WELL RELOCATION AGREEMENT

This Well Relocation Agreement ("Agreement") is entered into as of this __ day of _____, 2017 ("Effective Date"), for reference purposes only, by and between THE CITY OF RIVERSIDE, a California charter city and municipal corporation ("City"), and HILLWOOD ENTERPRISES, L.P., a Texas limited partnership ("Hillwood").

RECITALS

This Agreement is made and entered into on the basis of the following facts and understandings of the parties:

A. Substantially concurrently with entering into this Agreement, City will be the fee owner of that certain tract of land within the City Land (described below) containing approximately 1.722 acres (better described as a portion of Lot 13 of Block 54, Rancho San Bernardino, according to map thereof recorded in Book 7, Page 2 of Maps, recorded in the official records of San Bernardino County Recorder's Office, San Bernardino, California), located south of E Dumas Street and west of Waterman Avenue, in San Bernardino, California, consisting of Assessor's Parcel No. 0141-421-14, as legally described and depicted Exhibit "A" attached hereto and incorporated herein by this reference (the "SCE Land").

B. City is the fee owner of certain parcels of real property located in the City of San Bernardino, California containing approximately 60.318 acres, consisting of Assessor's Parcel Nos. 0141-431-17, 0141-431-18, 0141-421-18, 0141-421-19 and 0141-421-20, which, together with the SCE Land, includes the area denoted as "Ground Lease Area" and "Parking Area" on the legal description attached hereto as Exhibit "B", the area denoted as "Access Area" on the legal description attached hereto as Exhibit "C" and the area denoted as "City Well Parcel" on the legal description attached hereto as Exhibit "D", all of which Exhibits are incorporated herein by this reference, together with any and all buildings, fixtures and other improvements located on the City Land ("City Land").

C. Substantially concurrently with entering into this Agreement, City and Hillwood have entered into that certain Ground Lease Agreement (the "Ground Lease") pursuant to which (i) Hillwood will lease from the City the Ground Lease Area portion of the City Land and the SCE Land, consisting of approximately 49.691 acres, and the Parking Area portion of the City Land, consisting of approximately 5.932 acres, in the approximate configurations as depicted on Exhibit "B" (collectively the "Leased Premises"), and (ii) Hillwood will have exclusive access from the Leased Premises to E Dumas Street over the Access Area portion of the City Land in the approximate configuration depicted on Exhibit "C".

In order for the City to lease the Leased Premises to Hillwood (or its affiliate) ("Lessee") and to enter into the Ground Lease, certain ground water extraction and monitoring wells and above and below ground equipment and pipelines related to such wells presently located within the area which is to comprise the Leased Premises, need to be abandoned and relocated.

D. The City desires that Hillwood complete, and Hillwood agrees to complete, that certain work related to the well system relocation/abandonment as described in

that certain Warren 4R Well & Rice-Thorne Pipeline Replacement Report dated October 19, 2016, prepared by the Riverside Public Utilities Water Division (the "Well Relocation Report"), a copy of which is attached hereto as Exhibit "E" and incorporated herein by this reference, and subject to the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the mutual promises contained herein, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto hereby agree as follows:

AGREEMENT

1. **Well Relocation Work.**

(a) Scope of Work. Hillwood shall complete the Well Relocation Work as described in Well Relocation Report (as the same may be modified from time to time) (the "Scope of Work"), consisting generally of (i) the relocation of the Warren 4 water well (the "Warren 4 Well") to a location outside of the parcel lines for the Leased Premises to portions of the City Land identified as the City Well Parcel, on the attached Exhibit "D", which location is to be retained by the City and not be included within the Leased Premises, and (ii) the installation of replacement transmission pipelines and blow-off lines to connect the new Warren 4 replacement wells (the "Warren 4R Well") and the existing Warren 1 well located on the City Land to the south of the Leased Premises, and (iii) other new drainage and irrigation pipelines, and installation of electrical power transformers, above-ground pumping equipment and well equipment housing improvements for such existing and relocated well (collectively, the "Well Relocation Work"), all as more particularly described in the Well Relocation Report and the Scope of Work.

(b) Plans for the Well Relocation Work. Prior to the commencement of the Well Relocation Work, Hillwood, with the review and input of the City and its consultants, shall have construction plans and specifications prepared for the Well Relocation Work depicting: (i) the locations and specifications for the proposed replacement wells and equipment, transmission pipelines, blow-off pipelines, drainage and other pipelines and above-ground and below-ground improvements comprising the Well Relocation Work; (ii) the routing of the pipelines proposed to connect the existing and relocated wells to the existing transmission facilities; (iii) the procedures to be implemented to restore as nearly as reasonably possible all surface areas on the impacted portions of the City Land, SCE Land and the Leased Premises to the conditions existing prior to commencement and completion of the Well Relocation Work, including back-filling with clean soil any below-ground areas from which existing well lines and equipment are located and hereafter removed; and (iv) any other information deemed necessary by Hillwood, its contractors or consultants to define and complete the Well Relocation Work (collectively, the "Well Relocation Plans"). The Well Relocation Plans shall be prepared by a licensed civil engineer approved by the City and Hillwood, and in accordance with the appropriate and commonly recognized engineering standards for such water well facilities. All costs for such Well Relocation Plans shall be paid by Hillwood and shall be included within the Well Relocation Costs as further described in Paragraph 1(e) of this Agreement. The parties anticipate that development of the Well Relocation Plans should take approximately 6 – 9 months from the Effective Date of this Agreement.

