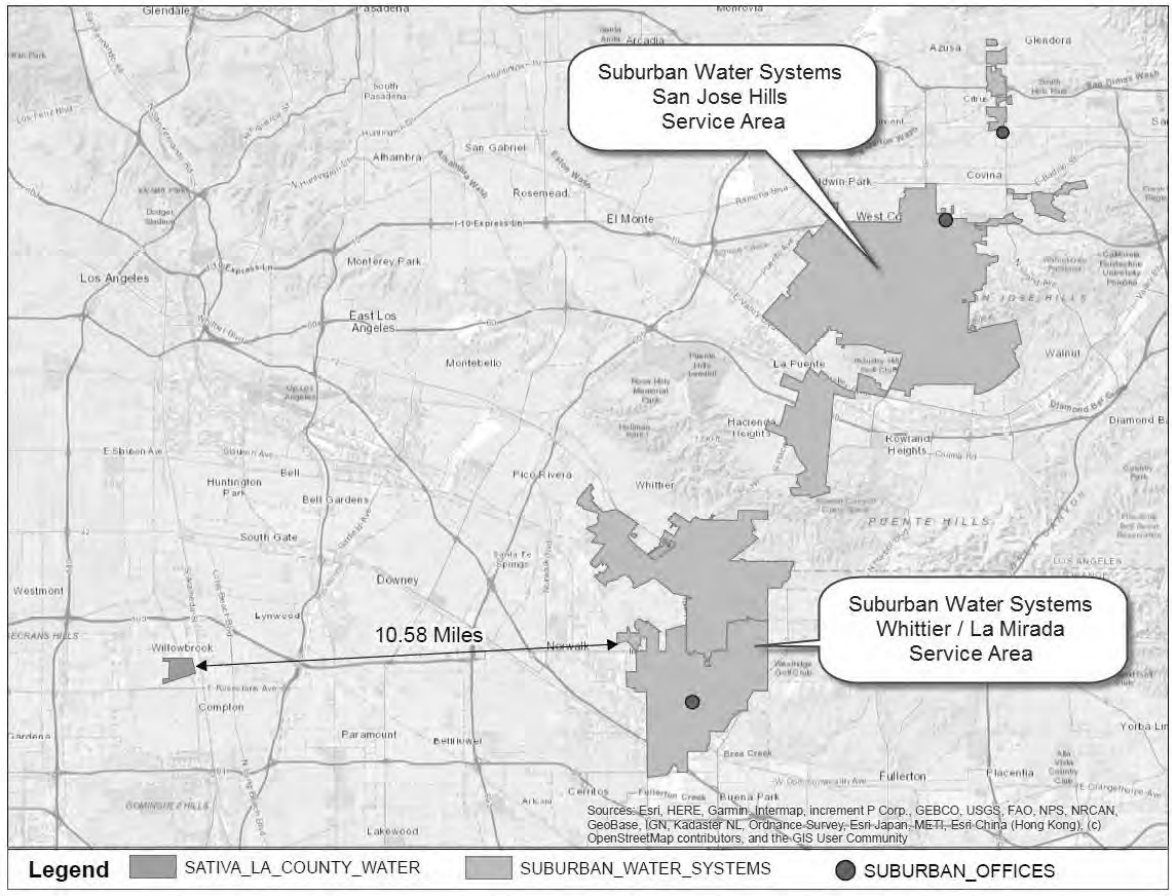
C. Operating and Rate Making Districts

Suburban has two existing ratemaking service areas, and intends to combine Sativa into the Whittier/La Mirada area as it is physically closer to Sativa and, like Sativa, depends on groundwater produced from the Central Basin groundwater basin:

Suburban Water Systems - Whittier/La Mirada
Number of connections: 33,814, which equates to 62,876 effective dwelling units
Customer service counter address: 15088 Rosecrans Ave, La Mirada, CA 90638

Suburban Water System - San Jose Hills
Number of connections: 42,606, which equates to 81,941 effective dwelling units
Customer service counter address: 2235 E Garvey Ave N, # A, West Covina, CA 91791

The following map shows Suburban's rate making service areas:



D. Contact Information for Points of Contact

Role	Contact	Contract Information
General Manager	Craig Gott	Suburban Water Systems 1325 N. Grand Ave., Suite 100 Covina, CA 91107 (P): 626-543-2554 (F): 626-331-4848 (E): cgott@swwc.com
Vice President, Service Operations (Customer Service & Quality Assurance)	Jocelyn Padilla	Suburban Water Systems 15088 Rosecrans Ave. La Mirada, CA 90638 (P): 626-543-2500 (F): 626-543-2692 (E): jpadilla@swwc.com

Role	Contact	Contract Information
Vice President, Field Operations (Water System Operating, Maintenance, and Leak Repair)	John Brettl	Suburban Water Systems 2235 E Garvey Ave N # A West Covina, CA 91791 (P): 626-543-2643 (F): 626-331-4848 (E): jbrettl@swwc.com
Vice President, Engineering	Jorge Lopez	Suburban Water Systems 1325 N. Grand Ave., Suite 100 Covina, CA 91107 (P): 626-543-2518 (F): 626-331-4848 (E): jlopez@swwc.com

E. Management Audit Report

Suburban has been in full compliance with CPUC requirements and has not been required to participate in any CPUC management audits.

Section 2 – Water Utility Management Experience

A. Engineering Department Capability and Local Experience

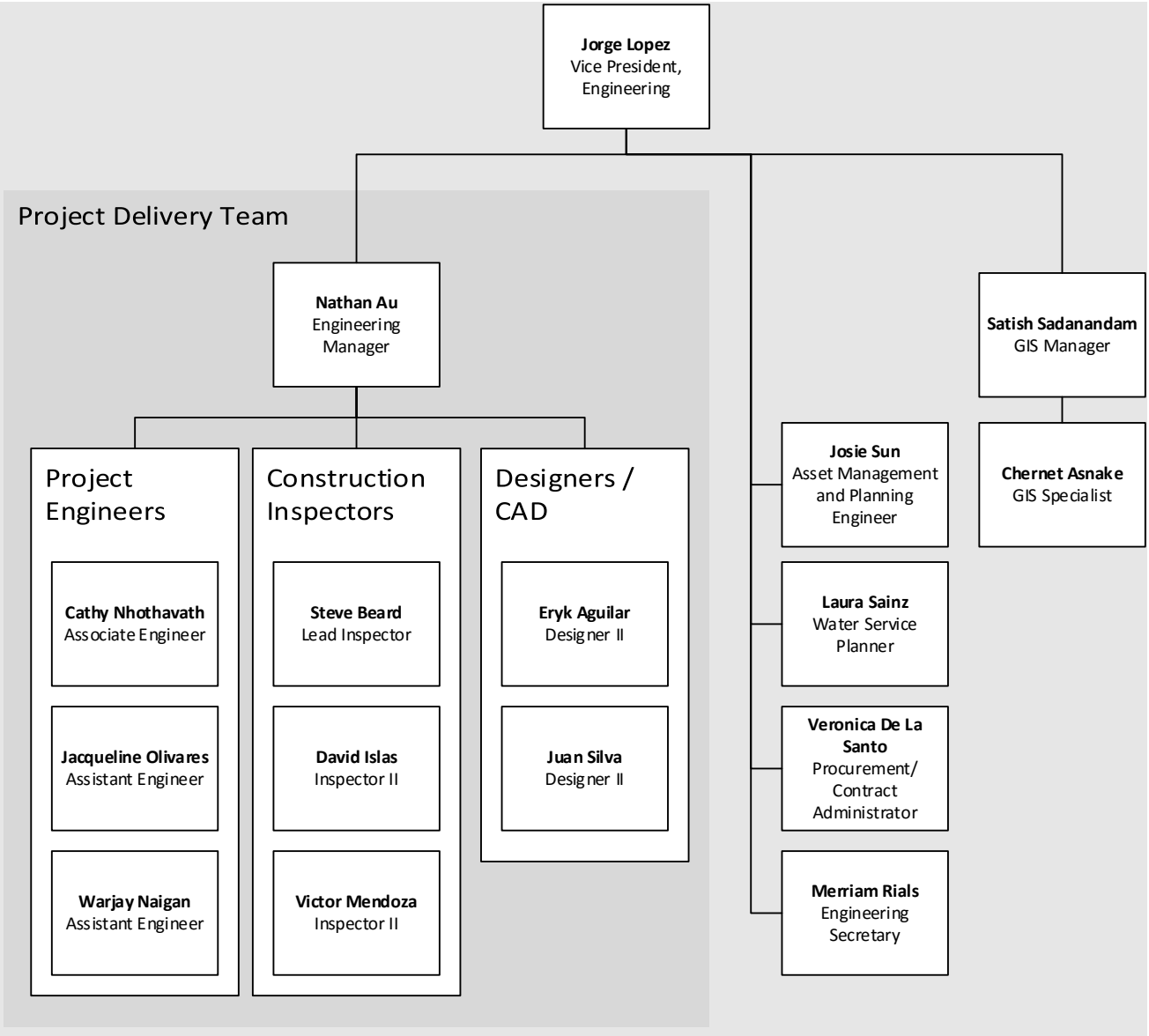
The Suburban engineering department has built a strong reputation for being responsible and credible with city and county public works departments as well as the CPUC. Suburban's capital projects, which are approved in the CPUC's General Rate Case process, have been found to be prudent, cost effective, and ensure that customers receive a safe and reliable water supply. Suburban's capital expenditure in each of the past 12 years has been within 1% of the CPUC approved project budget.

Suburban's diverse engineering department team is led by Jorge Lopez, P.E., Vice President, Engineering. Mr. Lopez is responsible for capital improvement planning, design, contract administration, and construction management. He is also responsible for asset management planning, new development, and GIS. Mr. Lopez's complete resume is attached to this proposal as Appendix 1, but the following provides a brief description of his qualifications and experience.

Mr. Lopez has a Bachelor of Science degree (Mechanical Engineering) from California State University Los Angeles and a Master of Business Administration degree from the University of La Verne. He holds an operator certification from the State Water Control Board in Water Distribution and Water Treatment and is a licensed Professional Engineer in the State of California. During his 13 year tenure with Suburban, he has led a variety of projects including, but not limited to, replacement of aging pipelines, valve station replacements, well drilling and equipping, bulk meter change out projects, SCADA upgrades, electrical-mechanical upgrades of pumping equipment, concrete and steel reservoirs, and water treatment plants that range in cost from $1,000 to $24 Million.

Engineering Organization Chart

The following is an organization chart showing the reporting relationship and roles of the engineering department employees:



Primary Capabilities and Primary Functions

The following section describes the primary functions and capabilities of Suburban's engineering team:

Capital Project Delivery: Nathan Au, P.E., is Suburban's Engineering Manager. He is responsible for capital project delivery, including the planning, design, contract management, and inspection of Suburban's capital projects. Mr. Au's complete resume is attached to this proposal as Appendix 1.

Suburban's engineering department has extensive technical capabilities in planning, design, operational support, contract management, and project management. Suburban's in-house project team has historically performed engineering services for the complete delivery of pipeline and valve station projects. Department personnel have many years of experience and are well qualified for performing this work. Suburban's staff also have tremendous experience with other projects including pump stations, wells, reservoirs, and treatment plants that usually require the use of engineering consultants specializing in geotechnical, electrical, structural, and hydro-geotechnical engineering. Suburban's internal personnel perform this work at a significantly lower cost than external consultants.

Permits: Suburban's water systems are located within a number of local jurisdictions including, but not limited to, Los Angeles County, City of La Mirada and City of Whittier. Suburban's staff is familiar with local agency requirements and have developed cooperative relationships with them. Further, Suburban's construction projects located near the San Gabriel river have resulted in experience with federal and state agencies including the U.S. Army Corps of Engineers, the California Regional Water Quality Control Board, and the California Department of Fish and Wildlife.

Construction Inspection: Suburban has an in-house team of three (3) construction inspectors who ensure that new water system facilities added to Suburban meet design requirements and are constructed according to contract and specification plans and documents.

Asset Management: Suburban has an in-house Asset Management and Planning Engineer who is responsible for identifying and studying the condition of its assets, and then determining and prioritizing refurbishment and replacement needs. The goal of Suburban's asset management program is to ensure the longest possible lifecycle for assets. This approach minimizes costs to customers while ensuring safe and reliable water that meets customers' service level expectations. Suburban's Asset Management and Planning Engineer, Josie Sun, has over 20 years of public works planning experience in both large public agencies and private water companies. Ms. Sun's complete resume is attached to this proposal as Appendix 1.

B. System Design and Experience with Automated Technologies

Supervisory Control and Data Acquisition ("SCADA") System: Suburban's extensive SCADA experience will greatly benefit Sativa customers. The real-time data collected via the SCADA system allows operators to make decisions quickly and implement appropriate changes

remotely to ensure that a high level of service is maintained. The use of SCADA has created a tremendous labor efficiency; without SCADA, plant operators would need to physically travel to each site to determine its status and make operational changes.

SCADA is particularly important for ensuring public safety because it allows for remote, real time responses to events in the water system, thereby minimizing emergency response times. For example, when a vehicle hits a fire hydrant or when large water leaks occur, water system SCADA operators can observe changes in the system – such as reductions in pressure or falling reservoir levels – and can alert crews to respond and resolve the issue before it has a significant impact on service to customers. The SCADA system is a critical tool for responding to natural disasters, like earthquakes, as it allows for a quick evaluation of the status of the water system and the identification of problems that need to be prioritized and addressed by field crews.

Suburban uses its SCADA system to monitor and control water distribution facilities throughout its San Jose Hills and Whittier / La Mirada water systems. The system monitors all 63 plant sites remotely, and the operator interface provides real time data that enables remote and timely decision making and necessary operational changes. Suburban has three (3) system controllers who monitor and control the system during business hours and respond to system alarms after hours and on weekends.

Suburban uses data collected and stored in the SCADA system to make design decisions for new and replacement facilities such as reservoirs, pipelines, and pumps. Data from the SCADA system is also used monthly to calculate water loss and production source totals that allow Suburban to efficiently manage the water system, resulting in affordable rates for customers.

Over the last few years, Suburban has taken several measures to establish a robust communication system between remote sites and centralized components that create consistency and facilitate maintenance. A recent review of the SCADA system by Cannon, a third-party engineering consultant based in Los Angeles, determined that Suburban's SCADA system security has a good foundation in physical security and cybersecurity that complies with industry standards. Sativa's customers will greatly benefit from the SCADA infrastructure that Suburban has in place, which will be expanded to cover the Sativa water system.

Advanced Metering Infrastructure ("AMI"): Suburban plans to initially install Automatic Meter Reading ("AMR") meters for all Sativa customers. AMR meters transmit meter reads using radio signals to a meter reader's laptop. The reader collects the meter reads from the whole neighborhood at one time, allowing for significantly faster and more efficient data collection compared to gathering individual meter reads from each meter. Suburban plans to install forward programmable meters that can easily be upgraded to work with the AMI system. In time, Suburban will install an antenna and bring the benefits of AMI to Sativa's customers.

Suburban intends to convert all of its 76,000 meters to AMI by 2025. On June 11, 2018, in response to a data request under a CPUC decision (D-16-12-026), Suburban submitted a plan to the CPUC Executive Director for the conversion of all meters to AMI over the next two General Rate Case ("GRC") cycles, each of which is three years. A multi-phase approach has been established that began in 2018.

Phase 1 involves replacing existing meters with a more versatile, modern electronic meter that can be read via traditional direct read, AMR, and AMI methods. Over 10,000 meters have been replaced through October 2019. The meters are initially configured as AMR devices, where the customer's monthly usage is transmitted from the meter to an antenna mounted on a roaming company vehicle. Suburban has successfully integrated AMR meters into its operations with data flowing directly into the billing process.

Phase 2 is an AMI pilot project that involves the construction of a fixed receiving antenna on a tower, and integration of remotely collected data into the billing system. 2,300 meters will be remotely converted from AMR to AMI mode, at which time they will begin transmitting continuous data to the fixed antenna. The AMI antenna equipment has been installed and is operational

Phase 3 involves the construction of multiple antennas throughout Suburban's service area to collect customer usage data from all of Suburban's meters using AMI.

Suburban believes the forward programmable meter approach takes advantage of the efficiencies provided by AMR, while avoiding the cost of having to switch meters again in the future to accommodate AMI. In addition, this provides for a phased AMI tower roll out. The phased implementation of this project ensures that issues are resolved before going full scale, minimizing the number of impacted customers and wasted investment if modifications to the implementation strategy is required. Further, the phased replacement of meters reduces the rate shock that customers would experience in a full scale un-phased deployment.

Geographic Information System (GIS): Suburban's GIS Manager, Satish Sadanandam, has over 20 years of GIS expertise and his complete resume is attached to this proposal in Appendix 1.

Suburban's GIS architecture utilizes the latest available technology from ESRI and applications that are customized to meet the needs of Suburban's teams. The GIS system allows users from various departments to quickly and efficiently search data to make operations and customer service decisions. The GIS system is available for employees on desk top computers in the office and on Mobile Data Terminals in the field. Applications include water quality issue tracking, leak repair data collection, valve exercising records, underground dig alert dispatch, completion tracking, and fire flow test result records. Recently, Suburban worked with HDR, a consulting engineering firm, who used Suburban's GIS pipe information and leak repair data to

study pipe longevity and failure probability to optimize the pipe replacement program for over 860 miles of aging pipe.

The water quality application gives water quality technicians the ability to input water quality alerts from customers (complaints) such as water odor, smell, color and turbidity. The events are graphically displayed to indicate potential area-wide problems and support technicians in making decisions to remedy problems.

Suburban's valve exercising crews also collect valve location data using Global Position System ("GPS") instruments. The coordinates, valve status, and conditions help our repair crews in locating valves and understanding how they will perform. This data is also used to identify and prioritize the replacement of valves. Suburban is now starting to use GPS instruments to record the location of meters.

Hydraulic Modelling: Suburban uses hydraulic modelling to analyze its system to identify restrictions and reliability vulnerabilities and to validate fire flow availability test results. Suburban also uses this technology to design system improvements, with the hydraulic model providing important validation of whether improvements are sized to meet requirements.

C.1. Capital Improvements and Replacements

Suburban plans on investing $66,964,861 in 2020 and 2021, and intends to invest $196,942,156 over the five (5) year period from 2020 to 2024. The following table summarizes Suburban's capital expenditure ("CAPEX") plans for the Whittier / La Mirada and San Jose Hills water systems for the next five (5) years.

Asset Class	2020	2021	2022	2023	2024
Plant Site Improvements	671,000				
Treatment Plants	810,000	3,200,000			
SCADA		268,000			
Generators		1,837,502	3,855,432		
Reservoirs	1,107,000	3,227,000		1,000,000	1,000,000
Pipelines	7,056,000	21,455,000	20,881,000	27,000,000	24,000,000
Pump Stations	3,540,000		3,400,000	1,000,000	1,000,000
Annual Work Orders	11,473,728	12,319,631	14,902,321	13,443,721	15,994,821
Wells				1,000,000	1,500,000
Annual CAPEX Total	**24,657,728**	**42,307,133**	**43,038,753**	**43,443,721**	**43,494,821**

C.2. Recent Innovations

Pipeline Replacement Prioritization: Suburban recently embarked on a pipeline study with HDR, an engineering consulting firm that is a recognized industry leader in Asbestos Cement ("AC") pipe life cycle analysis and pipe replacement prioritization. The study leveraged the pipeline attribute information and leak history collected systematically over the past two (2) decades and stored in Suburban's GIS system to create a performance curve that relates break counts, the average duration between leaks, and the proportion that failed again. The study determined that the majority of leaks are occurring on a relatively small percentage (20%) of the pipe inventory, and that each successive failure on a pipeline occurs sooner than the last. This information suggests that if Suburban can prioritize its pipeline replacement to these poor performing pipelines, it can maintain a level of service to customers without reinvesting infrastructure at an unaffordable rate.

Construction Management Software: Suburban has recently started using **Procore,** a web-based construction management software. Suburban's construction inspection and engineering team use this software to capture, store, and catalog construction photos and daily inspection notes. This system catalogs the work by project and phase and provides valuable asset information for recording fixed assets. It can be accessed by inspectors in the field and engineers in the office. This provides clear records of construction that will be used by future generations of employees maintaining and repairing the system.

Contract Management System: Suburban has recently started using **ContractWorks**, a web-based contract management system. Suburban's engineering department uses this application extensively to store and manage its contracts. It allows engineers to quickly obtain electronic authorization from stakeholders who are located remotely or away from the office. ContractWorks provides reminders to stakeholders for important events, such as deadlines, permit renewals, insurance renewals for Master Service Agreements, and warranty inspections. This web-based system allows controlled access to contracts in the office and on mobile devices. Most importantly, it stores contract documents and amendments (change orders) for future reference.

Construction Site Photography: Suburban uses a fixed high-resolution camera and the **Work Zone Cam** application to record construction site conditions and progress for major projects. This web-based software takes photographs every 30 minutes and stores them for future reference in the office or in the field. This allows engineers to get almost real time updates on construction progress and provides important records for future reference. The application also stitches photos together to create a time lapse video that shows months or years of construction progress in just a few minutes. This has been a valuable tool for communicating the construction process to customers, elected officials, city management, and other stakeholders.

D.1. Treatment Facility and Experience

Plant 409 Manganese and Color Removal Plant (Whittier / La Mirada System): Suburban treats water from Plant 409 W-3 to remove manganese and organic color prior to delivery to the system. Well 409 W-3 has a design capacity of approximately 2,500 gallons per minute (gpm).

The treatment system includes the following processes: oxidation, coagulation, mixing, pressure filtration, and ammonia addition. Chemical oxidation is achieved by injecting 12.5% sodium hypochlorite solution at the well discharge for pretreatment and oxidation of color, manganese and low-level hydrogen sulfide. Polyaluminum hydroxychloride (PROPAC 9810) is injected as a coagulant before the water enters the first mixing vessel. Ammonia is injected at the discharge side of the filters to form a chloramine residual at a 4.5 to 1 chlorine to ammonia ratio. The plant uses mixed media filter vessels that were designed and constructed by Filltronics.

The treatment system includes a 70,000 gallon reclamation holding tank for filter backwash water. The supernatant water from the holding tank is returned to the influent line prior to chemical injection at a rate of approximately 10 percent of the operating flow. Settled sludge is discharged through an air-gap structure into the sanitary sewer system.

Fully-treated water is analyzed continuously for total chlorine residual by a Prominent Dulcometer D1C. Water quality monitoring is conducted to optimize treatment efficiency, control chloramination, and ensure compliance with the permit requirements issued by the State of California Department. The following table summarizes the monitoring performed at this plant:

Constituent	Frequency	Location	Analysis
Color, Odor, Turbidity, Iron, Manganese, pH	Weekly	Well Raw Water, Plant Effluent and 2 - 4 intermediate process locations	Approved Laboratory
Coliform/HPC	Weekly	Well Raw Water and Plant Effluent	Approved Laboratory
Title 22 primary and secondary source water standards	Various	Well Raw Water	Approved Laboratory

Constituent	Frequency	Location	Analysis
Disinfection Byproducts	Weekly	Four intermediate process locations prior to ammonia addition and the Plant Effluent	Approved Laboratory
Free chlorine residual	Weekly	Four intermediate process locations prior to ammonia addition	HACH Colorimeter
Turbidity	Continuous (SCADA)	Plant Effluent	Great Lakes Instruments Model 8220 Turbidimeter
Total chlorine residual	Continuous (SCADA)	Plant Effluent	Prominent Dulcometer D1C
Flow	Daily	Plant Effluent	Meter reading
Chlorine residual	Weekly	Plant Effluent	HACH Colorimeter
Ammonia, Nitrite, Monochloramine	Weekly	Plant Effluent	HACH

Manganese Pilot Study: In 2018, Suburban contracted with WQTS (Water Quality & Treatment Solutions, Inc.), a specialty environmental engineering and science consulting company located in Los Angeles, to perform treatment process pilot testing on its Plant 410 to determine the most effective technology to remove manganese. The study determined that oxidation followed by green sand filtration was the most effective treatment technology to remove the manganese. Suburban plans to construct a treatment plant in 2021 according to the recommendations in this study.

D.2. Laboratory Facilities and Personnel

Suburban's certified Quality Assurance ("QA") Technicians collect samples and perform a number of lab tests and quality assurance procedures to ensure safe drinking water quality.

- **Chain of custody recording:** When taking water samples, Suburban's QA Technicians perform field water quality tests and record the following data: Chlorine residuals (Free or Combined), pH, temperature, sampler's name and signature including time that the sample is collected, sample type (e.g., Total Coliform, Perchlorate, and Nitrate), sample frequency (e.g., routine, repeat, other, well, distribution), and bottle type (plastic, glass, sterile).

- **Water Quality Tests Performed by Suburban:** Suburban's QA Technicians perform the following tests in the field: Free and Combined chlorine residuals, pH, nitrite, orthophosphate, free and total ammonia, monochloramine, and hardness.

  Suburban's QA Technicians use the following field instruments to perform water quality testing in the field:
  - HACH Colorimeter II (chlorine residuals);
  - HACH SL 1000 (chlorine, temperature, pH, nitrite, orthophosphate, ammonia, hardness);
  - HACH DR890 (chlorine, nitrite, ammonia);
  - Hanna (pH, temperature);
  - HACH (hardness test kit);
  - HACH (total chlorine kit for high chlorine residuals);
  - Hach 2100Q Portable Turbidimeter (turbidity).

Third Party Laboratories: Suburban does not generate enough lab testing work to warrant a specialized laboratory staff and the operation of an accredited in-house laboratory. It is more cost efficient to outsource the balance of the more complex water testing work to accredited laboratories that provide an unbiased and world class analysis of our water supply. Suburban uses the following accredited labs for routine and weekly sampling of wells and distribution systems:

Weck Laboratories Inc. (CA ELAP #1132)
14859 Clark Avenue
City of Industry, CA 91745
(626) 336-2139

Clinical Laboratory of San Bernardino (CA ELAP #1088)
21881 Barton Road
Grand Terrace, CA 92313
(909) 825-7693

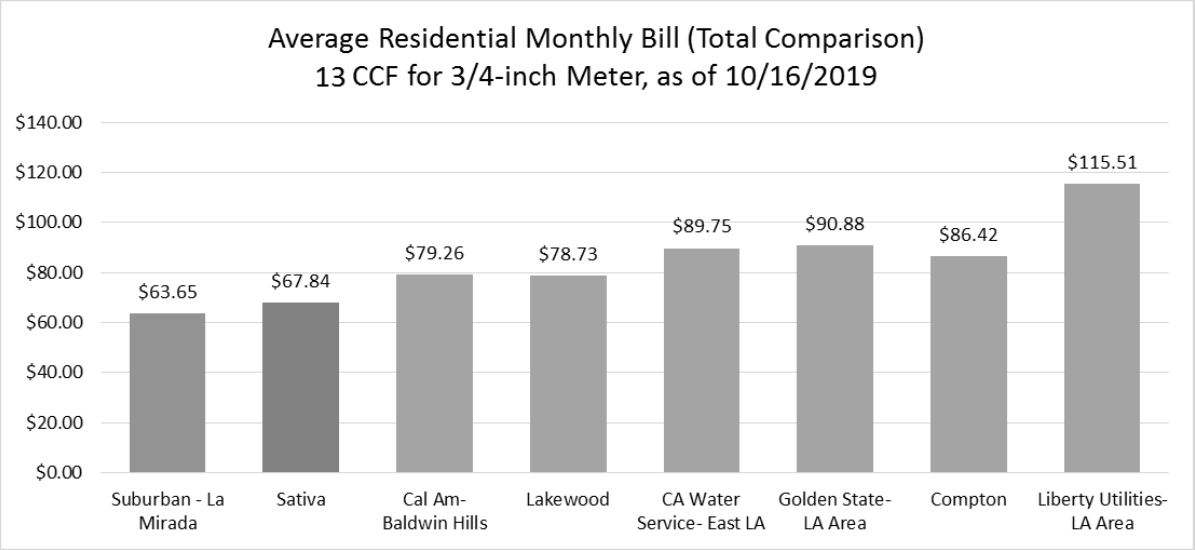
E. Benchmarking

The following are examples of some of the benchmarking that Suburban has monitored.

Average Bill: Suburban proposes to request CPUC approval for an immediate reduction in Sativa average monthly bills, from the current $67.84 to $62.00. This is in line with Suburban's continuing efforts to provide affordable service to its customers.

The following chart compares Sativa's current $67.84 fixed monthly water bill with comparable bills of neighboring investor owned and municipal water purveyors. The County has indicated that Sativa's customers are using an average of 13 CCF/month. The following chart was prepared using publicly available tariff and rate sheets. The bill includes a fixed base fee for a ¾-inch service, and a volume charge. The volume charge is determined by multiplying usage (Sativa's average usage per customer of 13 CCF) by the volume rates and other surcharges.

The chart includes an estimate of $63.65 per month that a Sativa customer would be paying if they were charged based on Suburban's current La Mirada rates, and shows that equivalent Suburban rates for average usage at Sativa is less than those of nearby investor owned utilities and the neighboring municipal systems in Lakewood and Compton:

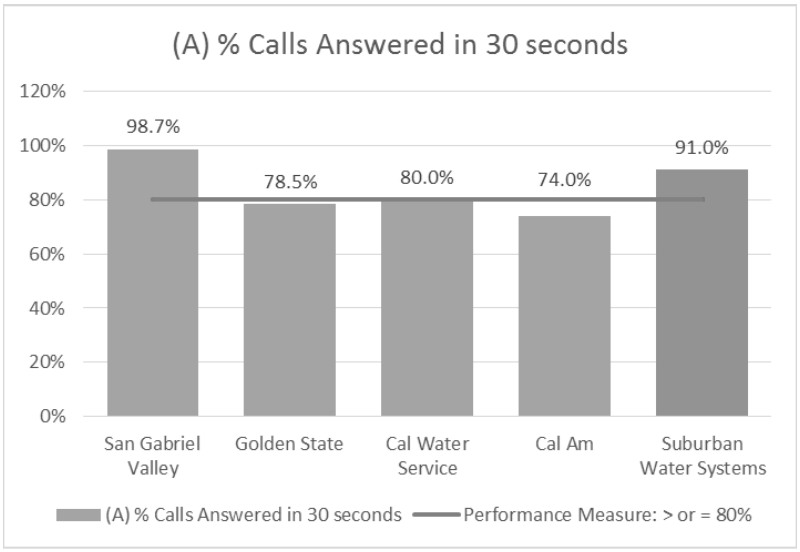


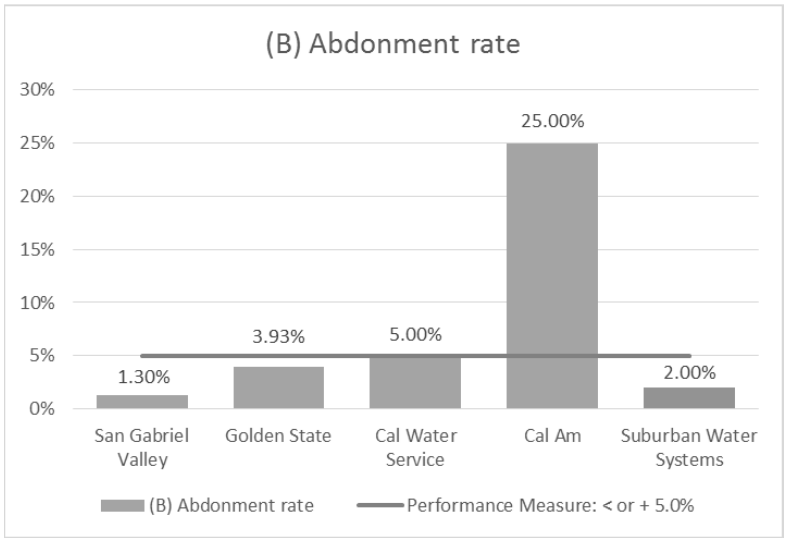
Please note that the monthly bill amount reflected in the above chart does not include the $7.11 per month Low Income Rate Assistance ("LIRA") discount applicable to eligible Sativa customers.

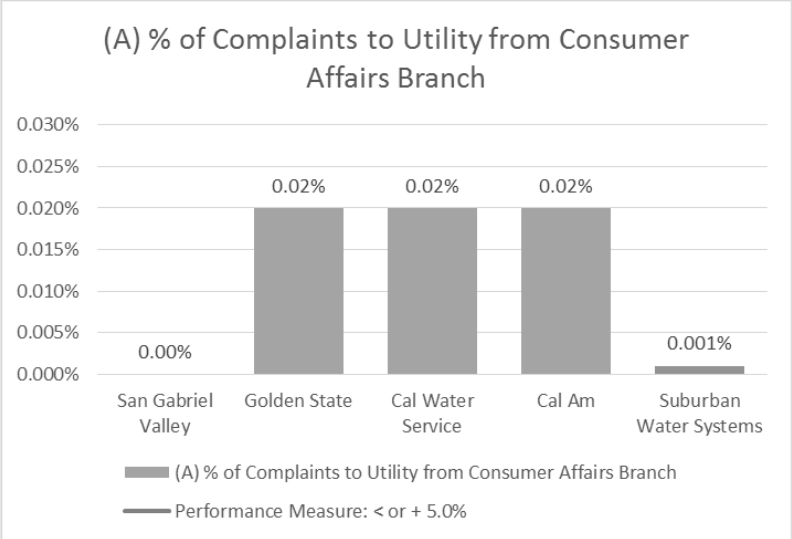
Customer Service Metrics: Each year, CPUC regulated water utilities are required to file annual reports with the CPUC that include *Attachment A – GO 103A Customer Service Performance Measures*. The data in this attachment summarizes the utility's performance measured against the CPUC's goals.

The following charts generated using publicly available data from annual reports benchmark Suburban's performance on Calls Answered in 30 Seconds, Call Abandonment Rate, and Percent Complaints to Utility from the CPUC's Consumer Affairs Branch, to the CPUC's goals and other Class A regulated water utilities.

The charts show that Suburban's La Mirada-based call center quickly responds to customer calls with few customers abandoning their calls, and that Suburban customers make very few complaints to the CPUC's Consumer Affairs Branch. Suburban is responsive to all complaints and reaches resolution without the need for a CPUC hearing.







F. Rate Management - Operations and Management Innovations to Maintain Affordable Rates

Innovative Rate Design: Suburban is the only California CPUC regulated Class-A water utility with rates that distinguish cost of service by pressure zone. Customers at higher elevations pay higher quantity charges to account for required "lifts" – i.e., the added cost to pump water to higher elevations. As Sativa would be in the lowest pressure zone, it would have the lowest rates.

Energy Efficiency: Suburban has dozens of pressure zones and more than 25 water sources that enter the system at various elevations and pressures. Suburban's production team aggressively manages their supply strategy to maximize energy efficiency to minimize power costs that are ultimately passed on to customers. The production team is careful not to send water into lower elevation zones only to waste energy re-pumping it at another time.

Suburban's SCADA system runs a time-of-use energy management program that looks at available water in lower zones and available storage in upper zones and runs pumps during off-peak or low-peak hours to avoid the higher costs of on-peak pumping.

Suburban works with Southern California Edison ("SCE") and consultants to perform pump energy efficiency tests on wells every twelve (12) months and on booster pumps every two (2) years. These tests reveal if a pump's moving parts have worn down and need to be replaced to maximize energy efficiency and minimize waste.

G.1. Experience Managing Water Resources and Water Rights

Suburban's managers and operators require a sophisticated understanding of water sources, costs, energy, and treatment requirements to meet the following production requirements:

1. Ensure that all water produced is safe to drink
2. Ensure that customers don't run out of water
3. Minimize production costs

Suburban delivers approximately 45,000 AF of water to customers each year. This requirement peaked at over 60,000 AF before Suburban's intensive conservation initiatives successfully curbed customer demand.

Suburban is the largest water rights holder in the Main San Gabriel Basin. Suburban participates in the Basin Management Committee that makes recommendations to the board for policies to ensure sustaining management, and also the Finance and Administrative committees that ensure the agency is managed well.

Suburban produces water through its own Main Basin wells and is also a partner in the U.S. Environmental Protection Agency's ("EPA") Baldwin Park Operable Unity, where Suburban receives highly treated water from the Valley County Water District ("VCWD") SA-1 treatment plant and the La Puente Valley County Water District ("LPVCWD") treatment plant. There are many ways to purchase main basin water, including entitlement, leases, over-production replacement, and pre-purchased cyclic storage.

Suburban also holds significant water rights in the Central Basin groundwater basin. Suburban has production wells to produce this water and has available water rights in the Central Basin that could also be used to meet Sativa's demand, if needed.

Suburban has ownership interests in two (2) local mutual wholesale water companies – California Domestic Water ("Cal Domestic") and Covina Irrigating Company ("CIC") – that have extensive water rights, surface and groundwater production, treatment, and transmission capacities.

Suburban's large service area overlays three (3) Metropolitan Water District of Southern California ("MWD") member agencies that include Upper San Gabriel Municipal Water District ("USGVWMD"), Three Valleys Municipal Water District ("TVWMD"), and Central Basin Municipal Water District ("CBMWD"). Suburban has direct treated connections with USGVMWD, and CBMWD, and takes TVWMD water though a neighboring agency.

Suburban has worked closely with neighboring water agencies to establish interconnections where we can deliver and receive water with neighboring water purveyors, including City of Glendora, City of Covina, City of Azusa, San Gabriel Valley Water Company, Valley County Water District, Golden State Water Company, Walnut Valley Water District, La Puente Valley County Water District, La Habra Heights Water District, Valencia Water District, Rowland Water District, City of La Habra, Orchard Dale Water District, City of Whittier, and City of Cerritos.

Suburban managers participate in the Central Basin Water Association ("CBWA") and San Gabriel Valley Water Association ("SGVWA"), holding board director seats and executive board leadership roles with both associations. Suburban employees hold director roles with the San Gabriel River Protective Association ("SGRPA"), which holds the diversion permit used to recharge the Main San Gabriel and Central basins. In the past, Suburban employees have participated in the Water Replenishment District's ("WRD") Technical Advisory Committee ("TAC") that ensures that pumpers are part of the WRD's capital planning process.

G.2. Securing New or Cheaper Sources of Water Supply

In December 2018, Suburban secured 41.70 AF of Prescriptive Pumping Rights in the Main San Gabriel Basin from a private party, which allows Suburban to pump more groundwater at a lower cost than other alternatives.

In June 2019, Suburban purchased at total of 68 shares of CIC stock from another water agency and a private party that provides Suburban with access to more cost-effective entitlement water. Similarly, from November 2018 to May 2019, Suburban purchased 9.5 shares of Cal Domestic Stock, which secure additional lower cost Cal Domestic entitlement water for Suburban.

In 2002, Suburban and other Main Basin pumpers impacted by industrial contamination successfully negotiated a project agreement for the cleanup of contaminants in the Main San Gabriel Basin known as the Baldwin Park Operable Unit ("BPOU"), an EPA Superfund site. This agreement provided low cost treated water to Suburban for 15 years. In 2017, Suburban and the other parties renewed this agreement for another ten (10) years.

In 2018, Suburban and other Main Basin pumpers impacted by industrial contamination successfully negotiated a project agreement for the cleanup of contaminants in the Main San Gabriel basin known as the Puente Valley Operable Unit ("PVOU"), another EPA Superfund site. Once completed, the PVOU treatment plant will provide low cost treated water to Suburban and its customers for the next several decades.

In 2010, Suburban entered into an agreement with the Upper San Gabriel Municipal Water District ("Upper District") to partner on the design, construction, and operation of a recycled

water transmission, storage, and distribution system in West Covina. Upper District secured over $28.5 million of grant funding and State Revolving funds to build and own this project. This recycled water offsets more costly and environmentally impactful imported water. Suburban customers purchase this recycled water at a cost that is 15% less than the potable water cost.

Section 3 – Water Utility Operating Experience

A. Ratemaking Service Areas, Connections and Employees

The following describes Suburban's existing ratemaking areas and provides the number of connections in each system:

Suburban Water Systems - Whittier / La Mirada
Number of connections: 33,814, which equates to 62,876.5 Effective dwelling units
Appendix 2 shows the Whittier / La Mirada ratemaking service area.

Suburban Water Systems - San Jose Hills
Number of connections: 42,606, which equates to 81,941.5 Effective dwelling units
Appendix 3 shows the San Jose Hills ratemaking service area.

Number of Employees: Suburban's two ratemaking service areas are immediately adjacent to each other and are only divided by the Puente Hills. Even though the systems are hydraulically independent, they are both operated by Suburban's 133 employees who are assigned to a system depending on the system needs and their rotating assignments.

Operational and Professional Recognition Awards

Quantum Workplace Employee Voice Award: In 2019, SouthWest and its subsidiaries, including Suburban, was recognized for distinction in employee engagement with the 2019 Quantum Workplace Employee Voice Award. Each year, Quantum Workplace, an employee satisfaction benchmarking company serving more than 8,700 organizations, recognizes 20 organizations for excelling in collecting, analyzing and taking action on employee feedback. (https://www.quantumworkplace.com).



Suburban's high employee engagement scores were a major contributor to SWWC earning this award and demonstrates that Suburban's employees feel that Suburban is a great place to work.

5-Star GRESB Rating: GRESB (https://www.gresb.com) is a globally-recognized independent rating service that measures the long-term sustainability of real estate and infrastructure companies, through an assessment of companies' environmental, social and governance

("ESG") principles. GRESB Infrastructure provides systematic assessment, objective scoring, and peer benchmarking for ESG performance of infrastructure companies and funds.

On September 4, 2019, SouthWest and its subsidiaries, including Suburban, received high marks for its Environmental, Social, Governance efforts. Specifically, SouthWest:

- Earned a 5-star rating in all four (4) years the GRESB Infrastructure survey has been administered (2016-2019)
- Achieved a score of 76 compared to a GRESB Average of 45 and a Peer Average of 71
- Ranked in the top 10% (8 out of 88) among survey participants from the Americas Region
- Ranked in the top 8% (30 out of 393) among All Infrastructure Assets

Highest 2018 Supplier Diversity Spend: As a CPUC-regulated water utility, Suburban is subject to CPUC General Order 156, which established the Utility Supplier Diversity Program framework and guidelines. General Order 156 sets a 21.5% of eligible procurement spend goals for utilities' use of diverse owned vendors (Minority-, Women-, Disable Veteran-, and LGBT- owned business enterprises). Suburban is proud to have exceeded this requirement annually and, in 2018, recorded a Supplier Diversity spend of over $15 million, or 49.5%. This was the highest diversity spend percentage of all CPUC-regulated water utilities and the second highest among all CPUC-regulated utilities.

B. Most Likely Ratemaking District to be combined with Sativa

Suburban will file with the CPUC to combine Sativa with the Whittier/La Mirada ratemaking area that consists of Suburban's Whittier and La Mirada operating systems. This service area was selected by Suburban because it is the closest to Sativa and, like Sativa, depends on groundwater produced from the Central Basin groundwater basin.

C. CPUC Annual Reports

Although it has two (2) operating systems (San Jose Hills and Whittier/La Mirada), Suburban files a single CPUC report that encompasses all of its operations. The 2016, 2017, and 2018 CPUC annual reports are attached as Appendix 4.

D. Most Recent State Department of Water Resources (SWRCB) Division of Drinking Water Annual Inspection Report

The most recent SWRCB Division of Drinking Water annual inspection report is attached as Appendix 5.

E. Annual Reports to SWRCB and Consumer Confidence Reports (CCR's)

The 2016, 2017, and 2018 annual reports to SWRCB are attached as Appendix 6.
The 2016, 2017, and 2018 Consumer Confidence Reports are attached as Appendix 7.

F.1. Systematic Routine Repair and Maintenance (Resources, Cost, and Manpower)

Construction Departments: The bulk of Suburban's water distribution system was constructed between 1955 and 1965 and is primarily composed of Asbestos Cement pipe that have failures due to ground movement, tree roots, rolled rubber gaskets, and collar failures. Suburban's water system has a high proportion of High Density Polyethylene service lines that are prone to failure where they are bent at the curb stop. Suburban has over 10,000 mainline valves that are also 60 to 70 years of age. This aging infrastructure results in routine maintenance for Suburban's construction crews, with crew members rotating their assignments every six (6) months. The construction crews have the following primary functions:

- **Leak Crew:** Suburban has three (3) full-time leak crews that use heavy equipment (backhoes and dump trucks) to excavate and repair failures on pipe, services, and valves. In 2018, these crews worked 946 service orders on these major system repairs (78.8/month).

- **Metershop:** Suburban has over 76,000 service lines and meter boxes that are the same vintage as the aging pipes. Suburban has two (2) dedicated Metershop crews that repair leaking meter box assemblies and change out stopped meters. In 2018, the Metershop crews completed 2,731 service orders on meter boxes (227.6/month).

- **Valve Crew:** Suburban has three (3) dedicated crews consisting of two (2) valve inspection crews and one (1) exercising crew. This work is described in detail in the following section on preventative maintenance.

- **Underground Service Alert and Governmental:** Every day, Suburban receives dozens of requests through the Underground Service Alert ("USA") system for the location of its underground utilities. In 2018, Suburban's two (2) USA team members responded to 13,084 location requests (1090.3/month). Also, to comply with county and city franchise agreements, Suburban coordinates the relocation of utility assets that conflict with projects such as street resurfacing, wheel chair ramps, street lights, etc.

Mechanical Maintenance Department: The Mechanical Maintenance Department maintains Suburban's production, pumping, treatment, and storage assets, which is critical to Suburban's ability to provide safe and reliable quality water and fire flow to its customers. Mechanical Maintenance employees are also responsible for achieving the designed life cycle and efficiency of each asset to minimize the costs passed on to customers. The following are the routine repair and maintenance functions that Suburban's Mechanical Maintenance Department performs:

- **Safety/Security** – Perform daily inspections of Plant sites. This task ensures that all the plants sites are secure and have not been breached by unauthorized individuals that may result in theft, vandalism or sabotage. This function is important for ensuring water safety to customers and providing a quick response to potential terrorist activity. This task also identifies any damage to facilities caused by natural disasters or other sources such as car accidents or fallen trees.

- **Housekeeping** – Clean all plant sites for the purpose of sustaining the condition of the plants' structures and assets. This is a fundamental part of Suburban's preventative maintenance ("PM") program.

- **Systems Control Valve Maintenance** – Perform routine inspections and timely refurbishments of flow control, pressure reducing, pressure relief, and pressure sustaining valves within Suburban's system. This program is critical for maintaining the equipment that ensures appropriate pressures and distribution of water within the zones.

- **Electrical Panel Maintenance** – Perform the cleaning, inspections, amperage & voltage reads, and maintenance of every booster and well control panel annually. Corrective maintenance is performed if faulty hardware and terminations are identified via thermography. This program ensures that the electrical panels remain in good condition and reduces the risk of component failures and arc flash incidents.

- **Corrective Maintenance** – Identify defects through inspections and predictive maintenance activities. Corrective maintenance is scheduled, tracked, and prioritized. The purpose of this activity is to proactively address imminent failures, thus increasing the reliability and availability of assets.

- **Reactive Maintenance** – Respond to unplanned downtime 24/7. Reactive maintenance creates the greatest risk of not providing safe and reliable water to our customers but may be necessary in the event of an emergency.

F.2 Preventative Maintenance Programs

Mechanical Maintenance: Suburban's mechanics perform the following preventative maintenance actions:

- **Preventative Maintenance** – Perform routine inspections of all assets, replace motor lubricants, and grease motors/pumps bearings, packing adjustments, and/or replacements. This calendar-based PM program is designed to sustain the reliability of our assets.

- **Predictive Maintenance** – Collect vibration readings of motors and pumps to identify any abnormal assembly vibrations that may indicate with bad bearings, misalignments, imbalance, or looseness. Data is captured for trending purposes and identifying defects. This is an important function for preventing reactive maintenance.

Valve Inspection and Exercising: Suburban's Whittier/La Mirada, and San Jose Hills Construction departments execute the valve inspection and exercising programs in their respective water systems.

Suburban has three (3) valve trucks with two (2) person crews who inspect and exercise valves and exercise and paint hydrants. Suburban is on pace to exercise all of its more than 10,000 valves in five (5) year cycles. In 2018, Suburban's valve crews exercised 2,772 valves (231/month). The valve crew also records valve locations using a GPS device, which will help locate the valve again in the future.

Reservoir Inspections and Repairs: Suburban has a consultant/inspector dive into its reservoirs every three (3) years and provide a report, video, and photos that show required preventative maintenance. The Engineering Department summarizes all of the required repairs and prioritizes the execution of the work. This preventative maintenance extends the life of the reservoirs, which reduces costs to customers.

Flushing: Our QA team performs routine flushing of dead end blow-offs. Flushing eliminates aged water from dead ends and removes particulates that settle out in the system. As part of this program, our technicians identify missing or non-functional blow-offs and submits them to Engineering for installation or replacement.

G.1. Emergency Response Ability

After Hours On-Call Program: The water system is required to provide safe and reliable service to customer 24 hours a day, 7 days a week and 365 days a year. Even though water system employees work regular business hours, events can occur that impact the water system outside of regular business hours. Suburban maintains a robust after-hours response program to maintain safe and reliable services outside of regular business hours.

Suburban's field employees participate in an On-Call program where they respond to after-hours emergencies and customer concerns. Suburban uses an after-hours call service to receive and route calls to the responsible on-call employees. These employees respond directly to customers and report to the site to investigate the scope of the problem to determine the appropriate response and urgency. Depending on the situation, they will address the issue, involve a more appropriate group, or call in the rest of the on-call response team to address the issue. These employees can also call in contractors to assist if the scope of the problem is beyond their capabilities. Employees participating in the On-Call Program take home company vehicles to facilitate timely responses.

Suburban's employees perform the following on-call duties:

> **Construction Department Duties:** Respond to water distribution system issues such as leaks and damaged fire hydrants, address customer service concerns, and address general water system issues.
>
> **Mechanical Maintenance Department Duties:** Respond to issues which may arise related to Plant Sites and other distribution facilities identified by Production, Construction or Quality Assurance On-Call employees.
>
> **Quality Assurance Department Duties:** Address customer water quality concerns.
>
> **Production Department Duties:** Review the water system periodically as needed, and respond to SCADA alarms.

SouthWest Resources: In emergencies, Suburban can rely on support and resources from its affiliates in five (5) other states. If Suburban's call center is unavailable after a disaster, its customer calls will be transferred to SouthWest's call center located in Texas.

CalWARN: Suburban is a member of the California Water/Wastewater Agency Response Network ("CalWARN"), whose mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance processes for public and private water

and wastewater utilities. Suburban has signed onto the omnibus mutual assistance agreement that promotes the sharing of resources during emergencies, mutual assistance, a forum for developing and maintaining emergency contacts and relationships, and new ideas learned in disasters.

Backup Generators: Suburban has a number of mobile emergency generators that it can move to plant sites that are without power for an extended period of time. Suburban also has fixed backup power generators at critical plant sites that are required to continue to pump even when power is not available.

Inventory: Suburban maintains an extensive inventory of parts required to repair the water system. It also relies on water parts suppliers/vendors that to maintain an inventory of parts.

G.2. Emergency Response Plan

Suburban's emergency response plan is included as Appendix 8.

H. Safety and Risk Management

In the past three (3) years Suburban has had the following major employee, operational and environmental accidents or losses:

Year	Type	Incident	Measurement	CAL OSHA Citation
2016	Workers Compensation	Employee injuried right shoulder	53 lost days	None
2017	Workers Compensation	Employee injured left knee	45 lost days	None
2017	Workers Compensation	Employee amputated tip of index finger	42 lost days	None
2018	Major Vehicle Incidents	Employee hit parked vehicles, no injury	Repair Costs $10,600	N/A
2018	Major Vehicle Incidents	Employee rear ended other party, no injury	Repair Costs $10,000	N/A

Note: There were no environmental incidents in the past 3 years.

I.1. Water and Energy Conservation – Meter Testing and Replacement

Large Meter Testing Program: The water that flows through Suburban's largest customer meters (greater than 2-inch) represents a significant portion of water delivered to customers. Metering inaccuracies in these large meters can result in significant volumes of water loss that have negative consequences, including inefficient water use, wasted embedded energy, and higher costs to other customers.

Suburban's Metershop teams test meters on a regular basis to ensure that these large meters accurately measure flows to customers. The testing frequency of each meter is determined annually based upon the consumption at that point of service.

Suburban owns calibrated comparative test meter devices that it uses in series to measure flow through large meters to determine their accuracy. Suburban also employs outside meter testing vendors to perform the same type of testing and produce test result reports. Meters found to be inaccurate are scheduled for replacement.

Small Meter Testing Program: Small meter (less than 2-inch) testing is performed on a case by case basis. If a customer makes an inquiry regarding a high bill, and the water consumption appears to be out of the normal range of history, the meter is tested by an independent third party.

Production Meter Testing Program: Suburban tests all production meters for accuracy every twelve (12) months.

Meter Replacement Programs: Suburban has a program to replace meters 2-inch and less every fifteen (15) years. The age of the meter is tracked in our Enterprise Resource Planning ("ERP") software. This program assures that Suburban's water sales within the sizes of meters adhere to the standard of 98.5% to 101.5% accuracy allowed.

I.2. Water and Energy Conservation – Water Auditing and Leak Detection Practices, and Energy Auditing and Energy Conservation

Water Loss Auditing: At the end of each month, Suburban compares its billed consumption with the water produced and purchased to determine unaccounted-for water loss. Suburban monitors the running twelve (12) month water loss average to ensure unaccounted-for water is minimized. Suburban has historically had water loss below 6.0%.

Suburban submits reports annually to the California Department of Water Resources to comply with the California Water Code (Section 10608.34). The validity scores for the San Jose Hills and Whittier/La Mirada water systems in the 2018 reports were 74 and 77, respectively.

Leak Detection Practices: Like Sativa, Suburban's service area is completely built out with suburban development. Combining this high-density population with Southern California's dry climate makes leaks easily apparent because of the running water they produce in gutters, streets, parkways, and sidewalks. Suburban's customers are conscious of water conservation and are quick to report their observation of running water. Also, Suburban's employees are always vigilant for running water while driving around the service areas. Suburban's field customer service employees and construction crews respond immediately to leaks to

determine its origin and scope, and prioritize its repair. Although leaks typically surface near the break in the line, it is not obvious. For hard-to-detect leaks, Suburban uses underground utility locating devices and ground microphones. Suburban prioritizes leak repairs to reduce water loss based on risk to health and safety, then by amount of water flowing, and then by age of the leak.

Suburban's construction crews capture data about leaks and submit them to the GIS system for historical references. This information is then used to identify pipes that have failed, and also to study the long-term life cycle of pipelines to prioritize replacement.

Energy Auditing: To ensure that energy is being used efficiently, Suburban uses the following approaches to audit energy use:

- Performs pump efficiency tests on well pumps annually, and all booster pump stations bi-annually, to identify inefficiencies in pumping energy consumption. Motors and pumps identified as inefficient are rehabilitated or replaced to maximize energy efficiency.
- Prepares a monthly energy report that combines Southern California Edison ("SCE") usage and billing information with production meter data to determine kilowatt per acre-foot metrics at each location to identify plant sites that have declining energy efficiency.
- Uses SCADA to monitor real time energy usage data provided by power monitor equipment at each site.

Energy Usage and Efficiency: Suburban strives to maximize operational efficiency including minimizing power consumption. Not only does this reduce environmental impact (smaller carbon footprint), it also minimizes the cost to provide service to customers. Suburban employs the following measures to maximize the efficient energy use:

- Takes advantage of its elevated reservoirs to do most of its pumping during low energy demand periods so it can participate in energy demand response events by manually shutting down wells and booster pumps where feasible. Suburban participates in demand response events to reduce its load on the power grid, reduce the potential for rolling outages, and reduce the power utility's installed capacity requirements.
- Takes advantage of time-of-use pumping rates to minimize energy costs and shift energy use to lower demand periods.
- Reviews pumping applications at the time of pump replacement to ensure that new pumps are ideally suited for the application.

- Installs premium efficient motors whenever it installs new motors or replaces existing motors. Premium efficient motors are more expensive to purchase than standard motors but use less electricity to do the same amount of work. Premium efficient motors reduce energy consumption and expenses.
- Has installed Variable Frequency Drives on many wells and booster pumps to control the speed of the motor and produce only the flow rate required. This saves energy that would otherwise be lost to relief valves or unnecessarily high pressure.