(c) Standard of Work. Hillwood shall perform the Well Relocation Work subject to similar construction standards and specifications as those used for the existing Warren 4 Well and any relocated wells shall consist of substantially similar components, as those installed for the existing Warren 4 Well and as described in the Scope of Work. Should the City desire to upsize, upgrade or otherwise modify the specification of any components of the Well Relocation Work to include any other specifications than those used for the existing Warren 4 Well and described in the Scope of Work ("Additional Work"), then the City will submit a written request for such Additional Work to Hillwood, documenting the agreement between Hillwood and the City that the Work described therein constitutes Additional Work and the City shall reimburse Hillwood for the cost of the Additional Work as provided in Paragraph 1(f) below(f) below. However, Hillwood will not seek additional reimbursement from the City for nominal variations in well construction from substantially similar standards and components as those used for the existing Warren 4 Well or to facilitate a substantially similar capacity to the existing Warren 4 Well, including but not limited to additional zone sample testing, depths and lengths and slot size of well screens, gravel pack gradation and depth, depth and position of auxiliary tubes, depth of pilot bore, frequency of soil samples, number of gradation analyses, depths and lengths of blank casing, depth of concrete slurry seal, length of pump column and shaft, design of pump (i.e. pump curve), sizing of motor (i.e. horsepower rating), additional hours and flow rates for well development and adjustments to flow rates and duration of well testing (i.e pump testing), but costs for all such nominal variations shall be included within the Well Relocation Costs described in Paragraph 1(e) of this Agreement.

(d) Bid Process. In order to ensure that Hillwood completes the Well Relocation Work in an efficient and cost-effective manner that does not unnecessarily result in cost overages, Hillwood will utilize a competitive bid process for selecting a general contractor. Hillwood shall procure bids for the Well Relocation Work from a minimum of three licensed and bonded contractors, such contractors to be specifically experienced in ground water extraction and monitoring well and pipeline construction as contemplated by this Agreement. Notwithstanding the foregoing, for any portion of the Well Relocation Work that may be completed on a design-build basis, Hillwood may select one licensed contractor to complete such design and build work. The bid process will be "open book" with such materials as bid instructions, bid sheet/cost summary, bid qualifications, insurance certificates, and subcontractor CV/project history, will be subject to review and ultimate approval by the City and Hillwood prior to the award of subcontracts.

(e) Well Relocation Costs. Hillwood shall maintain copies of all receipts, contracts, purchase orders and other documentation evidencing any and all amounts spent by Hillwood for work performed and expenses incurred in the course of Hillwood's completion of the Well Relocation Work, including, without limitation, design, permitting, construction and inspection costs (the "Well Relocation Costs"). Upon completion of the Well Relocation Work, Hillwood shall provide the City with documentation evidencing all Well Relocation Costs incurred by Hillwood together with an accounting for the total Well Relocation Costs. Hillwood and the City agree that the City will not be required to reimburse Hillwood for, or pay Hillwood in advance for, the costs of any requested Additional Work unless the total cost to complete the requested Additional Work together with the total actual cost to complete the Well Relocation Work (the "Actual Cost"), exceeds the cost estimate included in Table 3 of the Well Relocation Report, in the amount of $4,100,000 (the "Original Estimate"). In the event that the requested

Additional Changes will cause the Actual Cost to exceed the Original Estimate, the City agrees to pay Hillwood the amount by which the Original Estimate is exceeded (the "Excess Costs") pursuant to Paragraph 1(f) below.

(f) Funding of Excess Costs. Hillwood will update and reevaluate the Original Estimate on a monthly basis, as the Well Relocation Work progresses, and provide a copy of the updated cost estimate (the "Current Cost Estimate") to the City of Riverside Public Utilities Department for informational purposes. Any changes to the estimated costs, including costs for unforeseen conditions or contractor changes as various components of the Well Relocation Work are sent for final bid, will be documented and reflected in the most recent Current Cost Estimate. Hillwood will keep detailed and separate records of the costs for any Additional Work and provide the City with copies of supporting documentation with each Current Cost Estimate. Following receipt of firm bids for the Warren 4 Well relocation, if the Current Cost Estimate, including any Additional Work scheduled or performed at the request of the City, exceeds the Original Estimate, the City will pay such Excess Costs to Hillwood, up to the actual cost of the Additional Work, i.e. the City will not be responsible for cost overruns unrelated to the Additional Work. The City agrees to fund such additional costs as soon as reasonably practical in order to allow the Well Relocation Work and the Additional Work to proceed with no impact upon the construction schedule. Upon final completion of the Well Relocation Work, Hillwood will submit a final reconciliation to the City that allocates any savings between the actual cost of the Well Relocation Work, excluding the Additional Work, and the Original Estimate to the City. For example, by way of illustration only and not as a reflection of actual conditions, if the costs for the Well Relocation Work (excluding any requested Additional Work) are $3,700,000, Hillwood will apply the savings of $400,000 (the Original Estimate of $4,100,000 minus the actual costs of $3,700,000) to the cost of the Additional Work; conversely, if the costs for the Well Relocation Work (excluding any Additional Work) are $4,200,000, subject to Section 3 of the Agreement (permitting a credit of the Well Relocation Costs against the rent under the Ground Lease) the City will only be responsible for funding the actual cost of any Additional Work.

(g) Payment of Prevailing Wages. In its performance of the Well Relocation Work, Hillwood shall pay prevailing wages if and as required by law as described in California Labor Code § 1720, and the City shall not be liable for any failure in Hillwood's payment of prevailing wages or legally-imposed penalties therefore.