Water Conservation and Embedded Energy: In addition to the above listed mechanical strategies, Suburban is actively pursuing customer water conservation to reduce the amount of water delivered. A reduction in water delivered reduces the amount of energy embedded in the production, treatment, and distribution of that water.

Water Conservation: In 2016, California's Governor directed the SWRCB to provide conservation goals for water purveyors. Suburban's San Jose Hills water system was given a goal of 24% and its Whittier / La Mirada water system was given a goal of 28%. Suburban was able to work with its customers to achieve both of these goals. Please see the Section 4.2.3A Part 3A Section 4 item E - Communication with Customers of this proposal for more information on our conservation program.

J.1. Water Quality Violations and Corrective Action Plans

Suburban has not had any violations or corrective action plans for its operating districts.

J.2. Description of Suburban Water Systems Water Quality Activities

Suburban's San Jose Hills water system is classified as SWRCB Treatment 4 and the Whittier/La Mirada water system is classified as SWRCB Treatment 2. The following is a brief summary of the activities that Suburban's team complete to ensure the safety and quality of the water delivered to customers:

- **Sampling and testing:** Suburban's certified QA Technicians collect several thousand water samples each year at water sources such as wells, treatment plants, and interconnections with wholesalers. Suburban performs in-house tests such as chlorine and chloramine residual, and sends samples to state certified laboratories for testing substances such as coliform. The team monitors these results to identify concerns and coordinates with the Production Department and Mechanical Maintenance Department to adjust operations so that water delivered to customers is of the highest quality and meets primary and secondary drinking water quality requirements.

- **Reporting:** Throughout the year, the QA team and QA Reporting Manager enter data and prepare reports that are submitted to the Department of Drinking Water compliance program.

- **Responding to customer inquiries:** Suburban's Customer Service call center forwards calls in English and Spanish from customers regarding water quality concerns to our QA Technicians. The QA Technician coordinates with the customer to meet at their residence as soon as possible to observe and test the water. This QA Technician will perform flushing and take other measures to address the customer's concern.

- **Sequestration:** Suburban receives water from the Baldwin Park Operable Unit (BPOU) regional treatment plant SA-1, which is extensively treated using air stripping and ion exchange. As the resulting water has a high potential to cause corrosion in ferrous metallic pipes, which causes water to turn red, Suburban injects an ortho-polyphosphate sequestering agent to inhibit the corrosion effect and minimize the potential for customers receiving discolored water.

- **Chlorination & Chloramination:** Suburban disinfects water produced by its own well and maintains a free chlorine disinfectant residual by injecting sodium hypochlorite at its well production facilities. Suburban's employees practice safe chemical handling procedures, including using personal protective equipment.

  For wells that have high potential for high Trihalomethane ("THM") production, or for pump stations that lift free chlorinated water into zones that also receive chloraminated water from Metropolitan Water District of Southern California Water ("MWD"), Suburban injects anhydrous ammonia to convert its free chlorinate residual water into chloraminated water.

  Suburban's Mechanics and QA Technicians perform regular free chlorine and chloramine measurements on water samples taken throughout the system and at its production, distribution, and storage plant sites.

- **Reservoir Chloramine Residual Management:** Suburban's water system is supplied with water that is disinfected with free chlorine and chloramines. Mixing of disinfectants and water age can both cause a deterioration of disinfectant residual. Suburban maintains residual in reservoirs by regularly cycling them (running them down and filling them up). Suburban has recently completed a pilot study to test the effectiveness of a treatment process that involves reservoir mixing and chemical dosing. Suburban is in the contract phase of installing a permanent system on its first reservoir and plans to install this system on other reservoirs as needed.

- **Blending Treatment:** Suburban has a DDW approved blending plan that allows blending of water from wells that have poorer quality with high quality treated groundwater from Valley County Water District (VCWD) [Lante] Plant (SA-1) at Plant 121 in West Covina. The permit requires comprehensive testing and reporting to ensure high quality treated water leaves the plant.

  SCADA utilizes an operational interlock flow-weighted set point for perchlorate, which is the controlling contaminant. The purpose of this interlock is to remove wells exceeding the perchlorate maximum contaminant level ("MCL") from service and disable them from pumping if the calculated flow-weighted perchlorate level exceeds the set point and/or VCWD initiates a shutdown of SA-1. Once the calculated flow-weighted perchlorate level returns below the set point, the most contaminated well can become re-enabled and allowed to run.

On a weekly basis, or whenever new analytical results are obtained from the laboratory, the blending scenarios are updated by Suburban's Chief Operator and distributed to the System Control Operators ("SCOs"). The SCOs update the source water perchlorate concentrations in the SCADA system, if necessary, and use the updated scenarios for guidance when adjusting source water flow rates to the blend plant, and ultimately to the distribution system. System demands and system reservoirs capacities, along with other factors, determine the sequence, flow rate, and pumping duration of sources delivered to the blending plant.

K. Certified Operators Responsible for Operating Sativa

The following table summarizes all of Suburban's certified operators who work in the San Jose Hills and Whittier/La Mirada service areas. Suburban intends to use all of them at different times to operate the Sativa system. To protect employees' privacy, rather than use their names, letter/number combinations are used based on the employees' last names (e.g., "G8" instead of "Gott").

Employee	Title	Distribution Certificate	Treatment Certificate	Suburban Service Years
A1	Engineering	D1	T1	12
A2	Mechanical Maintenance	D3	T1	8
A3	Quality Assurance	D5	T4	10
A4	Customer Service	D1	T1	1
B2	Construction	D2	T2	4
B3	Engineering	D2	T2	4
B4	Construction	D3	T2	53
B5	Field Services Manager	D5	T2	20
C1	Production	D4	T2	38
C2	Construction	D3	T2	12

Employee	Title	Distribution Certificate	Treatment Certificate	Suburban Service Years
C3	Mechanical Maintenance	D2	T2	2
C4	Mechanical Maintenance	D2	T1	14
D1	Production	D4	T2	4
D2	Construction	D1	T1	1
F1	Construction	D1		2
F2	Construction	D3	T2	12
F3	Mechanical Maintenance	D4	T3	41
G1	Field Operations	D1		13
G2	Mechanical Maintenance	D2	T2	3
G3	Construction	D3	T2	5
G4	Field Operations	D1	T1	32
G5	Quality Assurance	D3	T3	15
G6	Construction	D2	T2	5
G7	Field Operations	D1		4
G8	General Manager	D3	T2	17
G9	Construction	D2		1
H1	Mechanical Maintenance	D4	T2	25
H2	Field Services	D1		3
H3	Construction	D1		4
H4	Mechanical Maintenance	D3	T2	15
H5	Construction	D3	T2	32
I1	Construction	D2	T1	7
I2	Engineering	D4	T2	7
J1	Construction	D2	T1	3
J2	Construction	D2	T1	3
K1	Mechanical Maintenance	D4	T2	41
K2	Technical Services	D1		36
L1	Engineering	D1	T2	13
L2	Construction	D2		4
L3	Quality Assurance	D4	T3	35
L4	Mechanical Maintenance	D2	T1	9
M1	Construction	D1		1
M2	Quality Assurance	D4	T4	17
M3	Production	D3	T2	16
M4	Customer Service	D2	T1	28
M5	Construction	D5	T2	28
M6	Engineering	D3	T1	13
M7	Field Ops Administration	D2		22
M8	Construction	D3	T2	10
N1	Technical Services	D2		27
N2	Customer Service	D2		40
O1	Mechanical Maintenance	D2	T2	14

Employee	Title	Distribution Certificate	Treatment Certificate	Suburban Service Years
O2	Engineering	D1		3
P1	Service Operations	D1		8
P2	Construction	D2	T1	17
P4	Conservation	D2		9
P5	Construction	D5	T3	30
P6	Construction	D2	T2	8
P7	Field Services	D5	T2	18
R1	Production	D3	T2	30
R2	Quality Assurance Reporting	D2	T2	8
R3	Field Services		T1	6
R4	Mechanical Maintenance	D2	T2	3
R5	Chief Operating Officer	D3	T2	18
R6	Field Operations	D2	T2	12
R7	Quality Assurance	D4	T2	10
S1	Engineering	D2	T2	7
S2	Field Operations	D3	T2	40
S3	Field Ops Administration	D1		17
S4	Engineering	D2	T1	6
T1	Safety and Security	D5	T2	17
T2	Construction	D3	T2	5
V1	Quality Assurance	D4	T3	14
V2	Customer Service	D2	T1	25
Z1	Technical Services	D2		40

Section 4 – Customer Service Experience

A. Location for Utility Receipt of Customer Payments, Inquiries and Complaints

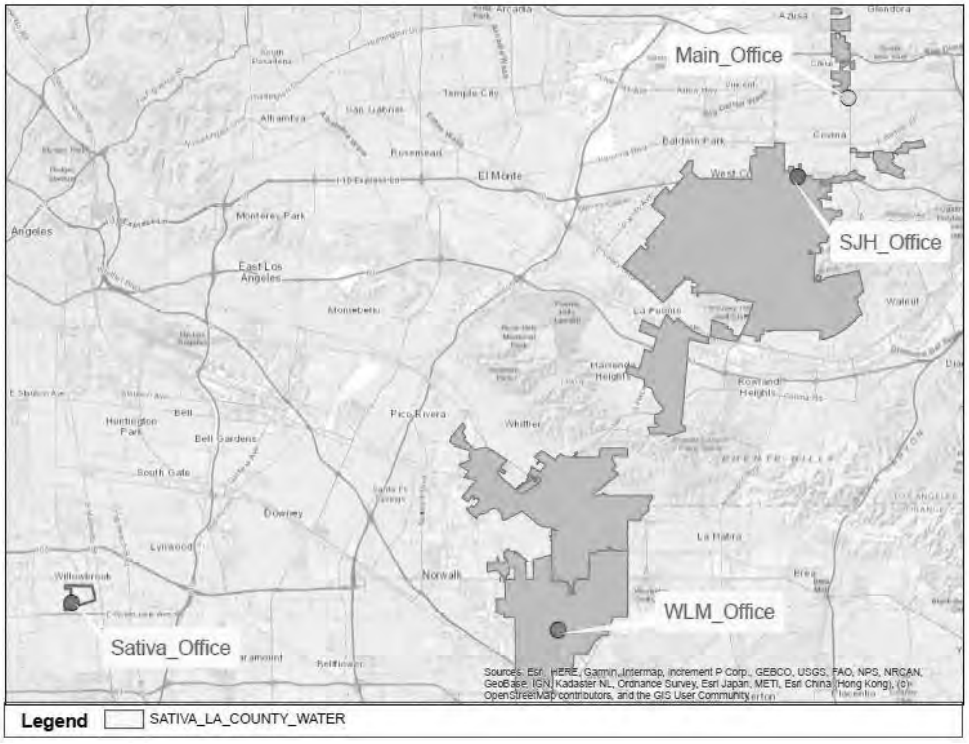
Sativa customers will benefit from Suburban's state-of-the-art customer information system. Suburban has multi-lingual (English and Spanish) customer service counters at the following locations that are also shown on the map below:

Suburban Water Systems - Whittier / La Mirada
15088 Rosecrans Ave, La Mirada, CA 90638
Phone: (562) 944-8219
Hours: Monday – Friday 8:00am to 4:30pm

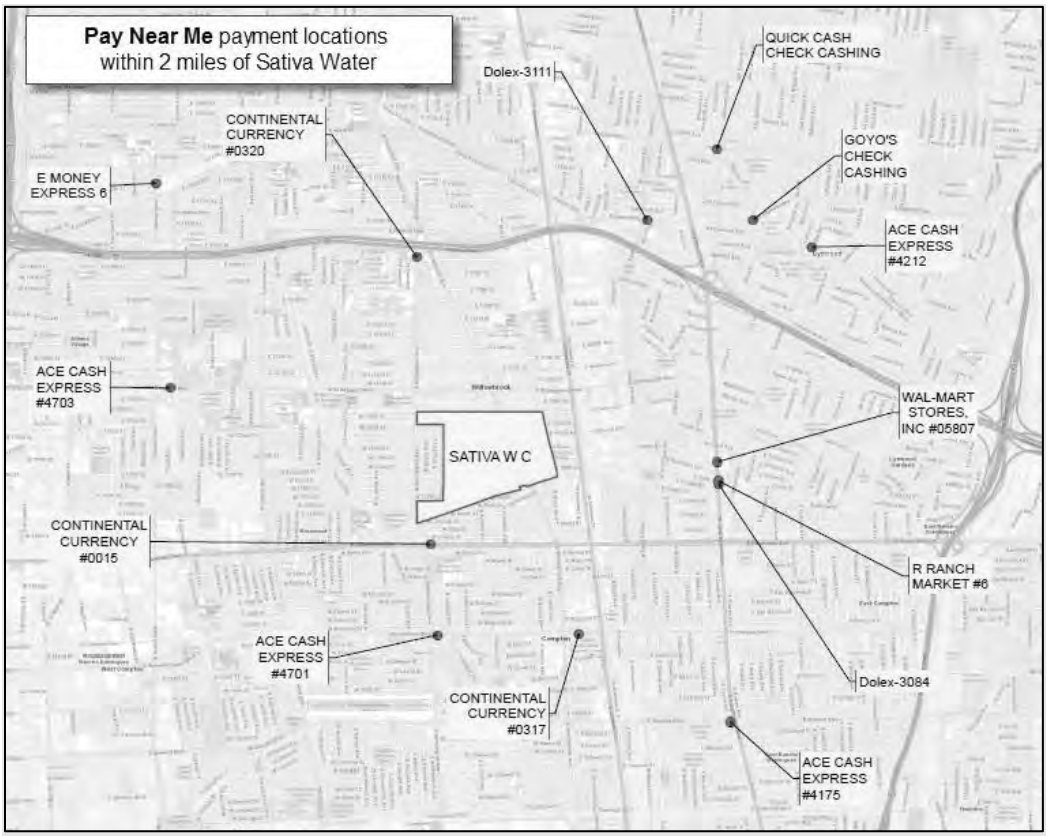
Suburban Water System - San Jose Hills
2235 E Garvey Ave, West Covina, CA 91791
Phone: (626) 543-2640
Hours: Monday – Friday 8:00am to 4:30pm

Suburban intends to maintain a customer service presence at the existing Sativa Water District office:

Sativa Water District Office
2015 E Hatchway St, Compton, CA 90222
Phone: To be determined
Hours: Monday – Friday 8am to 4:30pm



Customers will also be able to pay in cash at retailers who participate in the Pay Near Me program**.** The map below shows the retailers within a two (2) mile radius of the Sativa water system.



Our offices are staffed with experienced, professional, and courteous customer service professionals who are knowledgeable about the water system.

Suburban employs multilingual office and field staff who speak both Spanish and English to serve the primary languages spoken in the communities we serve. Our customer call center employees live in Southern California and work out of our La Mirada and West Covina offices. They are familiar with Los Angeles County and participate in many events to support our communities. Unlike many other call centers, Suburban's customer service call center employees have a long tenure with Suburban and are experienced and committed. In fact, we recently celebrated two customer service employees who recently passed the 40 years of service milestone.

As noted in the Benchmarking section of this proposal, Suburban has very minimal CPUC customer service complaints (0.001%) and the few complaints that are made are resolved

without the need for a hearing. Suburban's call center has a high answering calls within 30 seconds rate (91%), and a low number of customers who abandon their call (2%).

Suburban offers customers a variety of options for paying their bill:

- Pay cash or no fee credit card at one of above-mentioned office locations
- Mail a check to our remittance center in Covina
- Pay on online at Suburban's customer service web site:
    - Customers have access to their account information 24/7
    - Customers may pay their bill, start service, and stop service
    - Our website also highlights events where our employees participate in community outreach such as Meals on Wheels, food drives, and school supply drives. All these events benefit the communities where our customers are located.
- Pay with credit card over the phone
- Direct debit with Automated Clearing House (ACH)
- Pay cash at third party retailers through Suburban's Pay Near Me partners.

B. Suburban's Customer Service Philosophy

Customer Care is a core value in Suburban's Mission and Values and is top of mind for our employees. Our Customer Care values are:

- We listen attentively;
- We speak and act in a courteous and respectful manner; and
- We honor our commitments.

At Suburban, we understand the critical value of water and how important it is for customers' safety, welfare, and dignity. With this in mind, Suburban's customer service representatives strive to find solutions to help customers maintain service continuity.

We communicate and reinforce our Customer Care philosophy with our employees through various methods including our monthly newsletter, annual Values Award, annual performance evaluations, and one-on-one meetings.

C. Continuous Improvement in Customer Satisfaction

Suburban practices continuous improvement strategies to elevate the service we provide to our customers. We solicit customer feedback to enable continuous improvement, and use this information, with technology to improve processes. Suburban employees are empowered to

participate in the development of our programs and initiatives, and their contributions enable us to achieve organizational transformation.

Suburban understands that some customers prefer to communicate via social media; we have integrated these communication channels into our organization. Specifically, Suburban has augmented its social media presence to include Facebook, Twitter, and Instagram, and monitors neighborhood applications, including Nextdoor, to learn about customer issues not raised directly to the customer service team. Feedback received in person, by phone, email, or posted on social media is passed on to field operations and customer care teams so that processes can be reviewed and revised, to ensure that technology is being leveraged to support the customer.

Suburban seeks to continually improve its customer service experience by using technology to automate processes that benefit customers. Suburban's field operators have ruggedized laptop computers that provide them remote access to up-to-date customer information. Customer service field work is dispatched to operators using service orders generated by the company's integrated computing platform. This real time communication allows field operators to address customer issues associated with their water service in a timely and proficient manner. Customer care call center representatives also have access to a modern Customer Relationship Management ("CRM") system that is used to manage customer accounts and provides representatives with real-time information to address customer questions and concerns in a timely manner. The information that supports both the field and call center operations is stored in a modern ERP software system (SAP), which is periodically updated and upgraded to ensure contemporary technology is available to support customer facing processes.

Suburban customers have multiple options to pay their bills; our objective is to provide them with convenient payment choices that meet their needs and schedules. Payment options include mailing a check to the company's remittance center located in Covina, accessing the company website payment portal to set up a one-time or recurring payment, utilizing the interactive voice response (IVR) via telephone, visiting one of our payment locations, or dropping off payment at a retailer participating in Pay Near Me. Customers have the option of selecting to receive bills via US Postal Service or they can opt into the environmentally friendly method of paperless billing.

Suburban recently upgraded the telephone system used by the call center to handle customer calls. This upgrade ensures that the company's technology is compatible with the communication devices and smart phones used by our customers. Suburban wants to provide customers with a positive experience using either the self-service process or speaking with an agent. The phone system includes a courtesy-call-back feature that gives the customer the option to receive a call back or remain on hold. This feature reduces the amount of time the

customer spends on hold, especially during busy hours, and allows the customer to select the option that is most convenient for them.

Suburban is also upgrading its customer website portal to provide our customers expanded self service functions, including a streamlined move-in / move-out process, and access to consumption information to assist with conservation.

Since 2018, Suburban has installed over 10,000 AMR meters. These meters measure and capture the volume of water passing through the meter each hour. This hourly data is stored and can be exported into a report. These usage reports help our field representatives work with customers in identifying the source of high consumption (e.g., automatic sprinklers running when customer is asleep or a continuous toilet leak). Feedback from customers has been positive because customers are able to act and reduce their water usage to save money. In October 2019, Suburban began an AMI pilot project that will provide remote access usage information for 2,300 customers. Suburban plans on converting its entire system to AMI, which will greatly improve customer access to their usage information.

We have made process changes to reduce customer disconnections for non-payment. These changes, which include the following, have resulted in a significant reduction in disconnections for non-payment and improved customer satisfaction:

- Not turning water off on Mondays;
- Increasing the minimum balance due; and
- Proactively calling and giving customers notice 1-2 days prior to a shut-off for non-payment.

D. Complaint Resolution Procedure and Regaining Customer Confidence

Suburban strives to satisfy the customer, however, there are times when customers are dissatisfied because they disagree with a charge, feel they have a high bill, or they are unhappy that their water was disconnected for failing to pay their bill. The following describes Suburban's approach for helping dissatisfied customers:

- **Disagree with a Charge:** Suburban's customer service team will walk the customer through the bill and help them understand the charges.

- **High Bills:** Our call center and customer counter representatives are empowered to help the customer. Representatives often satisfy a customer by helping them understand the types of uses that contribute to high bills, such as excessive irrigation or a plumbing leak. However, if this does not resolve the customers concern, the customer service representative has additional tools, including:

- **Field Visit:** Suburban's office representatives are empowered to dispatch a field customer service representative to the customer's address to determine if there was an error on the meter read, and to determine if the customer has a leak on their plumbing;

- **One-time Leak Adjustment:** It is possible that a customer may have a high bill because they have a plumbing leak. If the customer can provide proof that they repaired the leak, they may qualify for a one time leak adjustment where their high bill can be reduced.

- **Financial Hardship:** Sometimes our customers are experiencing financial hardship and cannot afford to pay their bill. Suburban's representatives and our Customer Service Manager can use the following tools to help them maintain service:

  - **Payment Past Due Date Extension:** Past due date is extended to provide more time for customer to bring their account current

  - **Payment Plan:** Customer agrees to remain current on future bills, and signs an agreement to pay off the overdue bill over a specified number of months. To comply with the Water Shutoff Protection Act (SB998) that becomes effective on February 1, 2020, Suburban will extend the number of days past due prior to disconnection to 79 days, which is 19 days longer than required.

  - **Low Income Rate Assistance (LIRA):** Suburban's low income customers that meet program requirements are eligible for our LIRA program, which gives them a $7.11/month discount on their fixed service charge. The LIRA discount increases if base rates increase.

- **California Public Utilities Commission (CPUC) Complaint:** If the customer is still unsatisfied after Suburban's customer service team has exhausted its options, the customer may make a written complaint to the CPUC. The CPUC will send the complaint to Suburban requesting an investigation and a summary of actions taken to resolve the complaint. Our Customer Service Manager researches each issue and responds to the CPUC. If the CPUC is dissatisfied with the response, it may direct Suburban to resolve the customer's issue. In 2018, Suburban received 12 complaints from customers, which represents a miniscule 0.001% of customers served. All of these complaints were resolved without the need for a CPUC hearing.

E. Communicating with Customers

Customer Communication: Suburban uses a number of multilingual channels to communicate with its customers including:

- **General Rate Case (GRC) Notices:** Suburban sends customers a notice when it files a GRC application. This notice describes requested rate changes (actual changes are always less than requested). The multilingual notice provides links and contact information for customers to find additional information about the process and changes.

- **Public Participation Hearings (PPH):** Suburban may be required by the CPUC to hold PPH's whenever it files a GRC application or a Cost of Capital application, both of which are required by the CPUC's Rate Case Plan every three (3) years. A notice is sent to all customers regarding the PPH meeting details.

    - Suburban implemented drought conservation measures to comply with the California Governor's mandatory water use reductions. Suburban held PPH's in La Mirada and West Covina to discuss the requirements with customers and to respond to questions and concerns utilizing multiannual personnel and informational materials.

- **Website:** Suburban's website (http://www.swwc.com/suburban/) provides important multilingual information for customers including:

    - Customer service contact information;
    - Rates, Rules and Tariffs;
    - Accounting information and payment portal;
    - News about the utility (community involvement activities, etc.); and
    - Water quality (Consumer Confidence Reports – CCR's).

- **Customer Service Counter:** Suburban maintains flyers at the customer service counters for customers to learn about our programs, and have multilingual staff available.

- **Social Media:** Suburban has Facebook, Twitter, Instagram, and LinkedIn accounts to serve as another communication channel to reach customers. Suburban's Communications Manager posts updates regularly and responds to customer's questions and concerns. In some situations, the Communications Manager provides contact recommendations so the customer may reach the Suburban employee who has the expertise to resolve the issue.

- **Bill Flyers:** Suburban has an in-house billing center where bills are printed, folded, and stuffed every month. Throughout the year, the bill includes a flyer that contains important multilingual information for customers. Subjects covered in these flyers include:
    - How to read your bill
    - Lifeline (house service line repair program)
    - Conservation programs
    - Consumer Confidence Report (CCR)
    - Military Active Duty Bill Relief
    - Third party notification (older adult and disabled customers may designate a third party to receive copies of bills to help them manage their account)
    - Improvement projects updates
    - Water Invoice and Statement Help (WISH) Program (Low Income Rate Assistance)

Conservation Communication: Suburban is committed to an active program of public outreach and education to promote conservation and efficient water use with our customers. Suburban's conservation programs are as follows:

- **Theater Program:** Since 2010, Suburban has sponsored a water conservation-themed theater program for schools within our service areas. Each year, approximately 20 schools (or 10,000 children) participate in the program provided by the National Theatre for Children.

- **High Efficiency Toilet Program:** Suburban provided customers with high efficiency toilets to replace their existing toilets that consumed up to five (5) times as much water as the new models. These fixture replacements help customers reduce their water usage and keep their bills affordable.

- **Resource Action Program:** Since 2017, Suburban has worked with the Resource Action Program to provide a WaterWise program to 5th grade students throughout our service areas. During the 2017-2018 school year, more than 2,000 students participated in this program.

- **Customer Awareness Communications**: Each year, Suburban participates in various community events by conducting presentations to customers at landscape/gardening workshops and local organizations such as the Kiwanis Clubs, Lions Clubs, homeowner associations, and school groups.

- **Landscape Workshops**: Suburban's landscape and gardening workshops are held four (4) times a year to teach participants on how to conserve water while keeping a healthy

landscape. Each two (2) hour workshop covers topics ranging from type of plants, soil preparation, water needs, landscape design, irrigation design, and general landscape maintenance. Attendance at these workshops is typically from 25-100 participants per class.

Residential Landscape Surveys: In 2018, Suburban commenced a Landscape Survey and Irrigation Retrofit Program. Customers are provided with an in-depth report about their past water usage, a new smart irrigation controller, and new efficient sprinkler heads.

- **Other Activities:** Suburban participates on an ongoing basis in the following activities to promote conservation with our customers:

    - Presentations to homeowners association groups, school classes, city organizations, and other groups as requested.

Community Involvement: Suburban's employees are very active in the communities we serve. Suburban provides its employees with 8 hours of paid time to participate in community events during work hours. The following is a list of some of the activities our employees have been involved in 2019:

- Relay for Life / Breast Cancer Fundraising
- Tzu Chi Mobile Food Drive and Food Pantry
- Fun runs in West Covina, Industry, La Mirada
- Meals on Wheels (Industry / La Mirada)
- Watershed Restoration and Clean Up Events (Upper San Gabriel MWD)
- Small Business Expo
- West Covina Earth Day event
- Water Fest (Upper San Gabriel MWD)
- Women of Achievement Awards
- Glendora Water Awareness Festival
- Love La Mirada day of service event
- National Utilities Diversity Council (NUDC) Garden State Get Together
- Merced Elementary Career Day
- Merlinda Elementary End of Year Field Day
- School Supplies Drive / School Backpack Drive
- Summer Concerts in the Park (La Mirada)
- La Mirada Health Fair
- Whittier Chamber of Commerce – Women in Business Seminar
- West Covina Fire Department Open House


Tzu Chi Mobile Food Drive


Merced Career Day
Merced Elementary Career Day


School Supplies Drive

F. Customer Satisfaction Survey

Suburban conducted a survey in 2017 to gauge customer satisfaction, identify areas of strength, and determine opportunities for improvement. Suburban is proud of the contributions throughout our communities and will continue to deliver high quality, safe, and reliable water at an affordable cost. The survey focused on the following categories:

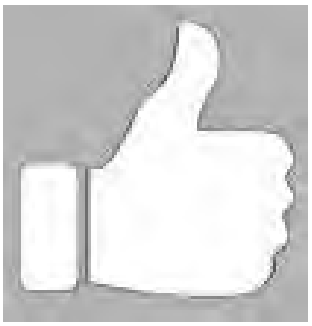
- Overall Satisfaction
- Company Attribute Ratings
- Billing and Payments
- Water Quality and Delivery
- Bill Inserts
- Newsletter Communications
- Promotions
- Customer Communication with Water Provider

The following info-graphic shows highlights from the survey results that are provided in full in Appendix 10.

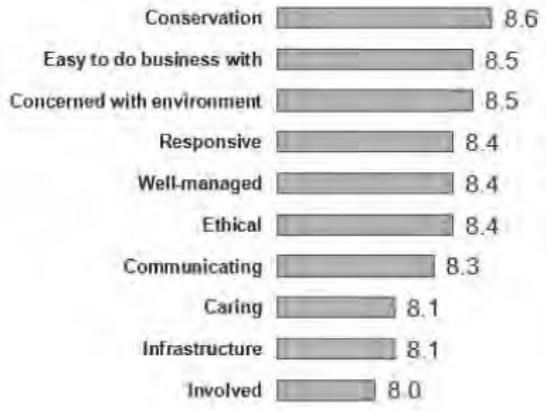
8.3 Suburban Overall Satisfaction

Suburban received high marks from our customers with an overall rating of 8.3 out of 10.

Suburban scored well in important areas including conservation, communication, environmental stewardship, and caring:



Water Company Attributes



Our customers rated us highly on billing attributes including:	
8.7	Sending bills that are easy to understand
8.7	Bill Timing
8.5	Offering a variety of options for you to pay your bill
8.7	Billing accuracy
8.3	Offering flexibile payment options
Suburban customers rated both the billing and payment processes highly, giving positive scores on understandable bills, accurate bills and timely bills.	
8.4	Billing process
8.5	Payment process
Suburban customers rated our water quality and delivery high:	
9.1	Delivering water without interruption
8.3	Water pressure
8.2	Water smell
8.1	Water being safe to use and drink

4.2.3B Part 3B – Financial Information

Section 1 – Proposal Bid Sheet

Please see the Proposal Bid Sheet on pages 56-57, after this 4.2.3B Part 3B.

Section 2 – Financial Capabilities

A. Audited Financial Information

Please see the most recent three (3) years of audited financial information attached as Appendix 9.

B. Annual Report to Public Utilities Commission

Please see the most recent annual report to the Public Utilities Commission attached as Appendix 4

C. Quarterly Securities and Exchange Commission filings

Not applicable as Suburban is not a public company.

D. Investment Grade Rating

Suburban's first mortgage bonds are investment grade, rated "1" by the Securities Valuation Office of the National Association of Insurance Commission.

E.1 Revenue Sources

The following summarizes Suburban's revenue sources:

- Base Fee Revenue (monthly service charge)
- Industrial Water Sales
- Water Sales to Public Authority
- Residential Water Sales
- Business Water Sales
- Recycled Water Sales
- Fire Hydrant Service (public hydrants on private property)
- Private Fire Protection Service
- Non-Tariff Revenue (houseline repair program)

- Recycled Water Operating Revenue (Suburban operates the Upper San Gabriel Valley Municipal Water District's recycled water system under an Operations and Maintenance Contract)
- Other Revenue

E.2. Collection Process

Suburban follows CPUC approved rules that govern customer payments. Customers receive their bill by mail or by way of their on-line account. The bill becomes past due 19 days after the bill date. A water shut-off notice is sent to the customer ten (10) days after the past due date and, if the customer has not paid by the 17th day after the past due date, another notice is sent to the customer to inform them that payment needs to be received within 24 hours to avoid a shut-off for non-payment. If the customer still does not pay their bill, the customer receives a notification that the account will be sent to a third party collections agency.

Suburban is always looking for new ways to remind customers of due dates and make it easier for them to make payments on time. For example, Suburban recently started calling customers who are scheduled for disconnection to let them know.

ATTACHMENT 1

LOS ANGELES COUNTY PUBLIC WORKS

PROPOSAL BID SHEET

FOR

SATIVA LOS ANGELES COUNTY WATER SYSTEM (SATIVA SYSTEM)

A. Buyer Information (provide additional sheets, as necessary, for clarity)

1. Name of Potential Bidder: Suburban Water Systems
2. Address: 1325 N Grand Avenue
   Suite 100
   Covina, CA 91724
3. Contact Person (Name / Position / Phone Number / e-mail address):
   Craig Gott
   General Manager
   626-543-2554
   cgott@swwc.com
4. Type of Entity (corporation, private firm, municipal water district, etc.):
   Corporation

B. Price Proposal - Sativa System

1. Sativa System and its Assets $ 10,093,346.00
2. Water Rights $ 6,906,654.00
   $14,571.00/AF
   ($_____/AF x 474 AF)

3. Exclusions/exceptions (Explain clearly and provide additional information on supplemental pages.) $ 0.00

C. Total Price Proposal $17,000,000.00

D. Alternative Purchase Plan (Please describe the proposed approach and Price Proposal using the same components included in Item B, above.)

N/A

E. General Exceptions (if any)

This proposal, including all conditions, contingencies and exceptions, and any asset purchase agreement to be negotiated by Suburban Water Systems and the County, are subject to regulation by, and contingent upon approval by, the CPUC.

F. Comments

We at Suburban Water Systems believe we are best suited and positioned to become the next stewards of the Sativa Water System, to provide quality water service to all served by the system.

4.2.3C Part 3C – The Plan to Address Primary Issues of Sativa System

Section 1 – Governmental Submittal Requirements

A. Rate Projection

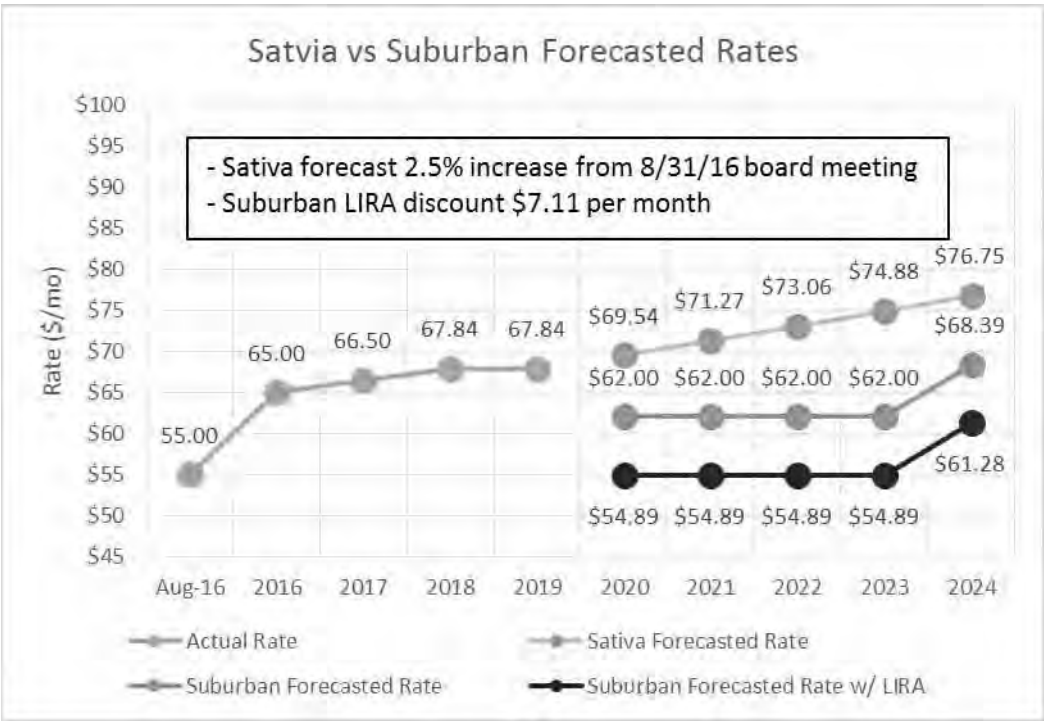
Subject to CPUC approval, Suburban proposes to ***reduce*** average monthly bills for Sativa customers immediately after acquisition by 8.5% – from $67.84 to $62.00 – and to maintain the $62.00 rate through 2023.

Year	Monthly Rate per Equivalent Dwelling Unit (EDU)	Comments
2020	$62.00	Effective subject to CPUC approval
2021	$62.00	
2022	$62.00	
2023	$62.00	
2024	$68.39	Effective on January 1, 2024 subject to CPUC approval

- Suburban assumes the CPUC approval process will follow the 245-day schedule and the transition is completed before the end of 2020 (see 4.2.3C, section 1.C., below).
- The estimated 2024 average bill assumes the Sativa water system is combined with Suburban's Whittier/La Mirada Service Area and subject to the current forecasted 2024 combined Sativa-Whittier/La Mirada rates.
- Suburban plans to install meters at all customer connections by the middle of 2023 so that Suburban can provide customers six (6) months of consumption usage to allow higher consumption customers to conserve and fix leaks before volumetric rates are charged in 2024. Suburban intends to install meters at Sativa to comply with the January 1, 2025 deadline for metering under AB2572 and AB975.
- Periodically, Suburban's customers are assessed surcharges/surcredits for changes in various costs that are beyond Suburban's control.
- As Suburban's next proposed GRC application is due shortly, on December 31, 2019, Suburban will not be able to include the Sativa water system in the next GRC; Suburban therefore proposes, subject to CPUC approval, an initial immediate 8.5% rate reduction for Sativa customers with the combined Sativa – Whittier/La Mirada rates to become effective on January 1, 2024.

- Suburban cannot definitively state what the rate resulting from Suburban's 2023 GRC proceeding will be. Rates will be set based on actual inflationary impacts on operating expenses (e.g., labor, water, electricity) and CPUC approved capital expenditures.
- In our application for CPUC approval of the acquisition of the Sativa water system, we will request CPUC approval for eligible Sativa customers to participate in Suburban's Low Income Rate Assistance Program, which currently provides a $7.11 discount on the fixed monthly charge for qualifying residential customers.

The following chart summarizes Sativa's rate history and provides a comparison of the rate increase plan approved by the Sativa Board on August 31, 2016, with Suburban's proposed 5-year rate plan for Sativa with and without the $7.11/ month LIRA discount. As reflected below, Suburban's rates in all years is lower than the rates approved by the Sativa board.



B1. Sativa 5-Year Capital Improvement Plan

The goal of the capital improvement plan is to provide clean and affordable water to Sativa's customers while making prudent infrastructure investments. The following is a narrative that explains Suburban's understanding of the Sativa water system's operational condition and situation, and our strategy to achieve our goals. The strategy is based on the information available to Suburban at the time of the Request for Proposal; the plan would be adjusted if unanticipated conditions are encountered. The costs for the first five (5) years of this plan are summarized in the table that follows the narrative.

Supply: The most important part of a water system is its supply. If the water supply is of poor quality, unreliable, or insufficient to meet demand, then customers will not receive clean, safe, reliable, and abundant drinking water. In addition to meeting customer demands, adequate supply is critical for providing lifesaving water for firefighting and emergencies.

As water supply is a utility's biggest expense, use of the least expensive sources should be maximized. Sativa's significant Central Basin groundwater rights provide its customers with access to water that costs significantly less than treated imported water. Production of this local water also has a significantly lower environmental impact (carbon footprint) than water pumped and transported from Northern California or the Colorado River.

We understand that Sativa's wells have impaired quality and are insufficient to meet firefighting and emergency demands, which has resulted in a dependence on water from neighboring purveyors. While interconnections with neighbors can be important reliable source of supply for both parties, they typically tend to have higher costs than groundwater produced from a water system's own wells.

The County's work to rehabilitate the existing wells and replace the pumping, electrical, and control systems will vastly improve the reliability and adequacy of supply. However, to further improve the reliability and adequacy of the lowest cost water supply, Suburban will invest in the construction of an additional well to replace the no longer operational Well 4. If manganese is also present in water produced from the new proposed well, we would route a dedicated pipeline approximately 1,000 Linear Feet (L.F.) to the soon-to-be-constructed treatment plant at Well 5.

Treatment: Suburban recognizes that Sativa's existing primary supply, Well 5, is producing water that has high levels of manganese, resulting in colored water being delivered to customers through the distribution system. This poor color quality is unacceptable to customers and reduces their confidence in its safety for consumption, bathing, and washing. Suburban agrees with the County's approach of installing an Oxidation-Filtration treatment system to remove the manganese and expects that it will be installed and operational by the time of ownership transition.

Storage: Reservoir storage in a water system primarily provides emergency supply should the primary supplies become unavailable or depleted. Storage also supports fire flow availability and helps balance the difference between the constant supply and fluctuating customer demand. The existing hydro-pneumatic tanks provide very minimal storage and are used for short term pressure stabilization. The Sativa water system does not have adequate storage to meet spikes in demand, which Suburban views as a major risk to the system's customers.

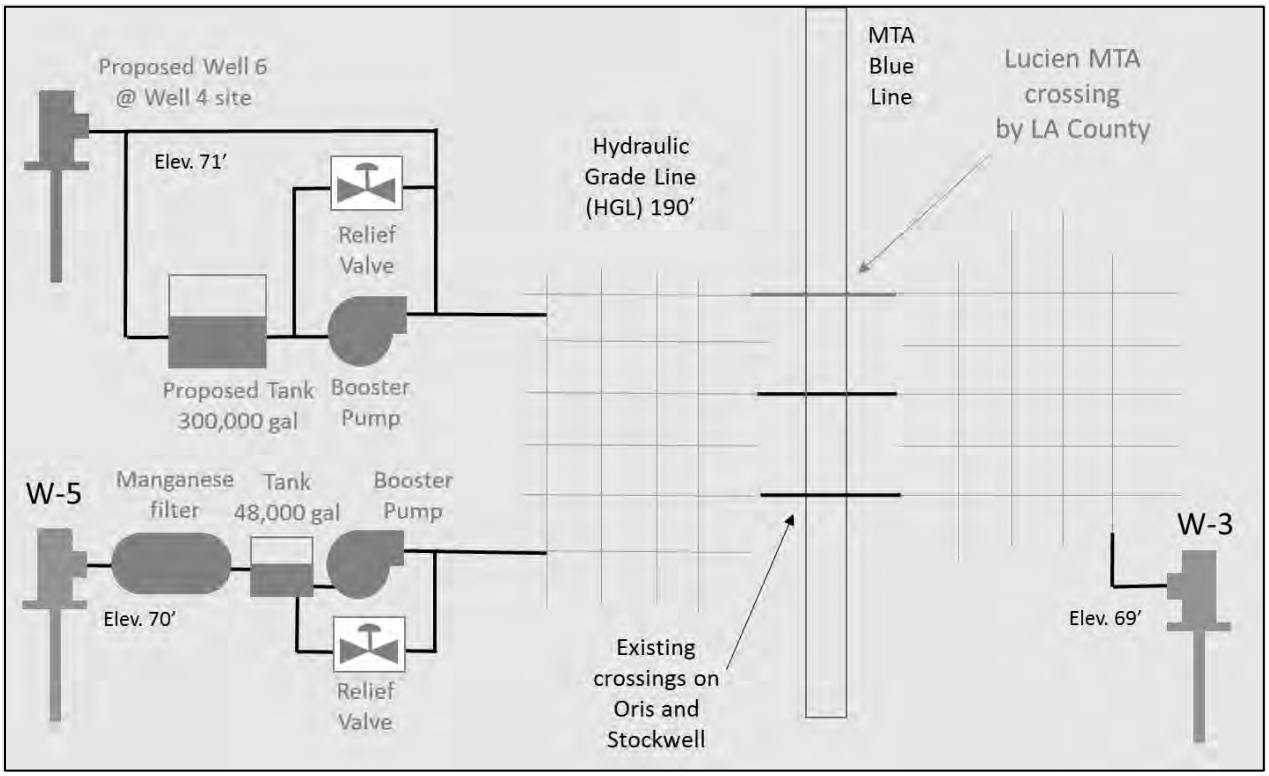
To address these storage issues, Suburban plans to install a 300,000 gallon, welded steel reservoir at the Well 4 site (as shown in the Tetra Tech study provided in Appendix Q - Current CIP of the bidder's notebook). Per the 2013 Civiltec Master Plan study attached to the bidder's notebook, more storage would be ideal but, given the limited available space, this smaller tank will provide direly needed emergency and fire protection supply. This will also simplify pressure management as discussed in the section below. This limited storage will be complemented by the 48,000 gallon tank to be constructed with the treatment plant at Well 5, and by its backup generators that will allow the wells to continue to access the vast underground central basin reservoir in the event of a power outage.

Pressure Management: Currently, the wells in the Sativa water system pump into aging 10,000 gallon hydro-pneumatic tanks. Air is added or removed with valves and air compressors to maintain a constant pressure on the water system, which is a complicated approach to pressure management. The tanks could be removed if Variable Frequency Drives ("VFDs") are used to manage pressure as described below. The 2013 Civiltec report recommends spending $400,000 on replacing the four (4) existing tanks. This money would be better served elsewhere if these tanks are eliminated.

The County intends to install VFDs on Well 3 and Well 5. The VFDs on these wells by themselves eliminate the need for the hydro-pneumatic tanks because they can be set to automatically modulate flow rate production to match customer demand and maintain a constant pressure in the system. To protect the system from over-pressurization, a valve is required to release excess pressure. Without a reservoir to discharge into, this water would go to waste, which is undesirable. Suburban assumes the County will install a relief valve at the discharge of the treatment plant to relieve excess water from the system into the 48,000 gallon tank to be constructed with the treatment plant.

As noted above, Suburban recommends constructing a large reservoir at the Well 4 site. For this reservoir to work it requires a pump station designed to meet the varying customer demand and higher fire flow and peak hour demands. The boosters in this pump station would also be driven by VFDs similar to those the County intends to install on the wells and would be designed to produce supplemental water for the system to match customer demand. Suburban would also install a relief valve from the system that would return excess water to the reservoir during off peak power periods. This would not only protect the system from over-pressurization but would also allow wells to run at optimal constant rates (improved energy efficiency) to balance supply and demand. The boosters would have smaller motors than the wells, providing lower cost pumping during low demand periods when the wells are not required.

The following is a system schematic that shows the proposed system:



Backup power: Sativa's wells pump from the groundwater basin that holds millions of acre-feet of water. In the event of a major water supply shortage event, access to this enormous reservoir is critical. Sativa's wells are driven by electric motors dependent on electricity from the power utility. Without an elevated tank, the Sativa system depends on 24-hour pumping powered by electricity. Power outage is therefore the greatest threat to maintaining pressure and supply to customers. The bidder's note book describes an existing generator owned by Sativa that does not have a California Air Resources Board ("CARB") permit. The County noted on the tour on September 23, 2019 that the generator has been maintained and is functional.

Suburban would purchase an AQMD-permitted fixed generator to run the well and pump station at Well 5. Should additional backup generators be required at the other wells, Suburban would deploy existing generators that are stored at its existing water systems. Further, it would install a fixed generator at the Well 4 site to power the pump station to supply reservoir water. Suburban recommends that the County install electrical transfer switches along with the new motor control centers at the wells to accept power from an emergency diesel generator.

Suburban would also work with the City of Compton and Liberty Utilities Park Water to establish interconnection agreements to provide water supply if all other measures fail.

Pipe Replacement: Sativa's pipeline system contains pipes of different sizes and materials installed in various locations (streets, alleys, and backyards). Although many of these pipes are old, the information in the bidder's notebook suggests that main leaks are rare and these pipes are not failing. The larger problem for Sativa's piping system is its poor performance transmitting fire flow, which is caused by poor looping and insufficiently sized pipes. Suburban agrees with the County's project to jack and bore a large pipe under the Metro Corridor to eliminate the restriction in the eastern part of the system.

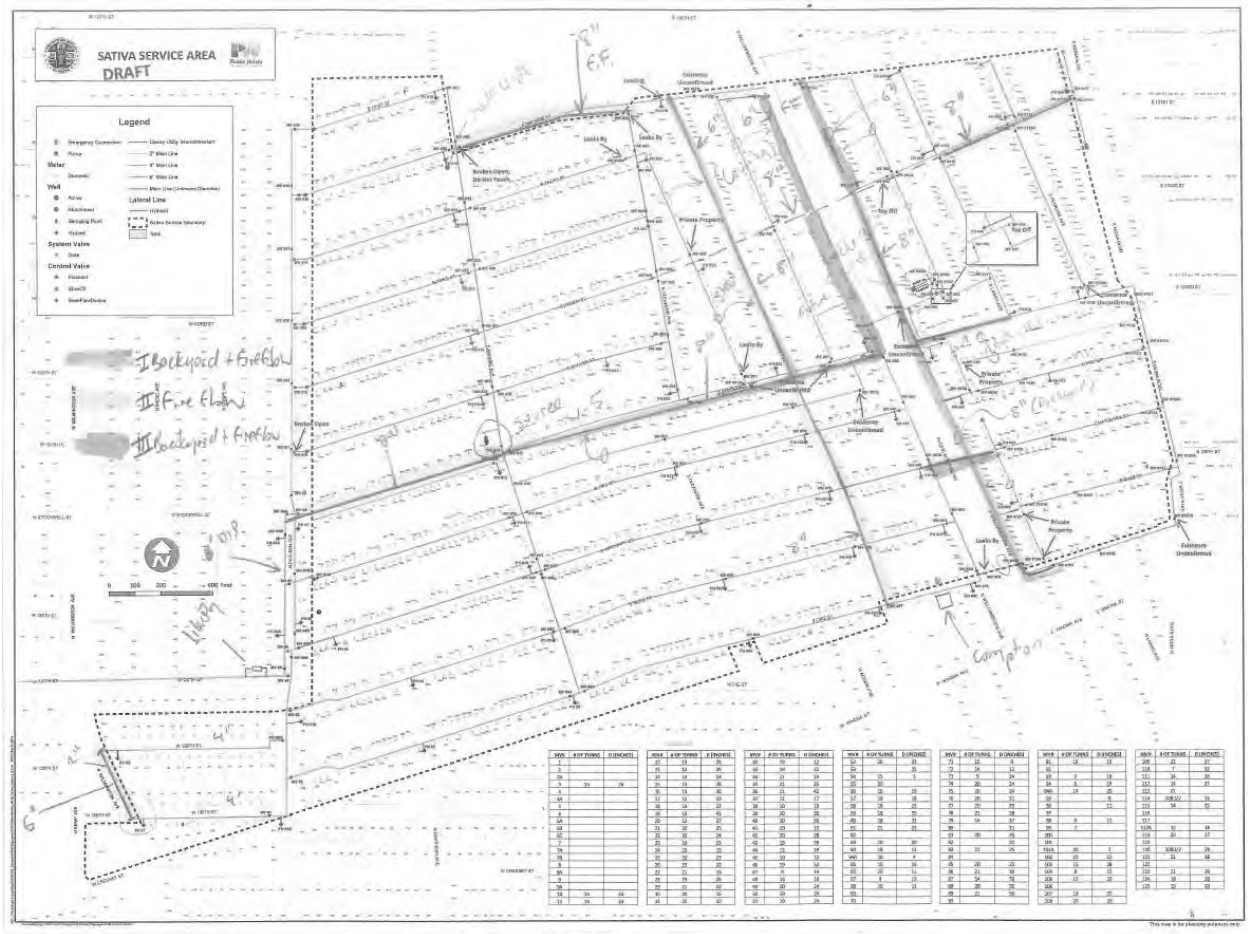
A large portion of Sativa's pipelines are class 200 AC pipe (41%). A large portion of Suburban's pipelines are also AC (80%). A recent Suburban study found that most of those pipes are still performing well (few or no failures) after 60 to 70 years. AC pipe is non-ferrous and does not rust or contribute to red water. For these reasons, we are putting a low priority on replacing these pipelines and instead will focus on the following projects over the next five (5) years.

Based on the limited information and time available to prepare this analysis, Suburban proposes the following pipeline improvements. These pipeline projects will also include the installation of meters and the replacement of services, hydrants, and valves:

- Install 8-inch pipeline on Stockwell to create transmission capacity through core of service area, and relocate pipeline from backyards.
- Construct 8-inch pipeline on Vesta (north of Stockwell) to improve fire flow northwest of water system, and replace pipelines in backyards and alleys.
- Construct 8-inch pipeline on Willowbrook to create northwest transmission capacity on east side of Metro right of way, improve transmission from Well 3, connect to new crossing on Lucien, and replace pipeline in the backyards.
- Construct 8-inch pipeline on Vesta (south of Stockwell) to improve transmission from the City of Compton connection.
- Construct 8-inch pipeline on Lucien (east of S. Largo) to improve fire flow in northeast corner of system.
- Construct 8-inch pipeline on Stockwell (west of S. Aranbe) to improve transmission from the Liberty Utilities connection.
- Construct 6-inch pipeline on N. Wilmington to eliminate two (2) dead ends and improve fire flow southwest of the water system.
- Construct 8-inch pipeline on E. Wayside to improve fire flow in the northwest end of the system, and to provide transmission to and from the reservoir to be constructed at the Well 4 site.

- Construct 8-inch and 6-inch pipeline on W. Willowbrook to connect new transmission on Stockwell with new crossing on E. Lucien, improve fire flow at dead end, and replace pipeline in backyards.
- Construct 6-inch pipeline on E. Willowbrook to improve fire flow at dead end, and replace pipeline in backyards.

The following shows the proposed piping that will improve fire flow transmission from the City of Compton and Liberty Utilities tie-ins and the wells to the extremities of the distribution system. Further, these pipelines replace those located in alleys and in backyards to provide access for maintenance, and to facilitate meter installations.



Service Replacement: The documents provided by the County suggest that most of Sativa's services are galvanized and are reaching the end of their useful lives. Suburban intends to replace services as part of its pipeline projects to improve fire protection and eliminate backyard and narrow alley mains.

Meter Installation: As-built plans and observation show that many of Sativa's services already have meter box assemblies, but without meters. Suburban plans to install meters in these boxes. For services that do not have boxes, or meter box assemblies that are in poor condition, Suburban will replace or refurbish the meter box assemblies and install meters. Suburban plans to install the same AMR to AMI meters discussed in the section 2.B above. In time, Suburban will install an antenna and bring the benefits of AMI to Sativa's customers.

B2. Capital Project Funding and Construction Schedule

The following table summarizes Suburban's five (5) year capital plan for Sativa:

Description	2021	2022	2023	2024	2025
Company Funded					
Service Replacements				182,400	182,400
Valve Replacements				48,000	48,000
Fire Hydrant Replacement				13,000	13,000
Pipeline Replacements				18,000	18,000
SCADA Integration		75,000			
Welded Steel Reservoir (290,000 gallons)				725,032	
Pump Station Construction (Site no.4)					222,283
Electrical Panel w/ ATS					50,000
Pump Station SCADA					25,000
Pump Station Generator					125,000
Pressure Relief Valve & Flow meter (site no.4)				75,000	
Well 3 Manual Transfer Switch				100,000	
Mobile Generator					90,000
Stockwell Pipeline (Backyard + Fire Flow)	566,000				
Vesta Pipeline (Backyard + Fire Flow)	534,000				
E. Willowbrook Pipeline (Backyard + Fire Flow)		741,000			
Jack & Bore (Fire Flow)					535,000
Wilmington Pipeline (Fire Flow)				107,000	
Wayside Pipeline (Fire Flow)				234,000	
Vesta Pipeline (Fire Flow)			310,000		
Lucien Pipeline (Fire Flow)			183,000		
Stockwell Pipeline Fire Flow			351,000		
W. Willowbrook Pipeline (Alley)				366,000	
E. Willowbrook Pipeline (Alley)				170,000	
Meter Purchase			418,758		
Meter Installation (Meter box and curb stop replacements)			433,174		
Well Drilling				1,000,000	
Well Piping and Equipment					500,000
Total	**1,100,000**	**816,000**	**1,695,932**	**3,038,432**	**1,808,683**

C. Proposed Schedule for Filing with CPUC

Upon being declared the successful bidder and successfully negotiating, drafting, and signing the asset purchase agreement with the County, Suburban would next submit an Acquisition Application to the CPUC. The preparation of the Acquisition Application would take approximately 60 days to allow time for Replacement Cost New Less Deprecation Study to be completed for the Sativa assets. The following application processing schedule is consistent with CPUC decision D.99-10-064 which includes the settlement attached to that decision between the Office of Ratepayer Advocates (now known as California Public Advocates ("Cal-PA")) and the water utilities.

Days After Filing	Event
0	Application filed
20	Utility notified by Cal-PA if it will request an independent appraisal (excludes municipal corporations)
30	Pre-hearing conference – schedule dates after the pre-hearing conference assume no independent appraisal
80	Cal-PA's report
115-125	Hearings
155	Briefs
215	Proposed decision – Or 60 days after case is submitted
245	Commission's agenda for decision – Or 90 days after case is submitted

D. Community Outreach Program

With the acquisition of the Sativa Water System, Suburban's Communications team will roll out our strategic communications plan with the focus on community partnership, building trust and strengthening the relationship with the customers, city staff, and local legislators. The strategic plan is the result of our ongoing experience in greater Los Angeles County and the work we support for disadvantaged communities through the California Association of Mutual Water Companies, which we support as a major shareholder of the California Domestic Water Company.