(h) Progress Inspections. City and its consultants performing services in connection with the Well Relocation Work, including, any hydro-geologist approved by the City, shall have the right, from the time Hillwood commences the Well Relocation Work until the City's final acceptance of the Well Relocation Work, to periodically conduct reasonable inspections and investigations related to Hillwood's construction of the Well Relocation Work (collectively "Progress Inspections"). Any costs associated with such Progress Inspections are included within the Well Relocation Costs described in Paragraph 1(e) above of this Agreement. Hillwood hereby grants a right of entry to City for all such Progress Inspections to be completed on the Leased Premises. Hillwood acknowledges and agrees that it is assumed and anticipated that the City will visit the Leased Premises on a daily basis during the construction process and will provide Hillwood with a log at the end of each month during the construction period documenting the number of Progress Inspections and the costs thereof. The City agrees to

indemnify, defend and hold Hillwood harmless from all liability, claims, demands, damages, or costs and any damage to the Leased Premises, arising solely from the negligence of City and/or its consultants performing services in connection with such Progress Inspections.

(i) Schedule for Completion. Hillwood anticipates that the Well Relocation Work shall be completed in accordance with the following schedule:

(i) The electrical supply and discharge pipelines for the Warren 1 Well will not be abandoned until after new discharge pipelines and electrical supply are designed, constructed, approved and placed into service.

(ii) The monitoring and irrigation wells shall be abandoned at the convenience of the Lessee.

(iii) The Warren 4R Well shall be connected to the existing transmission facility (as identified in the Well Relocation Report) and in operation within 540 days after the Commencement Date of the Lease Agreement. Upon the Effective Date of the Lease Agreement Hillwood shall be entitled to abandon and remove the existing Warren 4 Well and related equipment, easements, improvements and below ground pipelines related to the existing Warren 4 Well.

(iv) Liquidated Damages: Subject to time extensions for force majeure conditions (as defined in Paragraph 1(i)(vii) below, Hillwood shall pay to the City Liquidated Damages in the amount of $3,000 per day for each and every day beyond the 540 day period for relocation of the Warren 4 Well, as described in Paragraph 1(i)(iii) above, that the Warren 4R Well is not installed and operating.

(v) All Well Relocation Work, including restoration of all impacted portions of the City Land and the Leased Premises, shall be completed by Hillwood not later than the later of: 360 days following the approval by Hillwood and City of the Well Relocation Plans or 540 days following the Commencement Date of the Lease.

(vi) Salvaging. Hillwood shall provide a 30 day notice and shall grant the City access to salvage any equipment at any facility that is scheduled for abandonment or demolition.

(vii) Force Majeure. The time within which Hillwood shall be required to complete its obligations (including, the Well Relocation Work) under this Agreement shall be extended by a period of time equal to the number of days during which performance of such act is delayed due to war, insurrection, strikes, lock-outs, riots, floods, earthquakes, fires (not caused by Hillwood or its agents), casualties, natural disasters, acts of God, acts of the public enemy, epidemics, quarantine restrictions, freight embargoes, governmental restrictions on priority, initiative or referendum, moratoria, processing with governmental agencies other than the City, unusually severe weather, or any other similar causes beyond the control or without the fault of the party claiming an extension of time to perform. An extension of time for any such cause shall be for the period of the enforced delay and shall commence to run from the time of the commencement of the cause, if written notice by the party claiming such extension is sent to the other party within 30 days

of knowledge of the commencement of the cause. Any act or failure to act on the part of a party shall not excuse performance by that party.

(j) Insurance Requirements. Hillwood shall require its General Contractor and any contractors who are awarded contracts to perform any of the Well Relocation Work to maintain insurance of the type and in the amounts required by Exhibit "F" attached hereto (the "Insurance Requirements") and incorporated herein by this reference and name the City as an additional insured as set forth in the Insurance Requirements.

In addition, Hillwood shall require its General Contractor to maintain Builder's Risk insurance in the amount of the estimated Well Relocation Work. The policy shall include coverage for fire, theft, extended coverage, vandalism and malicious mischief. If the insurance requires deductibles/self-insured retention, then General Contractor shall pay for such deductibles. The amount of such deductibles shall not exceed $25,000.00.

2. **California Environmental Quality Act, Permits and City Inspections**.

(a) California Environmental Quality Act. In accordance with the requirements of the California Environmental Quality Act (Public Resources Code § 21000, et seq. ("CEQA")), the Well Relocation Work described in this Agreement is categorically exempt from CEQA pursuant to CEQA Guidelines sections 15301 and 15302, among others.

(b) Permits. Hillwood and/or its agents or contractors shall apply in a timely manner for such permits and other approvals as may be required from the City of San Bernardino and other governmental or quasi-governmental agencies having jurisdiction over the City Land and the Leased Premises, including without limitation the United States Air Force (as to removal of existing well treatment vessels). The City shall use its best efforts to assist Hillwood with obtaining all such permits and approvals, and the City shall timely review and approve any plans or other documentation necessary to be reviewed by the City as part of the issuance of such permits and approvals. Further, the City shall not deny Hillwood of any right or disapprove any work of Hillwood necessary or incidental to the relocation or decommissioning of the existing wells so that Hillwood may complete the Well Relocation Work.

(c) City Inspections. The City and Hillwood shall cooperate and use reasonable efforts in coordinating the scheduling and completion of any inspections required by the City for the Well Relocation Work. Any costs associated with such City inspections shall be paid by Hillwood and shall be included within the Well Relocation Costs described in Paragraph 1(e) above of this Agreement.

3. **Application of Well Relocation Costs to Rent Obligations**. Eligible Well Relocation Costs incurred by Hillwood shall be applied towards any rent obligations of Lessee as contained in Section 1.4 of the Ground Lease.

4. **Grant of License**. From and after the Effective Date, Hillwood and Hillwood's agents, employees, contractors, subcontractors, and consultants shall have the non-exclusive right and license to enter upon and use all portions of the City Land and the SCE Land which are not part of the Leased Premises as to which Hillwood has leasehold ownership rights, for the purpose of performing and completing the Well Relocation Work, and any other related activities

incidental thereto. Hillwood's rights hereunder to use the City Land and the SCE Land shall automatically and forever expire on the earlier of December 31, 2018 or upon completion of the Well Relocation Work and acceptance of same by the City.

In connection with the City's granting of this license over such portions of the City Land and SCE Land, Hillwood agrees to indemnify, defend and hold the City harmless, and to defend and reimburse City for any and all claims, judgments, actions, suits, proceedings, losses, costs, damages, liabilities, deficiencies, fines, penalties, punitive damages, or expenses, including attorneys' fees, incurred or suffered by the City resulting from, arising out of, or based upon any breach by Hillwood of its obligations in this Agreement or the negligent or willful misconduct of Hillwood.

5. **Removal of Existing Easements**. The City shall cause the abandonment and removal from title of any and all easements affecting title to the Leased Premises that relate to any of the following: any existing ground water or monitoring wells which are to be abandoned or relocated, well pipelines, transmission lines, blow-off lines, access, ingress/egress and/or maintenance easements related to any of the foregoing (collectively, "Well Easements") after or concurrently with the completion of the Well Relocation Work. The City shall cause the abandonment and removal or the Well Easements, whether by quitclaim deed, release or any other process that may be required by Hillwood and First American Title Insurance Company ("Title Company"), whose address is 3281 East Guasti Road, Suite 440, Ontario, California 91761, for Title Company to permanently remove such Well Easements from title to the Leased Premises.

6. **Default and Termination**. A party shall be deemed in default hereunder if it fails to meet, comply with, or perform any covenant, agreement, or obligation on its part required within the time limits and in the manner required in this Agreement for any reason other than a default by the other party hereunder or termination of this Agreement as provided in this Paragraph 6.

(a) Opportunity to Cure. No act, failure to act, event or circumstance which might be deemed to be a default by either party shall be deemed to be a default under any of the provisions of this Agreement, unless and until, notice thereof is first given by the non-defaulting party to the party alleged to be in default and said party fails to cure the alleged default within 15 calendar days in the case of a non-monetary default, or five calendar days in the case of a monetary default.

(b) Termination upon Default. After notice and an opportunity to cure, if the defaulting party fails to cure the default, the non-defaulting party may terminate this Agreement by giving written notice to the defaulting party. So long as Hillwood is not the defaulting party, upon termination, Hillwood shall immediately stop the Well Relocation Work and shall be entitled to application of all Well Relocation Costs incurred up and until such termination date, in accordance with Paragraph 3 above of this Agreement.

7. **Notices**. All notices, terminations, waivers and other communications hereunder shall be in writing and shall be delivered personally, by facsimile or shall be sent by registered or

certified United States mail or a nationally recognized, overnight courier service, postage prepaid, and addressed as follows:

City	**Hillwood**
City of Riverside Public Utilities Department 3750 University Avenue, 3rd Floor Riverside, CA 92501 Phone: (951) 826-2135 Fax: (951) 826-2450	Hillwood Enterprises, L.P. c/o Hillwood Development Company, LLC 901 Via Piemonte, Suite 175 Ontario, California 91764 Phone: (909) 382-2154 Fax: (909) 382-0073

Any notice in accordance herewith shall be deemed received when delivery is received or refused, as the case may be. Notices may be given by email transmission, provided that an original of said transmission shall be delivered to the addressee by a nationally recognized overnight delivery service on the business day following such transmission. Emails shall be deemed delivered on the date of such transmission.

8. **Interpretation**.

(a) Construction of Agreement. The language of this Agreement shall be construed as a whole and given its fair meaning. The captions of the paragraphs are for convenience only and shall not influence construction. This Agreement shall be governed by the laws of the State of California. Venue for any litigation between the parties hereto concerning this Agreement shall be initiated in the County of Riverside.

(b) Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement and this Agreement supersedes all previous negotiations, discussions, and agreements between the parties, and no parol evidence of any prior or other agreement shall be permitted to contradict or vary the terms of this Agreement.

(c) Recitals. The recitals in this Agreement constitute part of this Agreement and each party shall be entitled to rely on the truth and accuracy of each recital as an inducement to enter into this Agreement.

(d) Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the party benefitted thereby of the covenants to be performed hereunder by such benefitted party.

(e) Severability. If any provision of this Agreement is adjudged invalid, void or unenforceable, that provision shall not affect, impair, or invalidate any other provision, unless such judgment affects a material part of this Agreement in which case the parties shall comply with the procedures set forth in Paragraph 6 above.

(f) No Third Party Beneficiaries; Assignment. There are no third party beneficiaries and this Agreement is not intended, and shall not be construed, to benefit or be enforceable by any other person, excepting the parties hereto. This Agreement shall be assignable by Hillwood to another affiliated party upon written notice from Hillwood to City. As used herein, an "affiliate" shall mean any party that controls, is controlled by, or is under common control with Hillwood.

9. **Attorneys' Fees**. In the event either party to this Agreement institutes an action or proceeding to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party in any such action shall bear their own costs thereof, including attorney's fees and costs

10. **Further Actions and Instruments**. Each of the parties shall cooperate with and provide reasonable assistance to the other to the extent necessary to implement this Agreement. Upon the request of either party at any time, the other party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary to implement this Agreement or to evidence or consummate the transactions contemplated by this Agreement.