Suburban's communications approach will provide important, multilingual, timely, and accurate information to customers and community partners using a variety of communication channels. We will seek to continue and build on with the outreach efforts the County Department of Public Works has successfully established with the residents:

- **Bilingual (Spanish, English, Multilingual as necessary) Mailer:**
    - Update customers on the finalization of the agreement to transition to Suburban ownership of the Sativa water system;

  - Mailer will serve as Welcome Packet for customers; and
  - Mailer will include all information they have previously received along with the key bill inserts they will receive throughout the year featuring water quality topics, new service features, enrollment in Suburban's low income assistance program.

- **Community Forums:** Work with the County and local officials to conduct a series of multilingual community forums to explain rates, participation in low income rate assistance programs, as well as to introduce customer service and field service staff.
- **Bilingual (Spanish, English, Multilingual as necessary) Bill Inserts:** Suburban will provide educational material to customers on ways to save water and save money, updates on improvement projects, flushing schedule, our low income assistance programs, etc. (Note: the CPUC requires several inserts to be sent out annually.)
- **Bilingual (Spanish English, Multilingual as necessary) Press Releases:**
  - Bilingual announcement of completion of purchase agreement, reintroducing Suburban and the next steps;
  - Bilingual notice on planned and/or completed improvement projects; and
  - Bilingual notice on planned community town halls and/or open houses.
- **Sativa District Lobby:** Continue to make multilingual announcements available for walk-in customers to provide information and ongoing education
- **Legislative Quarterly Newsletter:** Update local legislators and community partners on ongoing improvement projects, community involvement opportunities, water quality, and Sativa field staff certifications.
- **Suburban Social Media:** Use Suburban's Facebook, Instagram, and Twitter accounts to communicate information to customers and respond to customer inquiries.
- **Suburban Website:**
  - Use Suburban website to communicate information to customers and community partners using multilingual resources;
  - Maintain current stories, announcements, and customer information portals;
  - Adapt site to best serve customers – provide information in a timely, easy to find manner using multilingual resources; and
  - Feature customer initiative campaigns.

- **Community Involvement:**
    - Proactive community engagement – Community engagement campaigns will encourage increased awareness, transparency and active community participation;
    - Community events – have an informational booth for customers to visit and communicate with Suburban personnel while receiving educational material and copies of bill inserts. Suburban is equipped to staff these booths with bilingual individuals at events held by schools, parks and recreation events, resident forums held by elected officials, and water education forums by various water districts;
    - Team up with nonprofits and community partners for fundraisers and food-donation drives (e.g., Operation Gobble – frozen turkey donations to local non-profits);
    - Coordinate with County Supervisors to build relationships with the local elected officials to see how Suburban can better serve their constituents who are also customers;
    - Meet with the Compton City Manager and water department officials to further develop and build on our relationship with the City and its residents;
    - Open House presentation and tours of new facilities (improvement project sites) for local legislators and customers to build long term relationships and trust; and
    - Visit public schools located adjacent to the Sativa service area to give presentations to students to teach them about water distribution and efficient water use.

Section 2 – Transition Plan

Transition Tasks: Suburban's team recently (2017-2019) transitioned five (5) remotely located water and wastewater systems. For Sativa, Suburban will use our system integration 100 Day Acquisition Plans to identify and execute all items required to close and onboard the new customers. The plan will include all activities required to ensure customers receive safe, reliable, and affordable service throughout the transition period and thereafter. The plan will also address communication strategies, regulatory approvals, reporting requirements and all other items to ensure a smooth transition during the pre-closing and post-closing periods.

Suburban understands that the County would like to be relieved of providing day-to-day operations for the Sativa Water System as soon as possible; even before CPUC approval. If selected as the successful bidder, Suburban would welcome the opportunity to enter into an Operations and Maintenance (O&M) agreement with the County to perform these services until the CPUC has approved the acquisition. Suburban's bid is not contingent on being awarded an O&M agreement.

Pre-Closing Period

Once selected as to be the acquirer, Suburban's leadership team would work closely with the County to address all legal, water quality, customer service, and regulatory requirements. The following tasks would need to be addressed in the Pre-Closing Period:

- Negotiation and Execution of the Asset Purchase Agreement
- Community communication
- Construction CapEx progress
- Asset evaluation
- Customer and financial data integration plans
- Identify all easements
- Update Emergency Plan
- Prepare and Assign tasks for 100 Day Acquisition Plan
- Prepare and file CPUC acquisition filing
- Receive CPUC approval for Suburban to provide service to Sativa service area and approval of rates

Closing and Post Closing Period: Upon approval of the acquisition by the CPUC and closing the acquisition with the County, Suburban would immediately assume complete responsibility for operating the system, providing customer service, and executing the 100 Day Acquisition Plan. Suburban would address the following and all other areas needed:

- **Customers**
  - Finalize customer integration into Suburban's system
  - Communicate to customers the completion of the acquisition and provide welcome letter in English and Spanish providing customer service contact information along with new account numbers
  - Make all customer payment channels available to customers
  - Work with customers who qualify for low-income assistance to get them set up in the system

- **Community Involvement**
  - Meet with stakeholders, including current employees, appropriate County Supervisors (including Supervisor Ridley Thomas), Legislators, City of Compton staff and representatives, Water Replenishment District, Central Basin MWD

- **Employees**
  - Human Resources team will on-board employees who are offered employment and enroll them onto Suburban's payroll and benefits programs
  - Ensure employees have needed safety equipment and training

- **Environmental Compliance and Water Quality**
  - Notify and update Department of Drinking Water of change in ownership prior to closing
  - Update all permits once closed
  - Continue flushing schedule to ensure high water quality
  - Develop sampling and reporting compliance schedules, and meet with DDW personnel to provide periodic updates
  - Commence planning, prioritizing, permitting and executing the water system capital improvement plan to ensure environmental, fire flow, DDW and other regulatory and legislative compliance

- **Financial Systems**
  - Accounts Payable will contact vendors and provide contact information to ensure services are not interrupted
  - Begin tracking all assets, expenditures and revenues in Suburban's system

- **Facilities**
  - Conduct final inspections of plant sites
  - Begin performing Cleaning, Inspection and Lubrication procedures
  - Develop preventative maintenance schedules by taking baseline vibration readings, and prioritize

- Work with SCADA vendors to integrate the Sativa facilities into Suburban's existing SCADA system

- **Legal**
  - Prepare all closing documents
  - Ensure all post-closing requirements are completed

- **Operation and Maintenance**
  - Assign Suburban's operators to be available to respond 24/7 to all water quality, operational, and customer service issues in the service area

- **Risk Management**
  - Ensure that required insurance policies are in place for worker's compensation, general liability, automobiles, etc.
  - Update Emergency Response Plans

Staffing and Organizational responsibilities:

Customer Service Office: Suburban intends to have a full-time customer service person available at the existing Sativa office during business hours.

Note: Customers will also be able to pay in cash at retailers who partner with Pay Near Me.

Customer Field Service: Suburban intends to have a full-time Field Services Superintendent at the existing Sativa Office location. This field-based employee would be responsible for day-to-day customer service field (turn on, turn off, etc.) operations and daily plant rounds (production meter reads, chlorine residual, etc.) and supporting the customer service office representative where required.

Upon installation of meters, Suburban would use existing Field Services staff from its La Mirada office to read customer meters each month. Suburban's Whittier/La Mirada system Mechanical Maintenance team would maintain the Sativa vertical assets (pumps, motors, valves, treatment plant equipment, reservoirs, SCADA, etc.). Suburban's Whittier/La Mirada system based Quality Assurance team would perform required sampling, testing and flushing, and operate treatment plant equipment. Suburban's Covina based production team would remotely operate and monitor Sativa's production and distribution facilities to ensure they meet customer demand and provide required emergency service. Should major repairs be required, Suburban's La Mirada or West Covina based in-house construction departments would make the repairs. The

mechanics, QA technicians, production staff, and construction crews are available after hours if emergency attention is required.

Opportunities to Retain Existing Sativa Employees: Suburban understands that there are two (2) Sativa employees remaining. Suburban will gladly interview these employees and determine their suitability for the roles described above. Any offer of employment would require the applicant to pass Suburban's standard employment screening, including a physical and background check. Suburban's preference would be to retain these employees who have historical knowledge of the water system and have important existing relationships with customers and other stakeholders. Should Suburban retain these employees, they would receive training in Suburban's systems (Customer Relationship Management – CRM, Service Orders, etc.) and policies that provide financial and accountability controls. Further, as with all Suburban employees, Suburban would provide these new employees with training and resources to obtain higher levels of water distribution and treatment certifications, develop customer service skills, and provide access to tuition reimbursement for higher education.

Billing and Financial Reporting Transfers

Suburban's customer service and IT teams will transition Sativa's customers onto Suburban's existing billing system. Suburban's Accounting and Finance teams will transition Sativa onto the Suburban's existing accounting system. The company's experienced IT and Accounting teams have participated in integrating acquired billing systems into our existing billing system.

4.2.4 Part 4 - Required Forms/Certifications

The following signed forms follow on the next page:

- Non-collusion declaration
- Avoidance of conflict of interest certification
- EEO Certification
- Lobbyist ordinance affidavit

NON-COLLUSION DECLARATION TO BE EXECUTED BY PROPOSER AND SUBMITTED WITH BID/PROPOSAL

The undersigned declares:
I am General Manager,

(Insert "Sole Owner", "Partner", "President", "Secretary", or other proper title)

Of Suburban Water Systems
(Insert name of Proposer)

The party making the forgoing bid/proposal submitted herewith to the Los Angeles County Department of Public Works declares:

That all statements of fact in such bid/proposal are true;

The such bid/proposal was not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation;

The such bid/proposal is genuine and not collusive or sham;

The said Proposer has not, directly or indirectly by agreement, communication or conference with anyone attempted to induce action prejudicial to the interest of the Los Angeles County Department of Public Works, or of any other Proposer or anyone else interested in the proposed contract; and further

That prior to the public opening and reading of bids/proposals, said Proposer:

a. Did not directly or indirectly, induce or solicit anyone else to submit a false or sham bid/proposal;

b. Did not directly or indirectly, collude, conspire, connive or agree with anyone else that said Proposer or anyone else would submit a false or sham bid/proposal, or that anyone should refrain from bidding or withdraw his or her bid/proposal;

c. Did not, in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to raise or fix the bid/proposal price of said Proposer or anyone else, or to raise or fix any overhead, profit, or cost element of the bid/proposal price, or of that of anyone else;

d. Did not, directly or indirectly, submit his or her bid/proposal price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent, or to any individual or group of individuals thereof to effectuate a collusive or sham bid, except the Los Angeles County Department of Public Works, and has not paid, and will not pay, any person or entity for such purpose to any person or persons who have a partnership or other financial interest with said Proposer in his or her business.

Any person executing this declaration on behalf of a Proposer that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and docs execute, this declaration on behalf of the Proposer.

I certify under penalty of perjury of the laws of the State of California that the above information is correct.

By: _____ Title General Manager
Craig D. Gott
Date: 11/12/19

AVOIDANCE OF CONFLICT OF INTEREST

The Los Angeles County Code, Section 2.180.010, provides as follows:

CONTRACTS PROHIBITED

Notwithstanding any other section of this Code, the County shall not contract with, and shall reject any proposals submitted by, the persons or entities specified below, unless the Board of Supervisors finds that special circumstances exist which justify the approval of such contract:

1. Employees of the County or of public agencies for which the Board of Supervisors is the governing body;

2. Profit-making firms or businesses in which employees described in number 1 serve as officers, principals, partners, or major shareholders;

3. Persons who, within the immediately preceding 12 months, came within the provisions of number 1, and who:

    a. Were employed in positions of substantial responsibility in the area of service to be performed by the contract; or

    b. Participated in any way in developing the contract or its service specifications; and

4. Profit-making firms or businesses in which the former employees, described in number 3, serve as officers, principals, partners, or major shareholders.

Contracts submitted to the Board of Supervisors for approval or ratification shall be accompanied by an assurance by the department submitting, district or agency that the provisions of this section have not been violated.

Craig D. Gott
Proposer Name (please print)

General Manager
Proposer's Official Title (please print)

11/12/19
Proposer's Signature

PROPOSER'S EEO CERTIFICATION

Suburban Water Systems
Company Name

1325 N. Grand Avenue, Suite 100, Covina, CA 91724-4044
Address

95-1371870
Internal Revenue Service Employer Identification Number

GENERAL

In accordance with provisions of the County Code of the County of Los Angeles, the Proposer certifies and agrees that all persons employed by such firm, its affiliates, subsidiaries, or holding companies are and will be treated equally by the firm without regard to or because of race, religion, ancestry, national origin, or sex and in compliance with all anti-discrimination laws of the United States of America and the State of California.

CERTIFICATION	YES	NO
1. Proposer has written policy statement prohibiting discrimination in all phases of employment.	(X)	( )
2. Proposer periodically conducts a self-analysis or utilization analysis of its work force.	(X)	( )
3. Proposer has a system for determining if its employment practices are discriminatory against protected groups.	(X)	( )
4. When problem areas are identified in employment practices, Proposer has a system for taking reasonable corrective action to include establishment of goal and/or timetables.	(X)	( )

Signature

11/12/19
Date

Craig D. Gott, General Manager
Name and Official Title (please print)

FAMILIARITY WITH THE COUNTY LOBBYIST ORDINANCE CERTIFICATION

The Proposer certifies that it is familiar with the terms of the County of Los Angeles Lobbyist Ordinance, Los Angeles Code Chapter 2.160. The Proposer also certifies that all persons acting on behalf of the Proposer organization have and will comply with it during the proposal process.

Signature: _____
Craig D. Gott

Date: 11/12/19

Appendices

See Volume II for appendices.

Appendix 1 - Engineering Department Resumes
Appendix 2 - Whittier / La Mirada Ratemaking Service Area
Appendix 3 - San Jose Hills Ratemaking Service Area
Appendix 4 - CPUC Annual Reports
Appendix 5 - DDW Inspection Report
Appendix 6 - SWRCB Annual Reports
Appendix 7 - Consumer Confidence Reports (CCR)
Appendix 8 - Emergency Response Plan (ERP)
Appendix 9 - Audited Financial Information
Appendix 10 - Customer Satisfaction Survey

R.17-06-024_13.a. List of Utility Property Valuations_MRV

Utility Property Valuations
Performed by Mark Rodriguez

Year	Project Summary
2021	Valuation of the fuel tank farm and interconnecting pipelines at an airport in Florida
2020	Valuation of a cogeneration facility in PA to satisfy tax reporting requirements
2020	Valuation of power plant assets in Manhattan
2020	Valuation of a hydroelectric facility in Chile for litigation support
2020	RCNLD Analysis of the Sativa Water System in Compton
2019	Valuation of a cogeneration facility in NY to satisfy tax reporting requirements
2019	Valuation of portfolio of nine hydroelectric power plants in New England to satisfy tax reporting requirements
2019	Valuation of two gas fired power plants in NY to satisfy tax reporting requirements
2019	Valuation of two gas fired power plants in NY to satisfy tax reporting requirements
2018	Valuation of three hydroelectric power plants in Arkansas for potential disposition
2018	Valuation of cogeneration power plant in NY for financing
2018	Valuation of a utility in Alaska for potential acquisition
2018	Valuation of a municipal water system in CA for management planning purposes
2018	Valuation of the fuel tank farm and interconnecting pipelines at an airport in Wisconsin
2017	Valuation of a cogeneration facility in MD to satisfy tax reporting requirements
2017	Valuation of a municipal water system in RI for management planning purposes
2017	Valuation of two gas fired power plants in CA to satisfy tax reporting requirements
2017	Valuation of resource recovery power plant in CA for lease buyout

R.17-06-024_13.b. List of Utility Property Appraisals_MRV

Utility Property Appraisals
Performed by Mark Rodriguez

Year	Project Summary
2021	Appraisal of water utility system in NY for management planning in anticipation of a potential condemnation action
2021	Appraisal of water utility assets and certain intangible assets in Texas for litigation support
2021	Appraisal of process piping and utility assets at a chemical plant in New Jersey for litigation support
2020	Appraisal of water irrigation systems for multiple golf course in Florida for litigation support
2020	Appraisal of water utility system in NY for management planning in anticipation of a potential condemnation action
2020	Appraisal of water and storm utility system assets in IL for due diligence to support a potential acquisition
2020	Appraisal of a two hydroelectric facilities in MA
2020	Appraisal of water and wastewater utility system assets in IL for due diligence to support a potential acquisition
2020	Appraisal of water and wastewater utility system assets in IL for due diligence to support a potential acquisition
2020	Appraisal of cogeneration facility in RI for litigation support
2020	Appraisal of a nuclear power plant in IL for litigation support
2019	Prospective appraisal of a future power plant in NJ for management planning purposes
2019	Appraisal of water utility system in CA for management planning in anticipation of a potential condemnation action
2019	Appraisal of water utility system in MA for condemnation action
2019	Appraisal of gas fired power plant in NY for litigation support
2019	Appraisal of gas fired power plant in NY for litigation support
2019	Appraisal of offshore natural gas platform and interconnect pipelines in Alaska for due diligence & potential acquisition
2019	Appraisal of gas fired power plant site in NY for lease buyout
2019	Appraisal of resource recovery power plant in VA for litigation support
2019	Appraisal of a nuclear power plant in IL for litigation support
2018	Appraisal of cogeneration power plant in MA for litigation support
2018	Appraisal of oil refinery in Midwest for litigation support
2018	Appraisal of gas fired power plant in NJ for litigation support

Utility Property Appraisals
Performed by Mark Rodriguez

Year	Project Summary
2018	Appraisal of water utility system assets in NH for litigation support
2018	Appraisal of biomass plant in NY for litigation support
2018	Appraisal of a nuclear power plant in IL for litigation support
2017	Appraisal of water and storm utility system assets in IL for due diligence to support a potential acquisition
2017	Appraisal of gas fired power plant in MA for litigation support
2017	Appraisal of three hydroelectric power plants in MA for litigation support
2017	Appraisal of a nuclear power plant in IL for litigation support

R.17-06-024_13.c. Testimony Experience_M.Rodriguez

Testimonial Experience (Expert Witness) & Litigation Support 2018 through April 2021

In addition to the following trials and hearings, Mr. Rodriguez has presented his appraisals and valuations in several arbitrations and at several property tax appeal boards.

- State of Florida – Provided deposition in February 2021 in a litigation matter *Grey Oaks Community Services*, *Inc*. *v*. *Grey Oaks Country Club, Inc.* to determine the market value of the tangible and intangible assets that comprise the water irrigation system.

- Commonwealth of Massachusetts – At the Department of Public Utilities, testified as an expert witness in May 2019 on behalf of the Milford Water Company as to the full and fair cash value of the water system assets, which are owned and operated by the Milford Water Company. This is an ongoing condemnation case.

- State of New Hampshire – Testified as an expert witness in February 2018, on behalf of Pennichuck Water regarding the value of the water system assets that are owned and operated by Pennichuck East Utility, Inc. within Litchfield, NH. This matter reached a settlement through mediation.

R.17-06-024_13.d. MRV Testimony_Water System Fair Value

VOLUME 5, PAGES 604-747

COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC UTILITIES

DPU 18-60

EVIDENTIARY HEARING held at the Department of Public Utilities, One South Station, Boston, Massachusetts, on Friday, May 17, 2019, 2019, commencing at 10:00 a.m., concerning:

TOWN OF MILFORD

SITTING:

Kevin T. Crane, Jr., Hearing Officer

Rates and Revenue Requirements Division:

Dan Strout

Mauricio Diaz

Alex Taylor

--------Reporter: Alan H. Brock, RDR/CRR--------

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May 17, 2019 10:00 a.m.

P R O C E E D I N G S

MR. CRANE: Let's go on the record. This is the fifth day of evidentiary hearings in Docket No. DPU 18-60. My name is Kevin Crane. I'm the hearing officer assigned to this case. With me on the bench this morning are Dan Strout, Mauricio Diaz, and Alex Taylor, from the Rates and Revenue Requirements Division. We are continuing with the Milford Water Company's witnesses this morning.

Mr. Conner, who is testifying first today?

MR. CONNER: Mark Rodriguez, Mr. Crane.

MR. CRANE: Mr. Rodriguez, could you please state your full name for the record.

THE WITNESS: Mark Rodriguez.

MARK RODRIGUEZ,

being first duly sworn or affirmed to testify to the truth, the whole truth, and nothing but the truth, was examined and testified as follows:

MR. CRANE: You may proceed with direct testimony.

DIRECT EXAMINATION

BY MR. CONNER:

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Q. Good morning, Mr. Rodriguez.

A. Good morning.

Q. Mr. Rodriguez, with respect to your direct testimony, marked for identification as Exhibit MWC-MR-1, dated January 25, 2019 -- I'm going to read several other items as well -- your CV, marked as MW-MR-2; and your report, marked MW-MR-3; as well as your workpapers, marked MW-MR-4 and MR-5; and finally, your rebuttal testimony, dated March 19, 2019, and marked for identification as Exhibit MW-MR-6, were these exhibits and any associated schedules and/or appendices prepared by you or under your supervision, direction, and control?

A. Yes, they were.

Q. I'm going to ask you regarding a series of information requests the same issues or topics -- or the same question. Were the responses to the following information requests prepared by you or under your supervision, direction, and control, as follows, DPU-MWC-1-1, 1-4, 1-5, 1-9, and 1-12 -- prepared under your supervision, direction, and control?

A. Yes.

Q. The following information responses as

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well: DPU-MWC-2-1, 2-1a, 2-2, 2-3, 2-4, 2-5, 2-5a, 3-2, 3-3, 3-3a, 3-4, 3-4a, 3-5, 3-5a, 3-6, 3-6a, 3-7, 3-7a, 3-8, 3-9, 3-10, 3-10-a, 3-11, 3-12, 4-1, 4-2 -- those are all DPU information requests. Were those information requests prepared under your supervision, direction, or control or by you?

A. Yes.

Q. And they're responses, not requests.

A. Yes.

Q. Finally, the next series: TOWN-MWC-4-1, TOWN-MWC-4-1a, TOWN-MWC-4-14 through 4-20, and TOWN-MWC-4-20-A, 4-20-B, 4-20-C, 4-21, 4-22, 4-22 Attachment, 4-23, 4-24, 4-24a, 4-25, 4-26: Were those responses to Town information requests prepared by you or under your supervision, direction, and control?

A. Yes.

Q. And finally, the next series is TOWN-MWC-4-26 -- I'm sorry, I already did 4-26. I'll go to the 7 series.

TOWN-MWC-7-25 through 7-33: Were those responses to information requests from the Town prepared by you or under your supervision, direction, and control?

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A. Yes.
Q. Do you have any corrections or revisions to make to your prefiled testimony?
A. Yes, I do.
Q. And what are those revisions?
A. I have several errata sheets that I need to make to the MRV appraisal.
Q. The MRV appraisal report is, I think, based on the previous identification, is marked MW-MR-3.
Mr. Rodriguez, we'll put these on the screen as we go through them. If you could explain to the Department each -- or the reason for the errata sheets and take us through each of the pages so the record is clear.
A. Sure. The first page of the errata is Page ii of our cover letter. The overall conclusion of value has been revised to $154 million as of December 31st, 2018.
Page 43, the calculation of functional obsolescence due to water loss as of October 31st, 2018, has been revised to negative $7,780,028.
Page 44, the economic obsolescence calculation has been revised and updated. The economic obsolescence penalty associated with the

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Milford Water System is $18,787,072 as of December 31st, 2018.
Page 50, Table L-2, the buildup model for the cost-of-equity analysis: We've updated the equity-risk premium from 5 to 5.0. We issued our report on January 18th, 2018. On February 19th, 2019, Duff & Phelps had a technical adjustment to the equity risk premiums within our cost-of-equity analysis, so we made the adjustment from 5 to 5.0 on Page 50.
Q. Mr. Rodriguez, before you go on -- and this is what real-time is good for, I think. I think you indicated on Page 43 your economic-loss calculation as of October 31, 2018. Is that supposed to be December 31, 2018?
A. Yes, December 31st.
Q. Then on the Duff & Phelps, their correction was published in February 2019?
A. Yes, February 2019 -- February 19th, 2019.
Page 51, we've updated the weighted average cost of capital, the 5.36. Also at the bottom of Page 51 we've revised our income approach value conclusion to $112 million as of December 31st, 2018.

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Q. The weighted average cost of capital revision was due to what?
A. Was due to the Duff & Phelps technical adjustment.
Page 56 shows our revised income approach value of $112 million as of December 31st, 2018.
Page 57, Table N-1, at the bottom of the page shows the three approaches to value with our concluded values for each approach and the weightings within the income approach, the income approach value was updated to $112 million.
Page 59, Table N-3, the overall value conclusion for the Milford Water System was updated to $138,400,000.
Page 64 within our appendices, the overall full and fair cash value of the Milford Water System assets was updated. The Milford Water System was revised to $138,400,000.
Page 65, the weighted reconciliation section table, the income approach value was updated to $112 million.
Page 67, both the functional obsolescence and the economic obsolescence

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calculations were updated, and the overall cost approach value was revised to $156,000.
Q. 56 million?
A. $156 million.
Page 69, the income approach analysis was updated with the new weighted average cost of capital, $112 million.
Page 70 reflects the equity-risk premium update from the Duff & Phelps technical adjustment from February 19th, 2019, from 5 to 5.0.
Page 396, the functional obsolescence calculation has been updated with the revised capitalization rate of 2.36, showing a new functional obsolescence value of negative $7,780,028.
Page 429, the economic obsolescence calculation was updated with the new -- with the new weighted average cost-of-capital adjustment. The economic obsolescence penalty is negative 18,787,072.
Q. Thank you, Mr. Rodriguez. Mr. Rodriguez, with those corrections, is all of your prefiled testimony that we've identified as well as your responses to information requests from both the

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Department and the Town, are they true and correct?
A. Yes.
MR. CONNER: I pass the witness for cross-examination.
CROSS-EXAMINATION
BY MR. REYES:
Q. Mr. Rodriguez, could you please turn to your response to Information Request DPU-MWC-2-2.
MR. CRANE: I'm sorry, Mr. Reyes, I want to go off the record for a moment before we proceed with your questioning.
(Discussion off the record.)
MR. CRANE: Let's go back on the record. Off the record we discussed a slight discrepancy between the pagination of the errata sheet distributed this morning and the prefiled testimony. Milford Water Company has offered to file a corrected version of the errata sheet during the lunch recess.
Mr. Reyes, thank you. You may proceed.
MR. REYES: Sure.
Q. So in your response to Part B of this information request, you've provided the company's actual rate of return for the past five years?

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A. Yes.
Q. How did you arrive at these numbers?
A. These were provided to us by David Condrey.
Q. So did you review any of the company's other documents regarding these numbers?
A. Some of them.
Q. Which documents did you review?
A. The financials that were provided to us by the Milford Water Company.
Q. And by "financials" what do you mean?
A. The revenue and expense documents, most of the documents that are included within our workpaper files.
Q. So you didn't review the documents that were submitted in the company's last rate case, did you?
A. Some of them I've looked at.
Q. Did you review the papers filed by John Guastella in that last rate case? That's DPU 17-107.
A. I'd have to see the document to be able to recognize it.
Q. I'm going to put before you --
MR. REYES: And I'm not marking this up

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as an exhibit, Mr. Hearing Officer. I'd like the Department to take notice of this document in its records.
Q. This is Exhibit JFG-2, Schedule D-1, in DPU 17-107.
And if you turn to Page 2 of the document -- I'll give you a moment to review that. Do you recognize this sheet?
A. Yes.
Q. So if you look at your discovery response in DPU-MWC-2-2, for 2014 you've indicated a rate of return of 5.72. And for 2014 in Mr. Guastella's exhibit he listed 3.48 percent. Does that appear correct to you?
A. It's listed as 3.48, yes.
Q. I won't go through all of these. I think you can look at them. You would agree that these numbers don't match?
A. I agree, they don't match.
Q. So why don't these numbers match?
A. I think you have to asked David Condrey.
Q. So you're not familiar with -- you said you reviewed the company's financials in coming up with the numbers in Exhibit DPU-MWC-2-2?