11. **Time of Essence**. Time is of the essence in: (i) the performance of the provisions of this Agreement as to which time is an element; and (ii) the resolution of any dispute which may arise concerning the obligations of Hillwood and the City as set forth in this Agreement.

12. **Waiver**. Failure by a party to insist upon the strict performance of any of the provisions of this Agreement by the other party, or the failure by a party to exercise its rights upon the default of the other party, shall not constitute a waiver of such party's right to insist and demand strict compliance by the other party with the terms of this Agreement thereafter.

[Signatures on following page.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

CITY OF RIVERSIDE

By_____
City Manager

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:

By: _____
Chief Assistant City Attorney

CA 16-1482
11/21/16

HILLWOOD ENTERPRISES, L.P, a Texas limited partnership

By: AHB, LLC,
a Texas limited liability company,
its general partner

By: _____
Name: John M. Magness
Title: Senior Vice President

Exhibit A

Meets and Bounds Description of Property

A PORTION OF LOT 13 OF BLOCK 54 AS SHOWN ON MAP OF RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, SAN BERNARDINO COUNTY RECORDS, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE NORTHERLY BOUNDARY LINE OF LOT 24 OF SAID BLOCK 54, SAID NORTHERLY BOUNDARY LINE BEING COINCIDENT WITH THE SOUTHERLY LINE OF DUMAS DRIVE, AS SHOWN UPON THE MAP OF VALLEY TRUCK FARMS, BEING TRACT NO. 1995 AND RECORDED IN BOOK 29 OF MAPS, PAGE 13 THEREOF, SAN BERNARDINO COUNTY RECORDS, SAID POINT OF COMMENCEMENT BEING SOUTH 89° 47' WEST 453.01 FEET FROM THE NORTHEASTERLY CORNER OF SAID LOT 24 OF BLOCK 54 OF SAID RANCHO AND ALSO DISTANT SOUTH 89° 47' WEST 1789.4 FEET FROM THE INTERSECTION OF SAID SOUTHERLY LINE OF DUMAS DRIVE WITH THE CENTER LINE OF WATERMAN AVENUE;

THENCE FROM SAID POINT OF COMMENCEMENT SOUTH 0° 39' 45" EAST, 1235.98 FEET;

THENCE SOUTH 9° 12' 45" EAST, 153.46 FEET; THENCE SOUTH 2° 25' 15" WEST, 255.59 FEET TO THE TRUE POINT OF BEGINNING;

THENCE FROM SAID TRUE POINT OF BEGINNING SOUTH 2° 25' 15" WEST, 250 FEET;

THENCE SOUTH 87° 34' 45" EAST, 300 FEET; THENCE NORTH 2° 25' 15" EAST, 250 FEET;

THENCE NORTH 87° 34' 45" WEST, 300 FEET TO THE TRUE POINT OF BEGINNING.

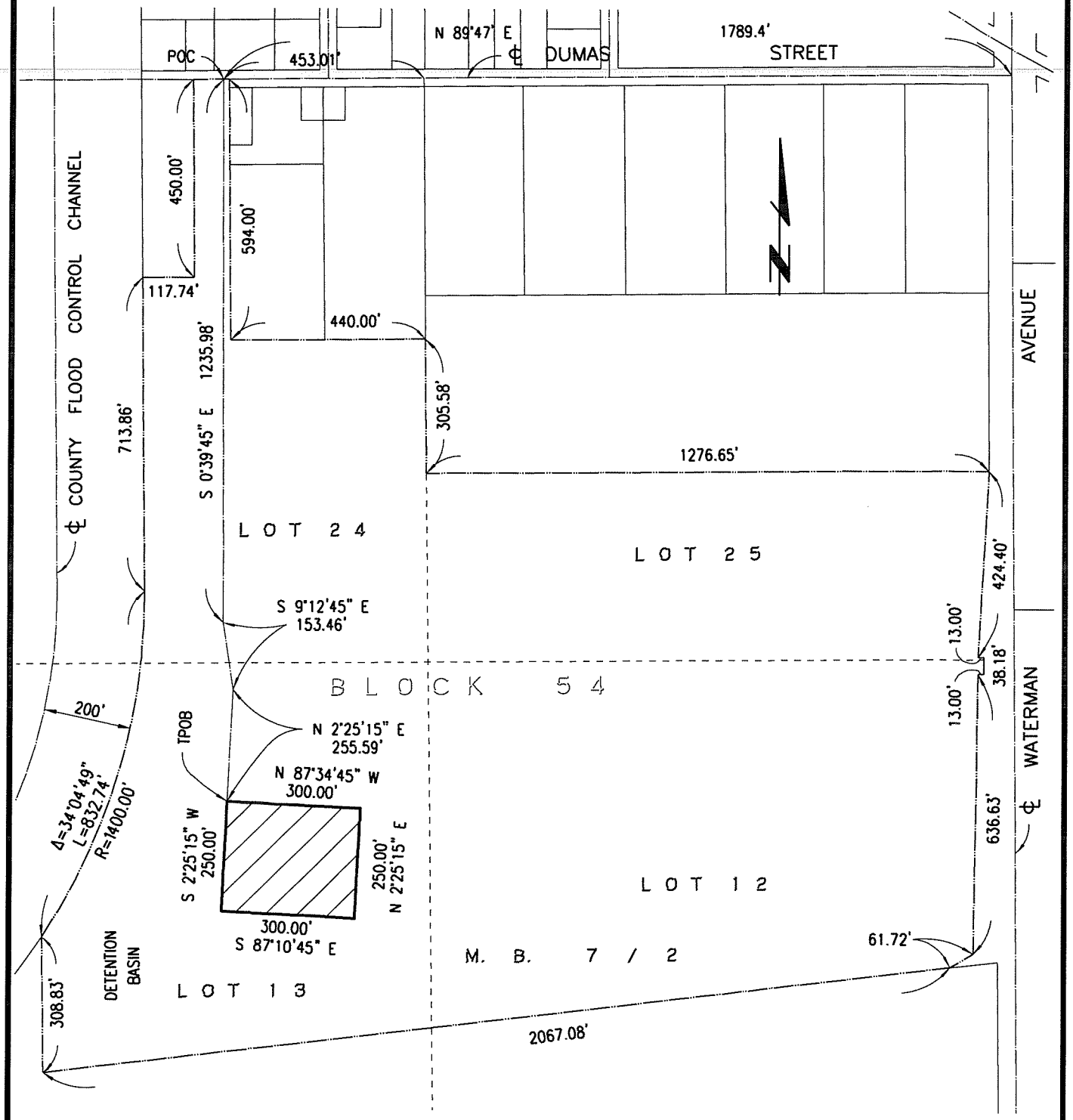
APN: 0141-421-14

CONTAINING: 75,000 SQUARE FEET OR 1.722 ACRES MORE OR LESS.

SCALE: 1" = 300'

Exhibit A

SHEET 1 OF 1



LEGEND:

INDICATES SCE PROPERTY
CONTAINS: 75,000 SQ. FT.
1.722 AC. ±

Exhibit B

GROUND LEASE AREA

LEGAL DESCRIPTION

THAT PORTION OF PARCELS 1 AND 2, AS DESCRIBED BELOW, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING SOUTHERLY OF THE SOUTHERLY LINE OF THE LAND DESCRIBED IN THE EASEMENT DEEDS GRANTED TO CALIFORNIA ELECTRIC POWER COMPANY, RECORDED FEBRUARY 13, 1957 AS INSTRUMENT NO. 1019, IN BOOK 4155, PAGE 501, AND MAY 10, 1957 AS INSTRUMENT NO. 334, IN BOOK 4226, PAGE 588, BOTH OF OFFICIAL RECORDS OF SAID COUNTY.

PARCEL 1:

THE EAST 2/3RDS OF LOTS 13 AND 24 IN BLOCK 54 AS SHOWN ON MAP OF RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, RECORDS OF SAID COUNTY.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

A. BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 24; THENCE RUNNING SOUTH AND ALONG THE EAST LINE OF SAID LOT, A DISTANCE OF 594 FEET; THENCE WEST 440; THENCE NORTH 594 FEET TO THE NORTH BOUNDARY LINE OF SAID LOT 24; THENCE EAST ON AND ALONG SAID BOUNDARY LINE 440 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

B. COMMENCING AT THE NORTHWEST CORNER OF THE EAST 1/3 OF SAID LOT 24; THENCE WESTERLY ALONG THE NORTHERLY LINE OF SAID LOT 24, A DISTANCE OF 80 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING WESTERLY ON THE NORTHERLY LINE OF SAID LOT 24, A DISTANCE OF 117.74 FEET; THENCE SOUTHERLY AND PARALLEL WITH THE WESTERLY LINE OF THE EAST 1/3 OF SAID LOT, A DISTANCE OF 450 FEET; THENCE EASTERLY AND PARALLEL TO THE NORTHERLY LINE OF SAID LOT, A DISTANCE OF 117.74 FEET; THENCE NORTHERLY AND PARALLEL WITH THE WESTERLY LINE OF THE EAST 1/3 OF SAID LOT, A DISTANCE OF 450 FEET TO THE POINT OF BEGINNING.

C. ALL OF THE EAST 1/2 OF THE WEST 2/3RDS OF SAID LOT 24, AND THE NORTH 1/2 OF THE EAST 1/2 OF THE WEST 2/3RDS OF SAID LOT 13 LYING WITHIN A STRIP OF LAND 400 FEET WIDE BEING 200 FEET ON EACH SIDE OF, MEASURED AT RIGHT ANGLES TO, THE FOLLOWING DESCRIBED CENTER LINE:

BEGINNING AT A POINT IN THE NORTH LINE OF SAID LOT 24, DISTANT THEREON NORTH 89° 36' 13.5" WEST 200 FEET FROM THE SOUTHEAST CORNER OF LOT 45 OF SAID BLOCK 54, SAID SOUTHEAST CORNER OF LOT 45 BEING A POINT IN THE NORTH LINE OF SAID LOT 24; THENCE SOUTH 0° 20' 14" WEST 1163.86 FEET; THENCE SOUTHWESTERLY 1039.88 FEET ALONG A TANGENT CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 1200 FEET AND A CENTRAL ANGLE OF 49° 39' 03"; THENCE SOUTH 49° 59' 17" WEST 807.37 FEET TO POINT OF ENDING OF THE CENTER LINE HEREIN DESCRIBED, SAID POINT BEING NORTH 49° 59' 17" EAST 75.85 FEET FROM A POINT IN THE SOUTH LINE OF LOT 14 OF SAID BLOCK 54, DISTANCE THEREON 619.16 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 14.