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A. Yes.
Q. And you don't know -- and you reviewed this previously; correct?
A. I've read this previously. But neither of these have anything to do with my appraisal, how I calculated my cost of equity. My cost of equity is based on the market, not based on one particular investor.
Q. Sure. But my question was: In your response in this docket, to this information request, you reported a different number from what was submitted to the Department in its last rate case; correct?
A. Yes. This is a document that I prepared here along with David Condrey, and I'm sure David can explain the differences when he testifies next week.
Q. So it's fair to say you don't know why there's a difference?
A. No.
MR. CONNER: Mr. Reyes, I'd like to point out for the record that this document only goes through 2016, and 1b goes through 2017 and 2018. So the information on 2017 and '18 is not

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reflected on the exhibit that you showed Mr. Rodriguez.
MR. REYES: I'll agree with that.
Q. Just to clarify the record: The discussion we were having was with respect to the numbers reported from 2014 through 2016. Is that correct?
A. Yes.
Q. Could you turn to your response to Information Request DPU-MWC-3-10.
A. Okay.
Q. It indicates that you also submitted an attachment, Attachment DPU-MWC-3-10, which is included in -- which was filed by the company in DPU -- Docket DPU 18-75 in its response to AG-MWC-1-2. Would you turn to that document.
I'm going to skip this question for now.
Could you turn to your testimony; that's document MW-MR-1, Page 26.
A. Okay.
Q. And in the chart below there's -- it says for the line SCADA Computer Software, and the cost approach is $75,412. Would you agree to that?
A. Yes, but that number has been updated in the errata.

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Q. Okay. So have all of these numbers been updated thereby?
A. Yes. This table here is consistent with Page 67 of the errata that -- it's a little bigger to read.
Q. So in the errata, for that line item, you would agree that says 76,927; correct?
A. Yes.
Q. All right. Could you turn to your report, Exhibit MW-MR-3, to Page 338.
A. I don't think I have that deep into the report here with me.
MR. CONNER: It should in that one.
THE WITNESS: This one here goes to 338.
MR. CONNER: It would be under Tab B.
What's the title of the table?
MR. REYES: There's just a box. It's untitled.
A. Okay.
MS. TIERNEY: I don't think we're on the same page. 338?
MR. CRANE: Let's go off the record.
(Discussion off the record.)
MR. CRANE: Let's go on the record. Off the record the witness was allowed to find the exhibit. Mr. Reyes, you may proceed with your cross-examination.

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Q. So that exhibit is an email from Marc Lemoi to David Condrey; is that correct?
A. Yes.
Q. And this was in your workpapers?
A. Yes.
Q. And so in that workpaper you would agree there's a valuation using the cost approach for the SCADA for $54,599?
MR. CONNER: I'm going to object to the form of the question. It's not a cost approach. The document doesn't reflect that.
Q. There's a calculation indicating a cost approach value set by Marc Lemoi, indicating calculation of RCNLD minus economic obsolescence of $54,599?
MR. CONNER: Again, that misstates the text of the document itself. It doesn't say "less depreciation" on here, either.
Q. Mr. Rodriguez, can you read the last two lines in the box at the bottom of the email?
A. Sure. It says, "Cost approach value equals

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RCNLD minus economic obsolescence, $54,599 equals $86,539 minus 31,940."
This document here represents what it would cost to replace the SCADA system, and the SCADA system is the addition of the software at 57,000, the plant startup and commissioning at 26,600, additional instrumentation startup 5700, and a remote pump station configuration program at 4800. So it gives you a total of 94,100.
If you refer back to errata Page 67, the 94,100 is under the RCN and Tata & Howard number, and then it is applied -- the indirect costs of 14,905, it gets $9,021 of AFUDC applied to it, to have a total replacement cost of the SCADA software at $118,027.
We used physical depreciation via an age/life method. We applied a five-year age and a 20-year life. So we have a physical depreciation on Page 67 of the errata of 25 percent. It comes up with a reproduction -- or a replacement cost new less physical depreciation of $88,520.
And then with the recalculated new economic obsolescence, it has a penalty associated with that asset of 11,593. And then on Page 67 it

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has the value of the SCADA system at $76,927. And that's the value of the SCADA system that goes into the cost approach analysis.
Q. Mr. Rodriguez, have you testified before as an expert in any regulatory proceedings as -- strike that.
Have you testified before in any regulatory proceedings pertaining to ratemaking for public utilities?
A. No, I don't believe so.
Q. Do you have any familiarity with how state public utilities set rates for regulated utilities?
A. Yes.
Q. Could you describe what the source is of your familiarity with that practice is?
A. Well, I've been valuing water companies and utilities for over 25 years, and, you know, over that time I've come across, you know, many financial pieces of information for these companies. And I'm familiar with that the rates are based on the rate base, with the original cost less book depreciation.
Q. Are you familiar with how regulatory -- state regulatory agencies determine the allowed ROEs for public utilities?

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A. Not intimately, no.
Q. Please turn to your testimony -- that's MR-MW-1 -- to Page 30.
A. Yes.
Q. So if you look down -- so you've got a section here indicating -- talking about a capital structure; correct?
A. Yes.
Q. And as you developed this capital structure, you reviewed two scenarios, one scenario with a government-owned utility and the second scenario assuming an investor-owned utility acquirer?
A. Yes.
Q. And then you applied a 50 percent weight to each scenario; correct?
A. Yes.
Q. And so on the next page, Page 31, for the investor-owned utility scenario, you're arriving at a capital structure of 55 percent debt and 45 percent equity; correct?
A. Yes.
Q. So in this table on Page 32 you have an average equity-to-capital ratio 47.7 percent;

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correct?
A. Yes.
Q. And the median is 51.2 percent; correct?
A. Yes.
Q. So if the average is 47.7 percent and the median is 51.2 percent, why did you select a 45 percent ratio?
A. We took a look at either of the two largest companies, American Water and Aqua America, and I just felt most comfortable going with a 55/45 split.
Q. So that was a pure judgment call; correct?
A. Yes.
Q. It doesn't reflect any particular one of these utilities you've analyzed; correct?
A. No.
Q. Have you performed this type of analysis prior to this case?
A. Yes.
Q. How many times have you done that, approximately?
A. More than 25.
Q. And with those -- were those with respect to regulated utilities?
A. Could have been for regulated utilities,

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could have been for unregulated utilities.
Q. Well, so how many times have you done that before for a regulated utility?
A. When you say "done that," are you talking about --
Q. This type of analysis.
A. The split between IOU and GOU, or just looking for research and coming up with debt to equity on a peer group of companies?
Q. This analysis that you've summarized in this box at the top of Page 32, how many times have you done that for public utilities, for regulated public utilities?
A. Over 25 times.
Q. So for this analysis on Page 32, that box again, what documents did you review to arrive at these numbers?
A. Which numbers are we talking about?
Q. Well, all of these numbers that are reported here. If you could describe them generally, first, and then I'll get more detailed.
A. As far as which numbers are we talking about?
Q. Well, let me take a step back. Let's go

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line by line. The first company, American Water Works Company, what documents did you review to arrive at these numbers that you're reporting in this first line?
A. If you refer to my report -- or the MR Valuation report, Page 48 -- but I guess it would be three pages different from that.
Q. Why is it off several pages? For the record, Page 48 of --
A. The MR Valuation report.
Q. That's MW-MR-3?
A. Yes.
Q. That's the page labeled --
MR. CONNER: 51 on the exhibit.
A. 51 within the exhibit.
Q. Okay.
A. So the section titled Capital Structure, these three paragraphs explain how we came about -- in the introduction to Table 1.
Q. So in the last paragraph it indicates you reviewed and analyzed several water system rate cases. Correct?
A. Yes.
Q. And these numbers come from those rate

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cases?
A. They could come from the rate cases, but overall rate cases gave me a feel for the debt-to-equity ratio that allowed me to select -- the comfort level to select 55 percent debt and 45 percent equity.
Q. When you say "a feel for" those structures, are you saying -- well, for example, debt to capital for American Water Works Company you've reported at 56.39 percent and equity to capital of 43.6 percent. Are you saying that those are not exact numbers?
A. No, I'm not saying they're not exact numbers.
Q. So when you say "get a feel for those," what are you referring to?
A. You asked earlier why I selected 55 and 45 when I had an average of 52.3 and an average of 47.7, with a median of 48.8 for debt and 51.2 for equity. I selected 55 percent debt, 45 percent equity based on my review of this information presented in L-1 as well as a review of those rate cases.
Q. Okay, but what's the source of these numbers that you're reporting -- not your final

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conclusion, but for each individual rate case? That came from the rate case; correct?
A. It could come from the rate case, could be from publicly filed information for the companies.
Q. Let's go through each of these rate cases. I'm going to put them before you.
I'm going to drop that line of questioning. I'll move on.
Turn to your testimony, MW-MR-1, to Page 39.
A. Yes.
Q. So you indicate that you assigned significant weight to the income approach because it enables -- and I'm not quoting directly -- it enables the potential acquirer to finance the acquisition and earn a fair rate of return?
MR. CONNER: Object to the form of the question. It totally misstates his testimony.
Q. Mr. Rodriguez, would you read that paragraph.
A. "We assigned significant weight to the income approach value indication. This approach to value is heavily relied upon by market participants since it is enables the acquirer to, one, whether or

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not the acquirer can finance the potential acquisition, and two, whether or not the acquirer can earn a fair rate of return on the acquisition price. For these reasons, we weighted the three approaches to value as follows: one, 60 percent to the cost approach method; two, 40 percent to the income approach method and zero percent to the sales comparison market approach. The following table summarizes the various approaches to value, weightings, and the concluded full and fair cash value of the Milford Water System assets."
Q. So in the first two items in the second sentence, why are those two factors important?
A. Which factors are we talking about?
Q. Well, one and two.
A. Whether or not the acquirer can finance a potential acquisition, and two, whether or not the acquirer can earn a fair rate of return on the acquisition. These are two basic requirements that financial investors are looking to ascertain when they make an acquisition.
Q. And at your recommended valuation for Milford Water Company, did you perform an evaluation whether an acquirer could do both of these items?

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A. Whether an acquirer could do both of these items? It's a fair market valuation, so it's the potential market of potential buyers. Some may fall into those categories, some may not.
Q. So you believe that there are some potential acquirers who could both finance the acquisition at your recommended valuation and earn a fair rate of return?
A. Yes.
Q. What types of acquirers could do that?
A. The hypothetical buyers listed in my report -- and I'll turn to the page.
MR. CONNER: If you give me the report page, I'll give you --
THE WITNESS: It's Page 19, but I believe it's 22.
MR. CONNER: It's on Page 22 of the exhibit.
A. So on Page 22 of the MRV appraisal, Exhibit 3, it would be the hypothetical willing buyers listed on Pages 22 and 23.
Q. Okay. Eversource Energy: Are you referring to the holding company?
A. I'm referring to the investor-owned utility

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that's headquartered in Hartford, Connecticut.
Q. And if Eversource Energy were to acquire Milford Water Company, you agree it would be regulated by the Department of Public Utilities? Strike that.
You would agree that if Eversource Energy acquired Milford Water Company, Milford Water Company would -- no, strike that.
You would agree....
If Eversource Energy acquired -- formed an operating company that acquired all the properties and rights and privileges of Milford Water Company, that this operating company would be subject to the Department of Public Utilities' regulation? Correct?
A. Yes.
Q. And you contend that that operating company, if it purchased those assets at the price you value it at, it would be able to finance that acquisition and earn a fair rate of return?
A. There's nothing that would preclude Eversource from purchasing the assets with 100 percent equity and not have the need to finance.
Q. What about earn a fair rate of return?

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A. If they purchase the assets, there is a fair rate -- yes, there would be a fair rate of return. The assets have a net income of almost $5 million.
Q. When you say the assets have a net income of $5 million, what are you referring to?
A. I'm referring to the errata pages, or page -- Page 69 of the errata. Under Year 2019 the net operating income is $4,857,659.
Q. So let me back up. What's your recommended valuation for Milford Water Company?
MR. CONNER: Object to the form of the question.
MR. REYES: Can I use as a shortcut "Milford Water Company" to mean Milford Water Company, all of its properties -- or all of its corporate properties and its rights and privileges?
MR. CONNER: That wasn't the source of my objection.
MR. REYES: What's the source of your objection?
MR. CONNER: You said his recommendation. It's his conclusion of value.
Q. What's your conclusion of value?

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A. If you refer to the errata Page 64, the conclusion of value for the Milford Water System is $138,400,000, and then the water rights at $15,890,000, for a total full and fair cash value of the Milford Water System assets to be $154 million as of December 31st, 2018.
Q. And if Eversource -- in your scenario, if Eversource would acquire Milford Water Company, its assets, for $154 million in pure equity, it could finance that amount. Is that what you're saying?
A. Well, if it's pure equity, you wouldn't finance; right?
Q. Well, they have to compete internally -- or the operating company would have to allocate equity to do that; right?
A. There's many different scenarios and creative structured financing that companies set up beyond, you know, being able to purchase it. I'm sure Eversource can purchase this without any issues at $154 million.
Q. Okay. So some combination of debt, equity, other financing vehicles?
A. It could. They could just do 100 percent equity, similar to what we saw, I think, with Epcor

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earlier this week was, I think, 98, 99 percent equity, cash purchase.
Q. So whatever the precise combination of financing vehicles that's put together to do this purchase, do you contend that Eversource would be able to make a fair rate of return based on its overall cost of capital for that financing? I'm using "financing" in terms of all of what needs to be done to make the acquisition.
A. Yes.
Q. Are you aware of what the company's net plant is today?
A. Which company are we talking about? Eversource?
Q. Milford Water Company.
A. Yes.
Q. And that's several -- your recommended valuation is several multiples of that; correct?
MR. CONNER: Object to the form of the question.
Q. Your conclusion of value in your report is several multiples of that; correct?
A. Are you saying -- are you referring to the book value of approximately $32 million?

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Q. The net book value.
A. The net book value; and if I recall Robert Reilly's testimony yesterday, he had mentioned that companies trade at three or four or five times book value. So if you were to multiply that by 5, it's about $154 million. It sounds like it's right in line with the $154 million number.
Q. So you believe that based -- well, in order for the company to earn a return, it has to have revenues; correct?
A. Yes.
Q. And those revenues are set by the Department of Public Utilities; correct?
A. Yes.
Q. And the Department of Public Utilities sets those revenues based on its expenses plus its cost of capital times its rate base; correct?
A. Yes.
Q. If Eversource, its operating company, were to acquire Milford Water Company, its allowed rate base would have to be several multiples of what it's currently at right now; correct?
A. No, its rate base is set, and it's increased in 2019 by 17.8 percent. In our model on

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Page 69 we have a net operating income of $4,857,659. It is a profitable company. It's throwing off a net operating income of almost $5 million.
Q. You're saying that with a net operating income of $4,857,659, Eversource would earn a fair rate of return based on a purchase price of $154 million?
A. Yes.
Q. Let's go to the hypothetical government-owned buyers that you've listed. I understand you responded in a discovery response that your approach doesn't require any of these specific buyers to be the hypothetical buyer; correct?
A. That is correct. These are just a sample of some of the hypothetical willing buyers that would most likely be interested in the system.
Q. And when you select a hypothetical buyer, do you make any judgment about whether it has any likelihood of being able to purchase Milford Water Company?
A. The answer is yes. And to a certain extent, when you list an item or a Town or a municipality as one, you also have to consider that

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they could group together and form a water utility or a combination of different municipalities. So just to single one out and look at their financial wherewithal might not necessarily be a true indication of what potentially could happen if a group got together.
Q. What's the basis of your hypothetical that any group of these could get together to form -- to purchase Milford Water Company?
A. Because it's situations that could be a realistic situation. These groups could get together and form a utility, or a Town could single up and do it themselves, or a County or the State. It's different scenarios that are potential. This is listing some of the Towns in the surrounding area that may have the interest or the likelihood to become a buyer if the system was put up for sale.
Q. Are you saying that county government could do this?
A. In certain states. I was talking hypothetically. Other states I've seen Counties pull together with local Towns to do that.
Q. You're not aware of any operating county governments in Massachusetts that could do this;

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right?
A. I'm not.
Q. And are you aware of any of these municipalities, or, for that matter, any municipality, that could possibly purchase Milford Water Company?
A. I'm sorry, I don't understand the question.
Q. Can you tell us what the likelihood is of any particular municipality in Massachusetts to purchase Milford Water Company?
A. If you refer to Page 22 of my report, under hypothetical willing buyers, this section here explains specifically the likely hypothetical buyers of the system, both from the government-owned utility side as well as the investor-owned utility side.
Q. But you can't tell us with what likelihood any of these buyers could do so; correct?
A. Just as well as I couldn't tell you that they wouldn't.
Q. You state that municipalities have extraterritorial condemnation authority for water utility and supply projects; correct?
A. Yes.

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Q. Is that true in Massachusetts?
A. I think we're in a situation here where the City is trying to take the system through a condemnation process. So the answer would be yes.
Q. Well, other than Milford, Massachusetts, can any municipality condemn Milford Water Company?
A. Weren't we talking about, I think, two days ago another -- another agreement that was changed in the '50s so another Town could take some of the assets?
You know, there's many different scenarios out there. To analyze every particular one and go through every scenario, could be numerous.
Q. So when you pose a hypothetical, don't you have to consider the legal ability to -- for these municipalities or any municipality to do so?
A. There may be -- or there is a legal aspect to it, which needs to be considered. Right now this is my list of the hypothetical willing buyers in the surrounding area that may be interested in the system.
Q. You didn't consider these Towns' legal capacity to buy Milford Water Company, did you?

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A. No, but that's a consideration that one needs to also consider, is the legal aspect of it.
Q. So you failed to make a legal conclusion of whether these Towns could purchase Milford Water Company?
A. I'm not an attorney. I don't make any legal conclusions in my appraisal.
Q. Did you make a legal assumption about whether these Towns could purchase Milford Water Company?
A. No, I made the assumption of these potential hypothetical willing buyers of government municipalities may be interested in acquiring the system, based on my appraisal.
Q. You were here yesterday for Justice Cordy's testimony; correct?
A. Part of it.
Q. Do you recall him saying -- and I'm not quoting directly -- but to the effect that a municipality can't just condemn property without a statute enabling it?
A. I don't recall that.
Q. So are you aware of any statute or any special account -- you mentioned -- we had a

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discussion yesterday of the Town that could -- let me strike that. Let me back up.
You were here yesterday for the testimony and discussion with Mr. Cordy about a Town that had a special act that enabled it to take by eminent domain part of Milford Water Company; correct?
A. Yes.
Q. And you're not aware of any other special act to that effect; correct?
A. I walked in and out a couple of times yesterday, so I didn't hear the whole testimony. So I don't know if there were any other discussions about that.
Q. But when you prepared your report, you weren't aware of that fact, either; right?
A. No, I was not aware of that fact, because I put together a list of what I believe the hypothetical willing buyers would be on Page 22 of my report.
Q. You reviewed Mr. Cordy's declaration; correct?
A. No, I don't believe I reviewed it.
Q. Well, you filed a rebuttal in this case,

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didn't you?
A. You have to show me exactly what you're talking about.
Q. That was in your testimony; correct?
A. Excuse me?
Q. You have rebuttal testimony in this case; right?
A. Yes.
Q. So turn to Page 1 of your rebuttal. That's marked as Exhibit MW-MR-6.
A. Okay, I have it.
Q. So between Lines 13 and 16 you've indicated -- well, it seems to suggest you've reviewed the declaration of Justice Robert Cordy; correct?
A. Yes, with regard to the opinion of fair market value of the system.
Q. Are you relying on his legal opinions?
A. I'm not relying on his legal opinions. It's one of the items that I reviewed when I determined -- or when I reviewed -- however I determined that my appraisal was completed consistent with valuation procedures and consistent with the fair market value definition, as defined

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within my report.
Q. So you're not updating your report given this declaration?
A. No.
Q. And given what you heard yesterday from Mr. Cordy, you're not -- you're not changing your opinion about whether government entities could purchase Milford Water Company; correct?
A. I'm not changing my report based on anything that happened yesterday, no.
Q. And let me ask you this hypothetical: Let's say there was no other municipality that had legal authority to purchase Milford Water Company. How would that change your report?
A. If no other -- other than one or than --
Q. Let's say it's just the Town of Milford.
A. Okay.
Q. Would that change your report?
A. Absolutely not. As soon as you have one government-owned utility enter into the arena of potential purchasers, all investor-owned utilities need to consider that, and that has an effect on the bidding.
Q. Could you turn to Page 15 of your report,

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MW-MR-3. You quote a portion of an order -- or an opinion by the Massachusetts Supreme Judicial Court; correct?
A. Yes.
Q. And in that -- are you relying on that opinion for -- as a basis -- as a legal basis for your valuation in your report?
A. I am relying on this definition of full and fair cash value.
Q. You would agree that it says, "A valuation limited to what the property is worth to the purchaser is not market value." Correct?
A. "A valuation limited to what the property is worth to the purchaser is not market value." That is correct.
Q. And you can only identify one government entity, the Town of Milford, that could purchase Milford Water Company; correct?
A. No. If you refer to my report, Page 19, I list at least ten hypothetical willing buyers. In your hypothetical scenario that you asked me to consider, you said there was one hypothetical one. So which one are you talking about?
Q. So let's say my hypothetical was correct.

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You can only identify Milford Water Company -- the Town of Milford as the purchaser; correct?
A. If you're limiting my pool of potential government-owned utilities to just one, then obviously in your scenario there is only one.
Q. And that's not a market, is it?
A. If there's only one in your world of hypothetical scenarios and they are going up against IOUs or....
Q. Sure, yes.
A. Then in that scenario you can hypothetically have a market.
Q. So you've listed Eversource Energy as a potential purchaser; correct?
A. As a hypothetical investor-owned utility buyer.
Q. There are other investor-owned utilities who could purchase Milford Water; correct?
A. Correct. If you refer to Page 23 of my report at the top, it's Connecticut Water Service is another investor-owned utility that we have identified.
Q. So you've only listed those two. But there's no reason any other investor-owned utility

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couldn't also try to purchase Milford Water Company; correct?
A. Yes, there is no limitation. There could be -- if they were invited to the bid, I'm sure that there would be others that would be interested.
Q. And given all of the other potential buyers, you contend -- if this were an open market, you contend that the Town of Milford would be the most likely buyer. Is that correct?
A. If you relate in your hypothetical only one limited GOU buyer to Page 23 of my report, to the last paragraph, it says, "In the case of the Milford Water System, a not-for-profit public entity buyer (i.e., government-owned utility) will," and continuing, "will set the market price for which all potential buyers, both GOU and IOU, will have to compete."
So in your hypothetical scenario of one IOU -- or one GOU or in my scenario of multiple GOUs, this sentence here is correct. The GOUs will set the market price to which all potential buyers, both GOU and IOU, will have to compete to bid.
Q. How is it that a GOU would set the market price?

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A. It says here in this paragraph, Item No. 1, "The GOU will not have to pay income taxes. The GOU will have access to low-cost municipal financing. And a GOU will not be subject to the same regulatory environment as an investor-owned utility. Therefore, the public government entity buyers will set the market price range for which all potential buyers, both GOU and IOU, will have to compete with to bid."
Q. Do you agree that the Town of Milford in this hypothetical is the only government-owned entity -- government entity that could purchase Milford Water?
MR. CONNER: Mr. Reyes, could I ask for a clarification?
MR. REYES: Sure.
MR. CONNER: I don't want to interrupt your flow. But when you say "have the right to purchase," are you equating that with condemnation or just the consensual right to buy?
MR. REYES: I should make that broader: having the authority to buy.
MR. CONNER: Authority, not just condemnation, right to condemn?

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MR. REYES: No, authority.
MR. CONNER: But Mr. Cordy was on condemning.
MR. REYES: I'm talking now about authority to buy.
MR. CONNER: Okay. Thank you.
MR. REYES: Although I should ask a few clarifications, now that I think of it.
MR. CONNER: I'm glad I could help you.
MR. REYES: Thank you.
Q. Would you agree that if another municipality hypothetically were to purchase Milford Water Company, the operating company would still be subject to the Department of Public Utilities' regulation?
A. Are we talking about reality or the hypothetical or scenarios? I'm a little confused on which scenarios we're talking about.
Q. Sure. We're trying to establish a free and open market; correct?
A. Yes.
Q. Or what constitutes a free and open market; correct?
A. Yes.

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Q. And the buyers in this hypothetical, aside from the Town of Milford, would be purchasing Milford Water Company as an investment; correct?
A. If that's your scenario, then I'll agree with it.
Q. And so they would be regulated by -- the Milford Water Company would still be regulated as an investor-owned utility at that point, in that scenario; correct?
A. If you're stating that that's the scenario, then I'll agree with it. So you have a GOU that purchased the system, and they're going to keep it, operate it as an IOU.
Q. Yes.
A. Okay -- which is inconsistent with Bullet 3 of my report, Page 23.
Q. How is it inconsistent?
A. Because the GOU would not be subject to the same regulatory environment as an IOU buyer.
Q. So you're making an assumption that that would be different from the hypothetical.
A. You made the assumption. I'm going with your hypothetical. I'm trying to keep it in line for the panel here, that that is different than my

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scenario. My scenario, which is probably more of reality, it's not subject to the same regulatory environment as an IOU. But in your scenario you have it as an IOU.

MR. REYES: I think it's a good time for the morning break perhaps.

MR. CRANE: Let's take a ten-minute break. We're off the record.

(Recess taken.)

MR. CRANE: Let's go on the record.

Before we continue: As discussed earlier, Milford Water Company will be filing the revisions Mr. Rodriguez discussed this morning with the correct exhibit identification pagination over the lunch break.

MR. SANDERS: Correct.

MR. CRANE: Earlier today there were several lines of questioning referring to an errata sheet that was handed out that include those revisions. I'm going to mark the errata sheet for identification purposes as Exhibit MWC-6.

(Exhibit MWC-6 marked for identification.)

MR. BONSALL: Is that the revised one

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that we're filing?

MR. CRANE: No, the errata sheet that was handed out this morning was not marked for identification purposes or entered as an exhibit into the record. I am doing that now, so anyone reviewing the transcript and wondering what the errata sheet was, they will be able to locate it at Exhibit MWC-6.

Mr. Reyes, all yours.

Q. Just to clarify that last line of questioning: None of my hypotheticals are reflected in the conditions you've assumed in your report; correct?

A. No, they're not.

Q. Turn to Page 72 of your report. That's MW-MR-3.

A. Okay.

Q. One of the expenses included in your income approach analysis in your report is taxes other than income taxes; correct?

A. Yes.

Q. So in the first year of your analysis, 2019, you have included $179,191.

A. Yes.

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Q. And that escalates to $196,813.

A. That is correct.

Q. The source for that -- what is the source of that information?

A. It's payroll taxes from the company.

Q. And if all else were equal, if taxes other than income were higher, then the results of your income approach would be lower; correct?

A. I'm sorry, say that again.

Q. If, all other things equal, if taxes other than income were higher, the results of your income approach would be lower; correct?

A. That is correct.

Q. You provided some supporting calculations for these numbers in response to Information Request DPU-MWC-3-10; correct? There should be an attachment.

A. I have 3-10 in front of me now.

Q. The attachment to 3-10? Sorry, let me refer you to 3-11, and that refers you to an attachment to 3-10; correct?

A. Yes.

Q. So please turn to the attachment.

A. I do not have the attachment.

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MR. CONNER: The attachment is referenced in the DPU Docket 18-75, in response to AG-MWC-1-2.

MR. REYES: I am going to reserve that question. I don't have that right now.

Q. Mr. Rodriguez, in your weighted average cost of capital analysis you analyzed eight publicly traded water companies; is that correct?

A. In my weighted average cost of capital? Where are you referring to?

Q. Sorry, your capital structure analysis. Page 32 of your testimony.

A. I'm on Page 32.

Q. In your capital structure analysis you analyzed eight publicly traded water companies?

A. Yes, they were considered in my capital structure analysis.

Q. But in your comparable sales analysis you didn't analyze any publicly traded companies, did you?

A. No.

Q. You analyzed six private transactions; correct?

A. Yes, but they could be public companies.

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MR. CONNER: Mr. Reyes, where are you referring to for your comparable sales?
MR. REYES: I was going to get to that.
Q. If you would refer to Page 75 of the report. That's Exhibit MW-MR-3.
A. Yes, I'm here.
Q. You've got a table. And when you said that these could be public, what did you mean by that?
A. Well, Comparable 4 is American Water, which is a public company. It's American States Water.
So some of these may be public companies.
Q. Which ones?
A. We have Pennsylvania American Water is part of American Water. Eversource we've talked about.
Q. So you were asked in Information Request DPU-MWC-2-3 why the company didn't include in your market analysis section of the appraisal the publicly traded companies that you studied in your weighted average cost of capital analysis in regards to comparables. Correct?
A. I'm just turning to 2-3 now. I'm sorry, what was the question, now?
Q. So the Department asked why you didn't

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include in your market analysis section of the appraisal the publicly traded companies you used in your weighted average cost of capital analysis. Correct?
A. Okay.
Q. And in your response -- well, can you read your response? Do you recall what you said in your response?
A. I have it here in front of me, yes.
Q. And so you said that -- and I'm paraphrasing -- you excluded them because there's information that's not publicly available.
MR. CONNER: Object to the form of the question. Misstates the response.
Q. In the second paragraph of your response, you would agree that that information isn't strictly necessary for you to include those companies, those public companies, in a weighted average cost of capital analysis; correct?
A. I use the public companies that are listed in the response as a buildup for my capital structure analysis. So if you refer to MW-MR-1, Page 32 of 43, I use those eight companies to determine my capital structure, 55 percent debt and

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45 percent equity.
Q. But my question was whether -- you wouldn't need to have -- you wouldn't necessarily need to have this information you've listed in Items 1 through 10 in order to determine whether those companies were comparable for the use in your weighted average cost of capital analysis; correct?
A. I don't think I'm following you. My weighted average cost of capital analysis is completely different. This is the capital structure, how much debt and equity is assigned to an IOU. The items here, 1 through 10, or the second part of the question, deal with an entire different approach to value. This is dealing with the sales comparison analysis. Your questions regarding the WAC in the capital structure are dealing with the income approach to value.
Q. So why is it necessary to have this information, 1 through 10, in your comparison analysis?
MR. CONNER: Object to the form of the question. Do you mean under the sales comparison approach?
MR. REYES: Yes, under the sales

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comparison approach.
A. Well, under the sales comparison approach you need information to make the appropriate adjustments so you could rely on the comparables, and these ten bullets here in the second paragraph of the response are a list of some of the items that you need to make the appropriate adjustments to the sales comparison analysis to be able to get a meaningful conclusion of value with that approach.
Q. You would agree that analysts make recommendations about the publicly traded securities of companies -- and I'm not talking about your comparable approach -- that for the purpose of financial analysis and investment, analysts make valuation determinations without having this type of information necessarily; correct?
MR. CONNER: I'm going to object to the question as being irrelevant to the valuation of the Milford Water Company.
MR. REYES: I'm getting to the relevance of this qualification here, about why the lack of this information, 1 through 10, would preclude him from including these companies that he's applied in his weighted average cost of capital approach --

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preclude him from making recommendations about value in his comparable approach.
MR. CONNER: Mr. Reyes, that's Appraisal 101, out of The Appraisal of Real Estate, 14th edition.
MR. REYES: I'd like to have the witness talk about it.
MR. CRANE: I'll overrule the objection. The witness can answer the question.
A. The sales comparison analysis takes a look at acquisitions, one company acquiring another, and my appraisal looks at four transactions that closed in 2017, one transaction that closed in 2018, and one pending transaction that is still pending.
There was nothing to preclude any of those public companies to be included or excluded from my sales comparison analysis. As you see, some of them are included within the companies in there.
I think that you're using the guideline publicly traded company analysis with a market approach analysis. A market approach analysis that we did takes a look at sales, mergers, and acquisitions in the marketplace. It does not look at the public guideline trading -- public company

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guideline trading method, which deals with public companies as part of a stock analysis.
This is not a stock sale, so we did not look at the publicly guided analysis because it's related to stocks. We were looking at asset deals.
This section here, the sales comparison analysis, identifies those transactions in the marketplace. They didn't preclude public companies or exclude any companies from being in or out.
Q. As you've stated, that you have not looked -- you have not valued the company as a stock sale but rather as an asset sale. In doing so, you didn't value the company as an ongoing business as a whole; correct?
A. It is an ongoing business. It is being valued as an ongoing business. We took a look at the market approach, the cost approach, and the income approach and concluded a value based on all three approaches to value.
Q. You included construction work in progress in your cost approach; correct? I'll refer you to Page 26 of your testimony, MW-MR-1.
A. Well, my analysis was updated, so if you refer to the MW-6, and then specifically Page 67, I

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believe 12 lines down, construction work in progress is identified on there as $3,040,000, and then we applied economic obsolescence to that, so it has a cost approach value of $2,641,882.
Q. So before adjustment, you started with 3.04 million in CWIP -- I mean, construction work in progress?
A. Yes.
Q. Are you aware that the company provided an updated annual return to the Department? Or not -- strike that.
Have you reviewed the company's 2018 annual return?
A. I've seen it, yes.
Q. You've seen it. Do you have that with you?
A. I do not.
Q. This was Attachment TOWN-MWC-4-12 Supplemental.
A. Okay, I'm sorry.
Q. Do you have that?
A. No. What was it called?
Q. Let me give that to you. That's Attachment TOWN-MWC-4-12 Supplemental.
MR. CONNER: It's not in your book.

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Q. You don't have it. Let me give it to you.
MR. CONNER: What page are you referencing?
Q. If you'll look at Page 6.
THE WITNESS: 6 of 61.
A. Okay.
Q. So Line 28 says "unfinished construction." Correct?
A. Okay.
Q. And the balance at close of the year, what is that?
A. Balance at the beginning of the year. Balance at the close of the year is $1,252,865.14.
Q. Shouldn't that have been used in your -- instead of your number, 3.04 million, in your report?
A. I don't know how that number is calculated. But my number, if you refer to MW-MR-3, Page 396 of 1009, this identifies not only the total of the construction work in progress but a breakdown of each one of the projects that comprise the construction in progress account. So it's $3,040,000.
And your sheet may reflect items that

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were converted from completed projects to -- up into their asset categories. This is the construction in progress for the year.

Q. Could you turn to Page 75 of your report, MW-MR-3.

A. Okay.

Q. So this lists six transactions, and the last one is a pending transaction; correct?

A. Yes.

Q. And Comparable Sale No. 1, that is Steelton Borough Authority. Is that transaction still pending?

A. No.

Q. When did it close?

A. It has a sales date of November 15th, 2018.

Q. Were you aware that Mr. Reilly responded in response to Information Request TOWN-MWC-7-18 that this transaction was not actually closed as of April 11, 2019, and that it still required regulatory approval from the Pennsylvania PUC?

MR. CONNER: Which transaction?

MR. REYES: The Steelton Borough Authority -- the acquisition of Steelton Borough. That's listed in Column 1 of the comparable sales

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chart.

A. I was not aware of that. I can read you the first paragraph from Page 76 of my report. It says, "Pennsylvania American Water, subsidiary of American Water, announced today that it signed an agreement to acquire the water assets of Steelton Borough Authority in Dauphin County, Pennsylvania. The total value of the transaction is $22.5 million for the water system, which serves nearly 2400 metered residential, commercial, and large industrial connections."

Q. So does an agreement to acquire necessarily mean the transaction is closed?

A. That's one of the shortfalls of this approach, is that you don't have all the information readily available to you to make all the adjustments to these comparable sales. You need what you call that block of second paragraph of ten items to be able to make the appropriate adjustments.

And that's just one more reason why we have zero weight on the comparable sales approach, is because there are issues like that that need to be identified and cross-checked to verify beyond the press release. You're trying to make a

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determination of value based on a three- or four-paragraph press release based on an agreement that may have a purchase and sale agreement 2 or 3 inches thick.

Q. So you should have listed that in this chart as a pending transaction rather than a comparable sale; correct?

A. No. If you read the paragraph here it says that they have signed an agreement to acquire the water assets of the Steelton Borough Authority. As far as the publicly available information, available to me as of December 31, 2018, it's shown as a closed sale.

But regardless if it was closed or not closed, it would have no impact whatsoever on my appraisal report.

Q. So you're not checking whether or not they have actually closed, you're just going by the press release?

A. That's one of the limitations of the sales comparison analysis, is that you're going with whatever publicly available data is available to the appraiser.

There are situations where I may be

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doing a valuation on a transaction; I have intimate inner workings of the transaction, but I'm precluded from using that because I have to work off of publicly available information. This paragraph here says that they have signed an agreement to acquire.

Q. So when you do an analysis as an appraiser, you can in fact include analysis of companies without full information. Whether or not you ultimately rely on that comparable approach, it is possible to rely on less than complete information.

A. It's not that you rely on it. It's when an appraiser comes down to, at the end of the analysis and the reconciliation process, you take a look at the data that goes into the cost approach, goes into the income approach, goes into the market approach. And based on the level of comfort that you have that data is complete and you have all the information, then you put the appropriate weightings on those categories -- or those approaches to value.

As I stated within my market approach, we did not have the information listed within that paragraph of ten bullets to make the appropriate adjustments to the comparable sales analysis. That's why we didn't put any weight on that

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approach.
Q. All right. So as you do the reconciliation approach, it sounds like what you do is --
MR. CONNER: Object to the form of the question. Reconciliation is not an approach.
Q. In the reconciliation process that you applied after conducting each of these approaches, what you do -- and correct me if I'm wrong -- what you do is, you weigh the evidence before you and, considering those weights, determine the relevant weights you will apply in your ultimate opinion of value?
A. That is correct.
Q. And if the evidence you have in certain -- in one of your approaches is less reliable, you would assign it less weight?
A. Yes.
Q. There's no mathematical precision to that; correct?
A. It's based on the analysis and the comfort and the data, the reliability of the data, the information that you use. In our analysis we relied upon the cost approach value, the value of the assets, and the income approach value based on cash

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flows and revenues and expenses, and no weight on the market approach.
Q. So it's ultimately a judgment call; correct?
A. It's ultimately a judgment call. And if you refer to -- if you refer to Mr. Reed's exhibit, Town-JJR-3, Page 19 of 57, one thing I agreed with Mr. Reed's comments was, "Earnings and assets give rise to value for a company." And this is consistent with the methodology that we used. The earnings -- we used the income approach.
For the earnings we used the income approach, and for the assets we used the cost approach, which is consistent with the methodology that we used on Page 59 of our report, Section N, reconciliation to value.
Q. And you would agree that under USPAP that in the evaluation of the -- in the valuation of a business it doesn't necessarily -- it doesn't prescribe a mathematical formula of how to weight the different approaches, the three different traditional approaches to value; correct?
MR. CONNER: What is "it"?
MR. REYES: The USPAP rules on reporting

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of business valuations.
A. USPAP does not address reconciliation of value.
Q. So it only tells you to state your opinion of value and explain why you excluded any one of those three approaches; correct?
A. No, it requires you to consider the three approaches to value. You consider the cost approach, which we did. We came up with a value conclusion from the cost approach. We felt comfortable. We applied 60 percent of our weighting to the cost approach.
We considered the income approach. We concluded a value. We applied 40 percent weighting to it.
We considered the market approach. We reviewed transactions. We collected data. But at the end of the day we did not have enough information to rely on the market approach, so we put zero weight on the market approach to value.
Q. So as a generalization of that process, it's really just examining all the evidence, all of the facts you've gathered before you undertake each of those approaches, and assigning them their

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appropriate weight, although not mathematically? It's a judgment call ultimately?
A. Yes.
Q. Could you turn to Page 99 of the report. That's Exhibit MW-MR-3.
A. Okay.
Q. What is this document on this page, 99?
A. This is part of Appendix 6. It's the market analysis that was done by WestWater Research with regard to the valuation of the water rights associated with the Milford Water Company.
Q. And did you incorporate results of this report or this research in your evaluation of Milford Water Company's water rights?
A. Yes.
Q. So you assigned it a value of $15.89 million; correct?
A. If you refer to Page 107 of this appendix, the value concluded is $15.89 million by WestWater Research LLC.
Q. Just to clarify the headers on this table: What is AFY?
A. Acre feet per year.
Q. So at the bottom of this table, just so I

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understand it -- so at the bottom -- there's a number at the bottom of the acre foot per year column, 3,708, and then that gets to market value of 15.89 million. You arrive there by multiplying 3,708 by 4,285?

A. That is correct.

Q. If you turn to the previous page, 106, at the top paragraph, last sentence of that: Do you agree it appears that WestWater Research arrived at that figure of -- that estimated value of $4,285 per acre foot based on the Town of Shrewsbury's alternate water supply study?

A. Yes, as of June 30th, 2015.

Q. And that was with regard to their proposal to subscribe to the Massachusetts Water Resource Authority?

A. Yes, the MWRA.

Q. And do you know if they are currently subscribed to the MWRA?

A. I do not.

Q. So this is actually just a proposed number; correct?

A. This analysis is taking a look at what is the cost, the cost to acquire water from a different

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source. And that's how the market price of water is determined, based on the Town of Shrewsbury's alternate water supply study of what another competing Town was willing to pay per acre foot of water per year if they tied into the MWRA system.

Q. If you turn back to Page 100 of that document and refer to Table 1.

A. Yes.

Q. There's a figure, the total at the last column, 3,708. That's the total withdrawal volume allowed by Milford Water's water rights permits; correct?

A. That is their annual baseline volume, so that is the amount that they're allowed to extract.

Q. And so this baseline is not in excess of what Milford Water Company requires to serve its customers, is it?

A. It's the maximum daily rate -- you can see it's in million gallons per day -- is what they need to service their customers. But they run very close to the amount that they're able to pull from the water.

So if you refer to Page 30 of my report, under Water Rights, we can see that their permits

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allow for 11 points of withdrawal, to withdraw water, eight for groundwater and three for surface water, for a total maximum daily rate of 8.565 million gallons per day.

Q. So you would agree that there's -- well, let me back up.

So you said that they're running very close to -- let me start over.

In order to serve its customers, Milford Water Company is actually withdrawing very close to that number. Is that an accurate characterization of what you said?

A. Yes. But some of these wells are not in operation now, so they're not pulling from all the well sources that are identified here.

Q. You're not saying that the permits are less than what they need, are you?

A. No, their permits are what they need.

Q. So if Milford Water Company did not have any one of -- well, any -- let me start over.

If Milford Water Company were not permitted to withdraw water from any of these points -- Charles River, Echo Lake, Louisa Lake -- it wouldn't have sufficient water rights to serve

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its customers; correct?

A. No, it would not have sufficient water rights. The water rights are very valuable. That's why we assigned a value to them. If they didn't have water rights, they wouldn't be able to service their customers. Without those water rights, they would need to tie into the MWRA system to obtain water rights -- in order to obtain source water.

Q. If Milford Water did not have these water rights, would it be able to generate operating income?

A. Not without these water rights. They need the water to generate their income. That's their supply.

MR. REYES: Mr. Hearing Officer, this might be an appropriate time to do the midday break. I have perhaps an hour left of questioning.

MR. CRANE: Let's take an hour break for lunch. We'll be back here at 2:00 o'clock. We're off the record.

(Recess for lunch.)

MR. CRANE: Let's go on the record. Mr. Reyes.

Q. So in your rebuttal testimony, Exhibit

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MW-MR-6, you stated that the purpose of your rebuttal is to provide an opinion of the fair market value of the system should the Department decide only to apply the cost approach. Are you updating your appraisal?

A. These pages here update the appraisal and the conclusion of value.

Q. Okay. I should clarify. Aside from the numbers that were updated as a result of the Duff & Phelps update, you had filed a rebuttal earlier, rebuttal testimony? Do you recall that?

A. Is there a specific page?

Q. Well, just in general I'm asking you here. Well, on Page 1 you stated that the purpose of your testimony is to provide an opinion of fair market value of the system should the Department decide to -- only to apply the cost approach. Are you providing a separate opinion of value with this testimony?

A. Well, with that testimony, if we just go to the cost approach value, we could look at, I believe it's MWC-6. And if you go to Page 67, you would see the cost approach value is $156 million, and then to that you would add the water rights of 15.8 million.

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It would be 171.8 million.

Q. I'm sorry, where is the 171.8 million?

A. It's -- well, it would be an addition of -- this is Page 67, I guess, which is Page 70. It's the only large page. It's Page 67. So it would be that page there, would be the 156. That would be the cost approach value.

And then if you go to Page 64 you would add the water rights at 15.89 million, and you would get the 171.89 million if it were a 100 percent cost approach, RCNLD.

Q. And so are you offering two opinions of the fair value of the system?

A. If one were to conclude that you're not going to consider the income or the market approach, this would be the cost approach to value.

Q. Just to clarify, just to make sure I understand what you're doing: So are you saying that your opinion of value depends on whatever the Department finds is the proper approach?

A. If the Department decides that they're going to rely upon the RCNLD approach to value only, and not consider the income approach and the market approach, then the value conclusion, if you put zero

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weight on the income approach, zero weight on the market approach, and 100 percent weight on the cost approach, my revised number would be 156 million plus the 15.8 for the water rights, for a total RCNLD value of 171.89 million.

Q. I guess I'll ask this out of curiosity, because I don't really know whether this rule applies under the USPAP: In order to provide that recommendation, that alternate valuation based on the chosen approach which you've presented in your rebuttal testimony, are you required under USPAP to update your report?

A. What I'm suggesting is that if the Department, the panel, decides that they only want to consider the cost approach, USPAP has what they call the jurisdictional exception rule, which will take the local jurisdiction's rules and apply that to USPAP. If that were to be the case and 100 percent of the weight is only to be applied to the cost approach, then that would be the application.

Q. Did you state the need to rely on the jurisdictional exception rule in your report?

A. No.

Q. Were you required to disclose that in your

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report?

A. I don't know how -- how the Department or the panel is going to view the appraisal report. If they review it and they decide they're only going to rely upon the cost approach, that's their prerogative. I don't know that at this point, if that's the way the ruling is. If that's the way they rule and someone wants me to revise the report to reflect that, I have no problem doing that.

Q. When you say "they," who are you referring to?

A. The panel or the Department.

Q. I guess my question is: Under USP would you be required to disclose the need to use the jurisdictional exception rule?

A. We don't know if there is a need to use it at this time. If someone comes back and says that we're only going to consider only the cost approach, then I could update the report to reflect that. But at this time no one has directed me that it's any different than considering all three approaches as required by USPAP.

MR. REYES: I think that's all I have.

MR. CRANE: Mr. Strout, do you have

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questions for the witness?
BENCH EXAMINATION
BY MR. STROUT:
Q. Good afternoon, Mr. Rodriguez.
A. Good afternoon.
Q. I have just a few questions this afternoon.
If I could refer you, please, to Exhibit MWC-6 at 67, and that's the company's errata information that was distributed today.
A. Okay, I have Page 67 in front of me.
Q. Could you just please explain what indirect costs, that column, what they represent as it's currently represented in this exhibit?
A. Sure. Do you have a copy of MW-3, which is my appraisal report?
Q. I do.
A. If we turn to Page 45 of the document. The first paragraph starts with "the replacement cost new provided by Tata & Howard."
Q. Okay.
A. So the indirect costs -- when Tata & Howard provided their analysis, their replacement cost new values, they went to the section of RSMeans that has the total direct costs. And once the analysis is

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done, it gives you -- they give a total of all their direct costs. And then RSMeans directs you that their costs do not include indirect costs, so they don't include construction management fees -- if you see the first full paragraph with the five or six bullets here.
So there's a 2 1/2 percent added to it for construction management fees. There's another 2 1/2 percent added for engineering fees, a half a percent added for construction permits, 1 percent added for performance and construction bonds, and 9.34 percent for construction insurance.
So those indirect costs there have those percentages added to it, to reflect those costs. So now we take Tata & Howard's cost numbers and we make them complete by adding the appropriate indirect costs associated with them.
And this is from the same book that they pulled their cost information from, and it's the right application of the indirects to the directs.
Q. Thank you. Could I refer you, please, to, staying on this exhibit, MW-MR-3, on Page 396, as well as your response to Information Request DPU-MWC-1-7.

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THE WITNESS: Was MWC-1-7 one of mine?
MR. CONNER: If we put it on the screen, that might be easier.
MR. SANDERS: Was it 1-7?
MR. STROUT: Correct, DPU-MWC-1-7.
A. Okay, I have the MWC-1-7 in front of me.
Q. And on that response the Department asked why each of those assets were included as elements to the company's cost approach to construction work in progress. And the response was that these items were listed on the company's preliminary December 2018 balance sheet and under the unfinished construction.
So now, if we turn to Exhibit MW-MR-3 at 396, from the second line to the fourth line, you'll see that each of those three items -- the Lake Louisa project, the 2017 rate case, and the sale of MWC to the Town -- are included as elements to the company's total construction work in progress. Is that right?
A. Yes.
Q. Could you please explain whether these three assets represent -- are tangible assets that could be physically transferred to a potential

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buyer?
A. You would have to look into which -- the work and activity that was being performed under each of these line items here. It says 2017 rate case, but there may have been activities that were required of them during that rate case.
And the way our analysis was set up, because we're doing a replacement cost analysis, we're building the system from scratch -- acquiring the land, putting the pipes in the ground. And when Tata & Howard finished their analysis, they did not have the ongoing construction work in progress in their analysis.
So we took a look at all of the active 2018 projects as of the valuation date, which total $3,040,000, and we added that to the Tata & Howard analysis. And the 3,040,000 is also hit with economic obsolescence. I believe there's about $400,000 worth of economic obsolescence that is removed from that number to reflect, I believe, a fair market value of $2,641,882.
Q. Do you still represent that the cost represented for the rate case and the cost represented for the sale of MWC to the Town

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represent construction work in progress?
A. Yes, as it was reported to me, that those are activities that are being performed for those descriptions. They might not be the best descriptions there, but there were construction work activities going on to associate.
Q. Would I be able to get specific descriptions for each of those three projects that would relate specifically to the designation of construction work in progress?
A. I'm sure you can. I'm sure that we can ask Mr. Condrey next week, when he's talking, or we'll be prepared over the weekend for when he comes on to have that information.
Q. I would like to do that for those three. And in a similar manner, there are additional items that relate to this construction work in progress. Still looking at Page 396 of Exhibit MW-MR-3, if I could refer you to -- from the top to the bottom there's a line item entitled Congress Street Booster Temp Improvements.
A. Yes.
Q. It's about five line items down. Just below that, Godfrey Brook Wellfield Investigation.

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A. Okay.
Q. A few line items below that, AG-18-15 tax rate adjustment. A couple of lines below that, PUB 7m Loan Facility. And almost near the bottom, 2018 Purchase of Miscellaneous Plant Equipment. More than anything I was just looking for clarification on what that particular line item may have entailed. And the last one is the Annual Sanitary and Security Tank Inspection.
So for all of those items that I have just identified, including the Lake Louisa project, the 2017 rate case, and the sale of MWC to Town, I would like a further description of what each of those projects entail.
A. Okay. I have a total of nine of them identified.
Q. And how they relate to CWIP. Yes, I concur, there are nine items.
So would that be a record request to be taken --
MR. CRANE: Let's go off the record for a moment.
(Discussion off the record.)
MR. CRANE: Let's go back on the record.

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So this is Record Request DPU-4. So this request, in reference to Exhibit MW-MR-3, is for a complete and detailed project description, with an explanation of how each project relates to construction work in progress for the following identified projects in the exhibit: The Louisa Lake project, identified as Project 201-9809; 2017 rate case, Project No. 201-1707; sale of MWC to Town, Project No. 201-1808; Congress Street Booster Temp Improvements, 201-1709; Godfrey Brook Wellfield Investigation, 201-1710; AG 18-15 Tax Rate Adjustment, 201-1815; PUB $7m Loan Facility, Project No. 201-1816; 2018 Purchase Miscellaneous Plant Equipment, Project 201-1802; and lastly, Annual Sanitary and Security Tank Inspection, Project No. 201-1817.
Sir, you understand the request?
THE WITNESS: Yes.
(Record Request DPU-4.)
Q. If I could refer you, please, to the Town's 2017 annual return, which I believe is Exhibit TOWN-MWC-1-1; and also, continuing to stay on Exhibit MW-MR-3, on Page 396.
Now, Town's counsel touched upon this

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next question a bit earlier this morning, and I wanted to follow up.
On your Exhibit MW-MR-3 you identify a total construction work in progress amount of 3,040,000. And if I refer you to what's identified as Page 202 in the Town's 2017 annual return --
A. Okay.
Q. -- on Page -- I mean on Line No. 28....
MR. SANDERS: Could you please say on what exhibit that is?
MR. STROUT: I may have written this down incorrectly, but I thought it was TOWN-MWC-1-1. It's the company's 2017 annual return.
MR. SANDERS: I think 1-1 was its 2008-through-2017 returns, so I'm just looking for the specific page that you're looking for.
This is the 2017 return.
MR. CRANE: It's Page 330 of 385.
MR. SANDERS: Thank you.
Q. And on the company's 2017 annual return, for plant investment accounts, Line No. 28, that row is entitled Unfinished Construction, for the amount of $942,411, for the balance at the close of the year, which is year ending -- calendar year ending

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December 31st, 2017.
A. Okay.
Q. Does the term "unfinished construction" as it's represented here in the company's 2017 annual return, does that equate to the same term of total construction work in progress, as identified on Exhibit MW-MR-3?
A. I would assume that the 942,411.07 is part of the 3,040,000, because the 3,040,000 reflects projects completed during 2018. So that unfinished amount of 942 would be part of the 3 million, because it's pushed over to the next year. You're at December 31st, 2017, and my analysis is through -- is one year later, through December 31st, 2018.
Q. So for your analysis, that includes 12 months, a full 12 months, for months ended December 31st, 2018.
A. Yes, these are the projects that are open as of the end of 2018. So, you know, you draw a line in the sand on December 31st. The 3,040,000 was the projects that were identified as construction in progress for that year.
Q. And step me through the reconciliation

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again of that number, the 3,040,000.
A. Sure. Can I walk up to the board?
Q. Sure.
A. So this 942 right here is overflowed into the next year. It's unfinished construction. So that 942 would go into the 2018 construction in progress, and just as well as some of the ongoing construction from 2018 will go into 2019, you know, it doesn't end at the year. The projects overlap and continue into the next year.
So our analysis picks up the building up of the system as Tata & Howard did it plus the projects that they didn't account for, which were the 2018 construction work in progress, which is the ongoing projects as of the end of the year.
Q. Would you be able to identify the incremental projects, the value of the difference between the 3,040,000 and the 942,000?
A. Me personally, right here now, sitting here, the answer is no. But I'm sure if I sat down with David Condrey for a day or two and went through all the work orders, that it could be reconciled very easily.
Q. I'd like to be able to see the

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reconciliation of those two numbers, to see where the difference comes in.
A. Sure.
MR. CONNER: If I might, Mr. Strout: What we'll do is, Mr. Condrey will be prepared to answer those questions and give you a full accounting for that during his testimony.
MR. STROUT: Okay, that's fine. We'll do that.
Q. Thank you. That's all that I have.
A. Thank you very much.
BY MR. CRANE:
Q. Before we move on, I wanted to ask you a couple of clarifying questions from your direct testimony at the beginning of the morning, when you were introducing the revisions to your direct testimony.
There were revisions to what's Page 46 of your Exhibit MW-MR-3. It discusses functional obsolescence. And I believe during your testimony you had stated that the functional obsolescence was as of October 31st, 2018, and then counsel had asked you about what the date of the economic obsolescence was. So I just want to clarify: What are the

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correct dates for functional obsolescence and economic obsolescence?
A. Sure. So on the errata page, which is the MWC-6, the one that's identified with 396, which I believe would be 399, the functional obsolescence is as of December 31st, 2018.
Also, on Page 432, economic obsolescence is as of December 31st, 2018. My appraisal was complete -- it was completed as of December 31st, 2018, in its entirety.
Q. Thank you. Referring next to what is Page 53 of Exhibit MW-MR-3. Earlier this morning you had identified the revision to the equity-risk premium in Table L-2, and that the revised number is 5.0.
A. Yes -- 5.50. So Duff & Phelps added .5 to that equity-risk premium. It went from 5 to 5.5.
Q. So just to clarify your testimony earlier, the testimony is 5.5.
A. That is correct, sir.
MR. CRANE: Mr. Diaz, do you have questions for the witness?
MR. DIAZ: I do, and I actually have questions on the same topic.
BY MR. DIAZ:

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Q. If you look at your errata -- and this will be Page 70 of Exhibit MW-MR-3.
A. Yes.
Q. Mr. Rodriguez, I know you revised this exhibit. I notice that even though there were changes in the table, the total amount is $156 million; is that correct? Which is the same in the original amount.
A. The cost approach remains the same, with -- well, the cost approach is 156. The income approach, if you go to Page 69, drops down to $112 million.
So this weighted average cost of capital is predominantly affecting the income approach to value -- so the income approach, which we weighted as 40 percent of our approach, so that the $9 million it went down as the effect of that 40 percent.
Q. So these numbers are not adding across in here?
A. When you say, which numbers?
Q. Let's take the first line. Is that a summation of these numbers, and then you come up with a number and then you add the amount?