D. ALL THAT PORTION OF THE SOUTH 1/2 OF THE EAST 2/3RDS OF SAID LOT 13 DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 13; THENCE NORTHERLY 498.04 FEET ALONG THE EAST LINE OF SAID LOT 13; THENCE SOUTH 84° 04' 36" WEST 886.36 FEET TO A POINT ON THE WEST LINE OF SAID EAST 2/3 OF LOT 13, DISTANT THEREON NORTHERLY 397.85 FEET FROM THE SOUTHWEST CORNER OF SAID EAST 2/3RDS OF LOT 13; THENCE SOUTHERLY 397.85 FEET ALONG SAID WEST LINE TO THE SOUTHWEST CORNER, THENCE EASTERLY ALONG THE SOUTH LINE OF SAID LOT 13 TO THE POINT OF BEGINNING.

PARCEL 2:

ALL OF LOT 12, BLOCK 54, OF THE FORTY ACRE SURVEY OF THE RANCHO SAN BERNARDINO, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, OFFICIAL RECORDS OF SAID COUNTY; AND ALSO THAT PORTION OF LOT 25, IN SAID BLOCK 54, OF SAID FORTY ACRE SURVEY OF THE SAID RANCHO SAN BERNARDINO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 25; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHEAST CORNER OF THE LAND DEEDED TO ERASZMUS C. BIGGS BY DEED DATED JUNE 21, 1865, AND RECORDED IN BOOK "F" OF DEEDS, PAGE 612, RECORDS OF SAID COUNTY; THENCE WEST ALONG THE SOUTH LINE OF THE LAND SO DEEDED, 80 RODS, MORE OR LESS, TO THE WEST LINE OF SAID LOT 25; THENCE SOUTH ALONG THE WEST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID LOT 25, THENCE EAST ALONG THE SOUTH LINE OF SAID LOT 25, 80 RODS, MORE OR LESS TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION WITHIN THE SOUTH ONE-HALF OF SAID LOT 12.

ALSO EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

PARCEL AA:

BEGINNING ON THE WESTERLY LINE OF WATERMAN AVENUE, 82.5 FEET WIDE, DISTANT ALONG SAID WESTERLY LINE AND ITS SOUTHERLY PROLONGATION, NORTH 2,954 FEET FROM ITS INTERSECTION WITH THE CENTER LINE OF COLTON AVENUE, 82.5 FEET WIDE; THENCE WEST AT RIGHT ANGLES TO SAID WESTERLY LINE OF WATERMAN AVENUE, A DISTANCE OF 570 FEET; THENCE IN A NORTHWESTERLY DIRECTION TO A POINT ON THE WESTERLY LINE OF SAID LOT 12; DISTANT ALONG SAID WESTERLY LINE, NORTH 500 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE ALONG SAID WESTERLY LINE OF LOT 12, SOUTH 500 FEET TO SAID SOUTHWEST CORNER; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 12 EAST TO THE SOUTHEAST CORNER OF SAID LOT 12, SAID SOUTHEAST CORNER BEING ON THE WESTERLY LINE OF SAID WATERMAN AVENUE; THENCE ALONG THE EASTERLY LINE OF SAID LOT 12; SAID EASTERLY LINE BEING ALSO SAID WESTERLY LINE OF WATERMAN AVENUE, NORTH TO THE POINT OF BEGINNING.

Exhibit B

GROUND LEASE AREA

PARCEL BB:

BEGINNING AT A POINT IN THE CENTERLINE OF WATERMAN AVENUE, AN 82.5 FOOT STREET, DISTANT THEREON 646.58 FEET NORTHERLY OF THE INTERSECTION OF SAID CENTERLINE WITH THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH 84° 04' 36" WEST, 1326.92 FEET TO A POINT IN THE NORTH LINE OF THAT PROPERTY CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED OCTOBER 17, 1956, IN BOOK 4065, PAGE 513,OFFICIAL RECORDS OF SAN BERNARDINO COUNTY, SAID POINT BEING NORTH 84° 04' 36" EAST, 4.90 FEET FROM A POINT IN THE WEST LINE OF SAID LOT 12 WHICH IS 498.04 FEET NORTHERLY FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE SOUTHEASTERLY AND EASTERLY ALONG THE SAID NORTH LINE OF THE STATE OF CALIFORNIA PROPERTY AND ITS EASTERLY PROLONGATION TO THE INTERSECTION THEREOF WITH THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE NORTHERLY ALONG SAID CENTER LINE OF WATERMAN AVENUE, 352.16 FEET TO THE POINT OF BEGINNING.

PARCEL CC:

BEGINNING AT A POINT ON THE CENTERLINE OF WATERMAN AVENUE, DISTANT THEREON 646.58 FEET NORTH FROM THE INTERSECTION OF THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12 WITH THE SAID CENTERLINE OF WATERMAN AVENUE; THENCE SOUTH 83° 01" WEST, 150.65 FEET; THENCE NORTH 59° 13' 48" EAST, 61.72 FEET; THENCE NORTH 0° 50' 42" EAST, 636.60 FEET; THENCE NORTH 89° 33' 06" EAST, 13 FEET; THENCE NORTH 0° 26' 54" WEST, 38.18 FEET; THENCE SOUTH 89° 33' 06" WEST, 13 FEET; THENCE NORTH 3° 33' or EAST, 430.05 FEET, MORE OR LESS TO A POINT ON THE SOUTH PROPERTY LINE OF PARCEL OF LAND CONVEYED TO JOSEPH G. LAZAR, ET AL, BY DEED RECORDED SEPTEMBER 08, 1959 IN BOOK 4923, PAGE 75, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY; THENCE EAST ALONG SAID PROPERTY LINE TO A POINT ON THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE SOUTH 0° 26' 54" EAST, ALONG SAID CENTERLINE OF WATERMAN AVENUE TO THE POINT OF BEGINNING.