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A. Yeah, those numbers go all the way across. And this is the cost approach to value. So the cost approach is 156. The income approach was revised from, I believe, 121 or 122 down to 112. The cost approach had some minor reflections with the functional and economic obsolescence because we updated the cap rate in the functional obsolescence calculation. Is it clear, the way I explained it?
Q. Yes. Could you turn to Exhibit DPU-MWC-1-6.
MR. CONNER: It's not in your book. It's David Condrey's. We'll pull it up.
A. Okay.
Q. Mr. Rodriguez, in here, in your response, you indicated that the information is based on the preliminary December 2018 balance sheet. Do you know, are you aware of whether there are any revisions to this, other than the preliminary?
A. This was -- the person responsible is Mr. Condrey on this one here. So I am not familiar if there was any revisions to that information.
Q. We'll save that for Mr. Condrey.
BY MR. CRANE:
Q. Mr. Rodriguez, I'm going to refer you to

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Page 70 of Exhibit MW-MR-3. It's your revised cost approach summary.
A. Okay.
Q. So comparing your original version filed January 25th, 2019, and the revised version filed today, it does not appear that the data under Column RCN Tata & Howard changes; is that correct?
A. That's correct.
Q. It does not appear that the data under Indirect Costs changes; is that correct?
A. That is correct.
Q. It does not appear that the data under Allowance for Funds Used During Construction changes; is that correct?
A. That's correct.
Q. It does not appear that the data under Total Replacement Cost New changes; is that correct?
A. Yes.
Q. The data under Physical Depreciation remains the same?
A. Yes.
Q. The data under Replacement Cost New Less Physical Depreciation stays the same?
A. That is correct.

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Q. The data for Economic Obsolescence has changed?
A. And also Functional Obsolescence has changed, too.
Q. Thank you. It would appear that those negative numbers have -- the numbers have decreased -- the obsolescence numbers have decreased, so that there's a -- so that the numbers under the cost approach value go down.
A. Yes.
Q. The total cost approach value does not change between your revised version and the original version filed January 25th of 2019?
A. Functional obsolescence goes down, and economic obsolescence comes up. But the overall rounded number of 156 stays the same. So the functional obsolescence calculation adjusts with the new cap rate that I revised in there, and the economic obsolescence adjusts because of the cash flows associated with it.
Q. So the total is a rounded number?
A. The total is a rounded number of 156.
Q. And the difference in the revision is not big enough to change the rounded number?

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A. Exactly, yes.
Q. Thank you.
MR. CRANE: Mr. Diaz, do you have further questions?
MR. DIAZ: Yes, I do.
BY MR. DIAZ:
Q. Mr. Rodriguez, could you turn to Exhibit MW-MR-3, Page 72.
A. Okay.
Q. If you look at the line item Taxes Other than Income Taxes -- do you see that?
A. Yes, I do.
Q. And the Department asked you to explain the source of these numbers, and I believe you responded in DPU-MWC-3-10, which is an attachment in Excel.
A. Okay.
Q. Let me know when you have that information.
A. I do not have the Excel in front of me, though.
Q. Maybe we can put it up.
MR. SANDERS: Is this it, Mr. Diaz?
MR. DIAZ: Yes.
MR. SANDERS: There's three tabs along the bottom.

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Q. Do you have an amount in there for taxes other than income taxes?
MR. SANDERS: Go back to the prior tab?
Q. Do you see that, Mr. Rodriguez?
A. Excel Row 33, if you highlight that?
Q. Right. My question is: Why are those numbers different?
A. The numbers reflected in the discounted cash flow analysis that we did here reflects payroll taxes. What we've done here is, we have taken out property taxes, and what that does is, it reflects what the likely buyer, where the pool of hypothetical willing buyers would have to set a threshold to what they would purchase the facility.
So if you have one government-owned utility that is not going to pay taxes in there, the investor-owned utilities need to step up to that level if they're going to compete with the government-owned utilities.
So our model does not include property taxes in there. But our weighted average cost of capital and our capital structure adjustments reflect the position of a hypothetical buyer in total.

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Q. So the only amount that you are removing is the property taxes from this calculation?
A. Yes.
Q. Could you go back and explain to me why it is appropriate to include property taxes with this calculation.
A. For this particular analysis we're coming up with what is the hypothetical willing buyer, and the hypothetical willing buyer, assuming that there's both GOUs and IOUs in the pool of buyers, the GOU will not have to pay property taxes. The IOUs, in order to competitively bid with that, have to step up their value adjustment to reflect what a GOU would bid. And this gives you a representation of what a GOU -- what the pool of buyers would be. And if you include those taxes in there, it would show a lower value for a GOU, and a GOU doesn't reflect property taxes.
BY MR. TAYLOR:
Q. On that point, where you are suggesting that a GOU purchase would involve a buyer that does not have to pay property taxes: Would the opportunity cost of property taxes have an intrinsic value to the municipality or the government-owned

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utility?
Stated another way, maybe more clearly: Is it an implicit cost, the forgone taxes, of purchasing the water utility for the Town?
A. I'm sorry, I don't think I understand the question.
Q. So you state that the Town -- if a government-owned utility purchased the water company, they would not have to pay taxes. If that hypothetical government-owned utility were the Town of Milford and they did not have to pay taxes, wouldn't it also be true that the Town of Milford would no longer be receiving property taxes on that income?
A. That is correct. Now, to counteract that, what we've done is, we've balanced and put 50 percent of our weight on the GOU scenario and 50 percent on the IOU scenario. So the GOU is not a full coming down to the IOU, an IOU is not fully going up to the GOU. They're meeting in the middle. So in essence, it's coming up with what a half of those property taxes might be. But then again, when you sit back and you think, well, what would the taxes be, are they based on the value of the system

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today or based on the value of the system as we apply it -- that's why we leave the property taxes out of the equation, because we don't know if the property taxes will be based on the value of the system as it is today or the value of the system as it sells in the future.

So to account for that, we adjust our weighted average cost of capital and weight it 50 percent GOU and 50 percent IOU, to account for that type of analysis.

Q. That's in your discount rate.

A. Yes.

Q. So you've removed the cost of taxes altogether from the calculation.

A. Yes.

Q. And then what you're stating is that, by adjusting that weighted average cost of capital to reflect half GOU, half IOU, that compensates for that?

A. It compensates for part of that at the revised WAC. It compensates for at least 50 percent of that.

Q. But whether the company -- whether the Town buys the water company or an independent operator

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buys the company, those taxes are a real cost to the Town, whether the Town is actually not receiving them, because they are now the water company, or whether the independent operator is paying those taxes. It would be a cost to the Town either way.

A. Or, if it was another GOU, it would be a cost to the Town, and that would be something after the acquisition that one would negotiate with a potential pilot agreement or tax negotiations with the Town after the fact, to account for that.

Q. I'm sorry, could you rewind and explain that again? I didn't follow that.

A. Sure. We're trying to determine what the fair market value is of the system with assumption of the hypothetical most willing buyer. And our analysis includes both 50 percent scenario of GOU and 50 percent of IOU.

We've removed the property taxes from the calculation in their entirety to reflect what a hypothetical buyer would anticipate when they put together their bid.

After the fact that the transaction closes, if there's issues regarding the Town with regard to property taxes, that would be something

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that they would discuss at a later date, after the valuation, because the valuation is trying to come up with fair market value today of what the system is worth as a whole.

Now, my analysis also, if you were to look at that, only puts 40 percent of the weight on that particular part of the analysis. 60 percent of the weight is still on the cost approach, and within that 40 percent, only 50 percent of it is associated with the scenario associated with a GOU.

So the effect is 50 percent, and the effect then further down is another 50 percent of that. So the overall effect to the analysis is not insignificant, but it is minimalized when we come up with, you know, our overall conclusion of value versus the cost approach to value.

Q. Okay. Just to be clear, though: If it's an independent owned utility that purchases this hypothetically, the property taxes would be an expense, and if a government-owned entity -- if Milford were to purchase the water company, there would be no tax -- property taxes.

A. Or another GOU there would be no property taxes, either. Any GOU you would assume would have

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no property taxes. In an IOU scenario they would have property taxes. But my analysis would be overinflated. If I were to include property taxes at a value associated with a number higher if the transaction doesn't close and it closes at a lower number, then I'm understating. So that's why we remove the property taxes out and adjust the weighted average cost of capital as best we can to reflect what the scenario is between a willing buyer and a willing seller.

MR. CRANE: Mr. Diaz, do you have followup?

BY MR. DIAZ:

Q. Mr. Rodriguez, going back to that number of taxes other than income taxes that we talked about.

A. Yes.

Q. We were in Exhibit MW-MR-3, Page 72. Would it be possible to provide documentation how you calculated those numbers for the year 2019 throughout the terminal year?

A. I'm sorry, how I provided these numbers on this page?

Q. Right, how you calculated, how you came up with that amount.

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A. Which amount? The 179,191?
Q. Correct.
A. That was provided by the company.
Q. And how did you go about -- what I'd like to see is how -- you explained to us the 50/50 portion and how you removed the property taxes. So I'd like to see, you know, the calculation of how you come up in the end with 179,191.
A. That's solely the payroll taxes provided to us by the company. There was no calculation or anything. They provided us 179,191. That's a hard input from the company.
Q. Okay. That clarifies my question. So it's strictly payroll taxes.
A. Yes.
BY MR. TAYLOR:
Q. I have a few more questions for you.
A. Sure.
Q. Could you please turn to Exhibit MW-MR-3 Revised at 72.
I'm sorry. It's not at 72. At 53.
A. Okay.
Q. This morning you said that you made a correction to this table on the equity-risk premium

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from 5 to 5 1/2 percent to reflect a technical change that's been made by Duff & Phelps; is that correct?
A. That is correct.
Q. When did Duff & Phelps make this technical correction?
A. They made it on -- their advertisement of the technical correction was on February 19th, 2019. Our report was completed on January 18th, so a little bit -- a month earlier we had it done, and that's why we made the adjustment after the fact.
Q. And have you updated any of the other components of the Duff & Phelps buildup model to reflect new or updated information?
A. This was the only one that affected our analysis, was that equity-risk premium going from 5 to 5.0 (sic).
Q. So a change in the risk-free rate wouldn't affect your pretax cost-of-equity capital?
A. If we changed the risk-free rate, then it would affect it, but there was no change to that.
Q. There's been no change in the risk-free rate?
A. No.

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Q. Thank you. Can you turn to your Exhibit MW-MR-3 at 49.
A. Okay.
Q. Halfway down on this page you discuss the holding period.
A. Yes.
Q. And you state that the most common multistage variation of the DCF model projects cash flows over a finite number of periods, usually one business cycle, between three and ten years; is that correct?
A. Yes.
Q. Would you define what your understanding of a business cycle is?
A. A business cycle would be one complete scenario of an inclusion of maybe rate adjustments. So it could be anywhere from three to ten years.
No matter what scenario you use with a DCF, if you use three years, five years, or ten years, or a direct cap, if you do it correctly, theoretically you should come up with the same value.
Q. So in this context, when you use the term "business cycle," you are referring to the business

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cycle of a regulated distribution company?
A. Yes.
Q. Thank you. Could you turn to Page 50 of the same exhibit.
A. Okay.
Q. Here you stated that, "We forecasted a stabilized long-term inflation rate of 3 percent for the holding period, which accounts for the likelihood of future rate increases."
A. Yes.
Q. What forecasting methods did you use to arrive at the 3 percent inflation rate?
A. We took a look at -- I believe we responded to one of the questions. If you could give me a second, I'll pull up the....
I found it. It is DPU-MWC-3-4. And to calculate our long-term growth rate, we considered both general inflation at about 2 1/2 percent, and we also took a look at the water industry in particular. And we cited here one particular article here that shows a 4 percent growth rate for the water industry. We have some other additional ones as well that show 5, 5 1/2 percent.
So we conservatively took a look at the

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4 percent here plus the 2.2 percent, and we conservatively selected a 3 percent growth rate for the water industry.
Q. Thank you. On Page 60 of this same exhibit -- I'm sorry, of MW-MR-3, at Page 60 --
A. Okay.
Q. -- you stated that "The income approach is heavily relied upon by market participants, since it enables the acquirer to evaluate, one, whether or not the acquirer can finance the potential acquisition; and, two, whether or not the acquirer can earn a fair rate of return on the acquisition price." Is that correct?
A. That is correct.
Q. Can you explain how a potential acquirer would utilize a DCF analysis to determine If it could earn a fair rate of return?
A. Sure. Market participants are going to set up a discounted cash flow or a direct cap analysis, inputting their particular investment criteria into developing their own particular purchase price or offer price if they were to acquire the system.
Specific to each potential acquirer, they're going to come up with their own method of

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how they're going to finance the transaction, if it's going to be 100 percent equity or 50 percent equity or 25 percent equity. Each potential buyer is going to create their own particular investment strategy, investment criteria, to go into their financial modeling. And at the end of the day each of the bidders will put their best strategy forward, and one of them will be the successful bidder. And that's what we're trying to anticipate, is what the successful bidder will look like based on the analysis that is performed here.
Q. If we turn, then, to your discounted cash flow analysis on Exhibit MW-MR-3 Revised at 72.
A. Okay.
Q. The starting point for the revenue that you've used in this analysis is $7,776,000; is that correct?
A. $7,765,569.
Q. And that is determined by adjusting the company's 2018 revenues up by 17.8 percent; is that correct?
A. That is correct. There's a footnote on the bottom of that page that reflects that.
Q. And that 17.8 percent, I believe you said

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in response to discovery, was an anticipated rate increase that the company would receive based on its cost of service?
A. Yes.
Q. And that cost of service -- or that anticipated increase of 17.8 percent would reflect the company's capital structure?
A. It's based on the actual revenues anticipated from the existing capital structure, yes.
Q. Which is the company's capital structure.
A. Yes.
Q. And is that company's capital structure 100 percent equity?
A. No.
Q. Does that represent the hypothetical buyer that would include a 100 percent equity purchase?
A. This is -- which is the financial information that would be available to the potential bidders. So all the bidders will take a look at what is the revenue, the current revenue and expenses. They will consider that in putting together their discounted cash flow analysis. And the discounting and the determining of the price,

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the discount rate, and the terminal growth rate, all of that will be the potential bidders to put together what their structure is. It could be 100 percent equity, could be 95 percent debt and 5 percent equity. You know, that's for the hypothetical buyer here.
But there is some starting point that they have to start from, and that's where this 7,765 reflects the current situation, where their starting point is going to be from.
Q. But that's the hypothetical current starting position for the company, using the company's cost of capital and capital structure; correct?
A. Yes.
Q. If a company, hypothetical company, decided to purchase this water company with 100 percent equity, would it be able to get an approved cost of capital based on a 100 percent equity capital structure?
A. That would happen after the fact. We have to have a starting point for the analysis to come up with the fair market value. You're going to come in in the middle of a rate scenario here in 2019.

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There might not be another, if it's an IOU, for two or three years. So that would be something down the road that would be affected by that, not the appraisal here today.

Q. But it is something that the potential IOU would consider; correct?

A. It's something that may be a consideration, yes.

Q. In the terminal year on this table, you have a revenue of 8,085,271.

A. Yes.

Q. And did you calculate that figure by increasing the 2023 revenue by 3 percent?

A. Yes.

Q. Would that make the terminal year 2024?

A. We have to go to the bottom if we're present-valuing. If you go to the bottom, if you scroll down, you'll see we're bringing back the discount period four and a half years. So the terminal value is in that last year. We're present-valuing that with the 2013 --

The 2013 and the terminal occur in the same year, if you see the 4.5 we're bringing back from that particular year. So it is a five-year

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analysis.

Q. So I see that you've used a four-and-a-half-year discount. My question is, why did you use four and a half years, time period there, not five and a half years, when at the top of the table we can see that you've now increased the revenue for the terminal year by one more year of growth at 3 percent.

A. Well, we're representing what that growth would be in the terminal year if it were to be growing, to be growing. Both occur in the same year. 2023 and the terminal occur in the same year.

MR. TAYLOR: Could you scroll down on that page just a little bit, please.

Q. Do you see a terminal value of $2,973,627 for your free cash flow?

A. Yes.

Q. And then the present value of that cash flow in perpetuity is $125,835,920; is that correct?

A. No, the present value of that would be the $99,473,231.

Q. I'm sorry?

A. Is your concern the midyear convention, why we're using the middle of the year?

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Q. No, I understand the middle-of-the-year convention. I don't know why you haven't used a five-and-a-half-year time period to discount the terminal value.

A. We didn't use -- we used the five-year discounted cash flow model, not a six-year, and we have the terminal year the same as the fifth year.

So it doesn't matter if I'm going to continue on and do a ten-year DCF or a three-year DCF. If you sit back and look at this -- in essence, it's a normalized direct cap. You know, over those middle years, it's relatively flat, because we're showing where the rate case is. We could have modified the capital expenditures, leveled that off to have a number, and just did a one-year direct cap. But if I did one year or five years or six years or ten years, theoretically mathematically I'm going to come up with the same value as long as it's normalized correctly.

Q. I think I understand. The terminal value of 125 million, how did you arrive at that figure?

A. That's the 2,973,627 capped at the discount rate less the terminal growth. So that would be capped at 2.36 percent.

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Q. Could you just explain to me the calculation?

A. It should be 2,973,627 divided by, and then open parentheses, 5.36 minus the 3, close parentheses; and that should divide out to 125,835,920. It may be off slightly for rounding because of the other numbers that are affecting it throughout there.

Q. Earlier today you discussed the -- well, in discussing the valuation for the company, you've come up with a -- not discussing it -- in performing your valuation for the company, you've arrived at an amount of 154 million? Is that the new figure?

A. Yes.

Q. And the difference between the 154 million and the net book value is an acquisition premium; correct?

A. Yes.

Q. And are you familiar with the Department's treatment of acquisition premiums?

A. To an extent, yes.

Q. So a company can include acquisition premium for recovery in rates traditionally if they can show the benefits outweigh those costs; correct?

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A. Okay.
Q. Do you think that it's feasible that a company could find cost savings in Milford Water Company that exceed that acquisition premium, based on your analysis?
A. I believe that there are companies that would be interested in acquiring this asset -- these assets of this company as we have appraised them. We have seen in the marketplace people paid three, four, five times book value for similar-type companies like this.
This is not a big company, by any means, so it's not -- while it looks on paper as a significant multiple overall, if a larger investor-owned utility were to acquire it, it would not be a significant impact on the company. If a GOU acquires it, it's a moot point because it will no longer be rate-regulated.
Q. When you say that you've seen companies pay three, four, five times market -- sorry, three, four, five times book value in acquisitions, is that for a utility that we're discussing?
A. Sure.
Q. Or in general?

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A. For water utilities -- I mean, water utilities as well as other utilities as well.
MR. CRANE: That's all the questions from the Bench for now. Does the company have redirect?
MR. CONNER: Briefly.
REDIRECT EXAMINATION
BY MR. CONNER:
Q. Mr. Rodriguez, Mr. Reyes asked you a number of questions concerning specific potential hypothetical buyers, and if I'm not mistaken, one of his questions was directed to whether or not you were aware if any of your municipal hypothetical buyers that you listed had the ability to condemn property outside of its municipal boundaries. Do you recall that line of questioning?
A. Yes.
Q. In your analysis of the hypothetical buyer, are you assuming that the municipal hypothetical GOU buyer would have to have condemnation authority?
A. No. It would be somebody that would negotiate an arm's-length transaction to acquire the water utility.
Q. So it would be a consensual buyer,

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consensual seller, who might happen to be a GOU outside of the municipal boundaries of Milford?
A. Yes, a willing buyer and a willing seller, yes.
Q. With respect to your growth rate that I think one of the panelists asked you about from, I think it's 3 percent, that is just in your income approach analysis, isn't it?
A. That is correct.
Q. That does not impact your cost approach at all, does it?
A. No, it does not.
Q. With respect to your growth rate, you indicated -- and I think directed the panel to one of your IR responses that identified growth of potentially 4 percent in the water industry for 2018. I'd like to hand you another document, and present it to the panel as well.
Can you identify this document for us, Mr. Rodriguez?
A. Sure. This is another industry forecast that we prepared for the water industry. This shows forecasts from 2019 through 2023.
Q. What is the source of this information?

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MR. CRANE: Are you introducing this as an exhibit?
MR. CONNER: Yes, I am.
MR. CRANE: We're going to mark this for identification as Exhibit MWC-7.
(Exhibit MWC-7 marked for identification.)
Q. What is the source of the information found on MWC-7?
A. At the bottom there's a footnote here. It says, "Water/sewer/utilities quarterly update, March 25th, 2019."
Q. If the industry forecast is for an annual compounded rate of 4 percent in the U.S. water, sewer, and other systems between 2018 and 2023, why didn't you include a 4 percent growth rate in your income approach analysis, or your DCF model?
A. We took a conservative approach and basically averaged the 4 percent with the general inflation rate of about 2.2 percent and came up with a conservative estimate of 3 percent, middle of the road.
MR. CONNER: Would you pull up the summary on his income -- I mean, the valuation, from

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the errata.
Q. Mr. Rodriguez, I'm going to direct your attention to MW-MR-3, Page 68, and this is your corrected income approach number of $112 million; is that correct?
A. That is correct.
Q. And so before adding the water rights to the final conclusion of value, what is your fair market value determination or final conclusion of value in this matter?
A. The final value conclusion is weighted 60 percent on the cost approach, 40 percent on the income. The weighted -- or a total fair market value of the Milford Water System is $138,400,000 as of December 31st, 2018.
Q. Now, your explanation to the panel I think with respect to the 50/50 weight from your income approach to the GOU hypothetical buyer and a 50 percent approach to an IOU hypothetical buyer, that's solely in the income approach; correct?
A. Yes, it is.
Q. So on an overall weighted percentage in the $138 million final conclusion of value, what percent does the -- is reflected by a GOU in the income

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approach?
A. It would be overall 20 percent, or 50 percent of the income approach to value.
Q. Thank you.
MR. CONNER: I have no further questions.
MR. CRANE: Does Milford have any followup?
RECROSS-EXAMINATION
BY MR. REYES:
Q. Just on the errata sheets, on Page 69, just comparing the terminal value, which you've listed -- you've indicated is 125,835,920 --
MR. CONNER: Jesse, are you on the one that we submitted with the exhibit numbers? It's Page 72.
Q. And then compare that to the other sheet, Page 429 -- 432, where the terminal value is indicated as 135,715,150. Could you explain the difference between those two sheets?
A. Page 432 is the economic obsolescence calculation. Is that correct?
MS. TIERNEY: Yes.
A. So what is your question? I have the DCF

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in front of me, which is Page 72, and now I have the report, MW-MR-3, Page 432, in front of me.
Q. So we're just comparing the terminal value of free cash flow on Page 432 with the DCF sheet.
A. Okay. You would have to use the errata Page 432. Is that what you're asking?
Q. Yes.
A. So not the original 432.
So the free cash flow, which is the 2,278,468, is the year one free cash flow that goes into the economic obsolescence calculation.
Q. Sure. And the terminal value column?
A. The terminal value -- the terminal value is 135,713,150, which should be 125,835.
Q. Does this affect any other numbers?
A. I'm just trying to think of how it would affect it. It's not going to go down as much.
It's going to have a slight impact on the economic obsolescence calculation. How much it is, I'd have to rerun it.
MR. REYES: No further questions.
FURTHER REDIRECT EXAMINATION
BY MR. CONNER:
Q. Is that a correction you need to make, Mr.

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Rodriguez?
A. I do need to make it. It is a typo on Page 432.
MR. CONNER: We'll propose, Mr. Crane, to submit that revised worksheet.
MS. TIERNEY: Can we also get how it affects any other calculations?
MR. CONNER: Yes.
THE WITNESS: Yes.
MS. TIERNEY: Thank you.
MR. CONNER: If it's okay, we'll provide that Monday morning.
MR. CRANE: That would be fine.
MR. CONNER: I have nothing further.
MR. CRANE: Thank you, Mr. Rodriguez. You are excused.
THE WITNESS: Thank you.
MR. CRANE: Let's go off the record.
(Recess taken.)
MR. CRANE: Let's go on the record. We're proceeding with the Milford Water Company's next witness. Sir, could you please state your name for the record.
THE WITNESS: Mark Pomykacz.

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$125,835,920 710:19
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R.17-06-024_Sup 2. Disadvantaged Community

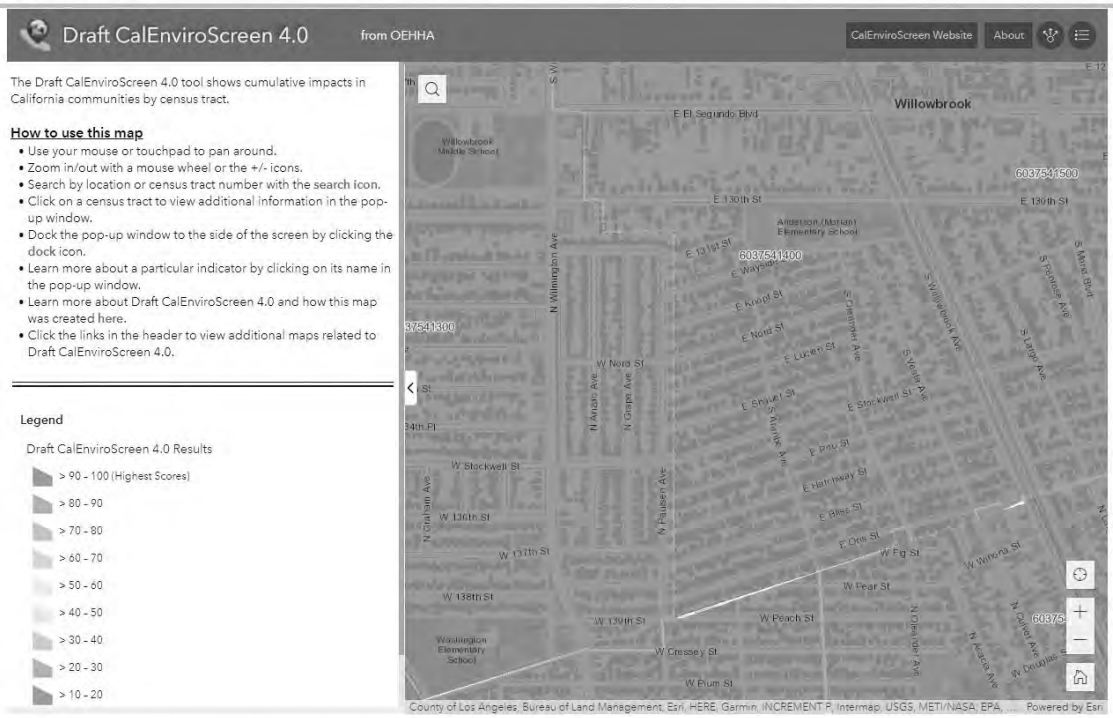


Sativa Los Angeles County Water System

Water Service Area
Boundary Map

Census Tract	Total Population	California County	ZIP	Nearby City (to help approximate location only)	Longitude	Latitude	DRAFT CES 4.0 Score	DRAFT CES 4.0 Percentile	DRAFT CES 4.0 Percentile Range
6037541400	7587	Los Angeles	90222	Compton	-118.2337235	33.9131395	60.76	96.34	95-100% (highest scores)
6037541500	6094	Los Angeles	90222	Compton	-118.2270116	33.9148293	60.71	96.29	95-100% (highest scores)
6037541300	5715	Los Angeles	90222	Compton	-118.2410907	33.911833	57.90	94.85	90-95%

Source: CalEnviroScreen_4.0Excel_ADA_D1_2021



Preliminary Analysis and StoryMap on Race/Ethnicity and Draft CalEnviroScreen 4.0 Results

FILED
08/13/21
04:59 PM

A2108011

Attachment 11

Application Service List

APPLICATION SERVICE LIST

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