CONTAINING: *2,164,531 SQUARE FEET OR 49.691 ACRES MORE OR LESS.*

EXHIBIT "B" *ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.*

SUBJECT TO: *COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND RIGHTS-OF-WAY, IF ANY.*

PREPARED UNDER THE DIRECTION OF:

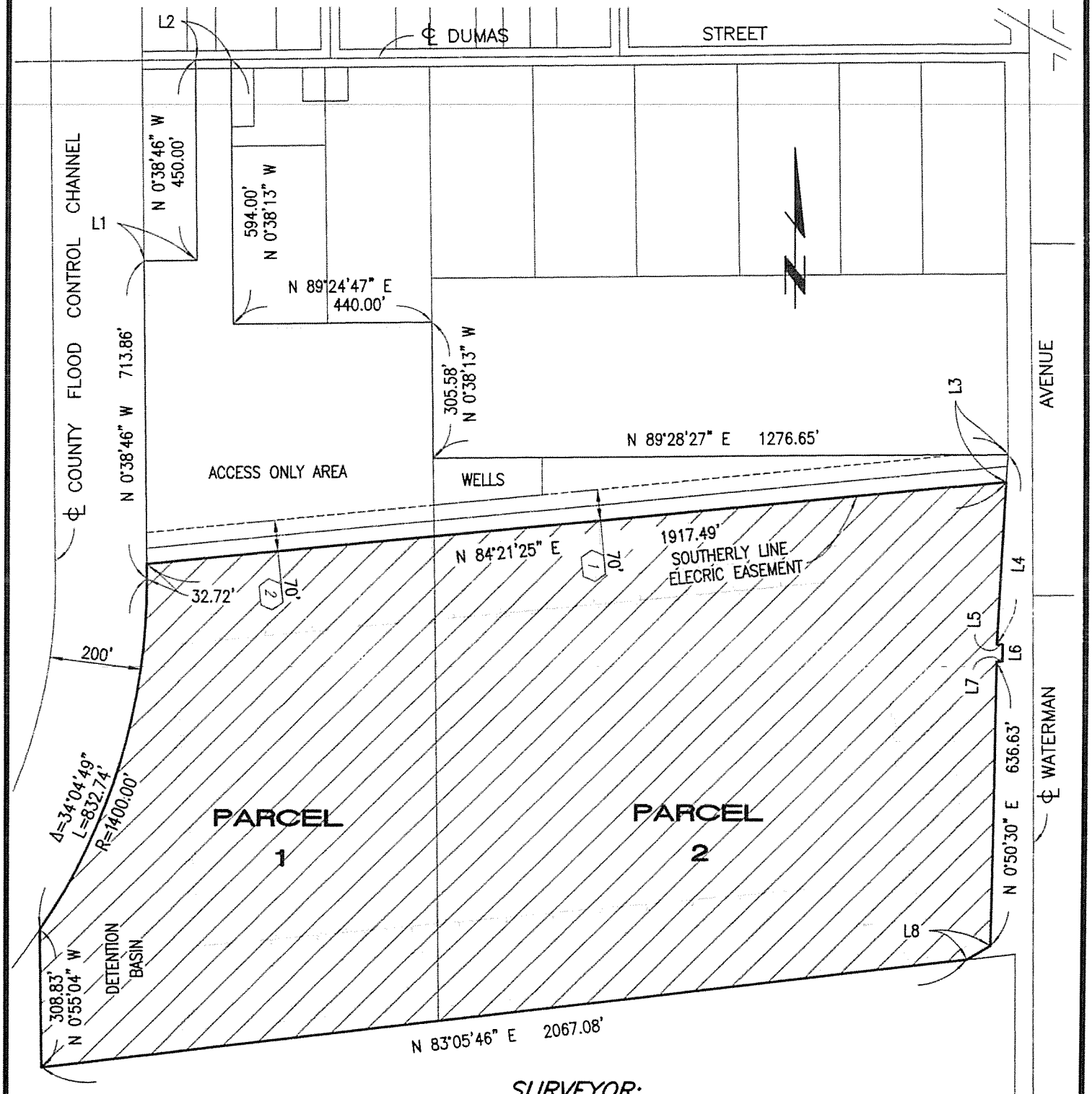
12/27/16

BRIAN L. THIENES *DATE*
P.L.S. No. 5750
REG. EXP. 12/31/17

SCALE: 1" = 300'

EXHIBIT "B"

GROUND LEASE AREA



SEE SHEET 2 FOR
LINE TEBLE, EASEMENT NOTES, AND LEGEND

SURVEYOR:

PREPARED UNDER THE DIRECTION OF:

BRIAN L. THIENES
P.L.S. NO. 5750
REG. EXP. DEC. 31, 2017

12/27/16
DATE

PROFESSIONAL LAND SURVEYOR
BRIAN L. THIENES
NO. 5750
STATE OF CALIFORNIA

PREPARED BY:

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

EXHIBIT "B"

GROUND LEASE AREA

LINE TABLE		
LINE #	LENGTH	BEARING
L1	117.74'	N 25°23'40" E
L2	80.07'	N 89°24'47" E
L3	61.35'	N 03°11'49" E
L4	424.40'	N 03°11'49" E
L5	13.00'	N 89°32'54" E
L6	38.18'	N 00°27'06" W
L7	13.00'	N 89°32'54" E
L8	61.72'	N 59°18'06" E

(1) GRANT OF EASEMENT RECORDED FEBRUARY 13, 1957 AS INSTR. NO. 1019 IN BOOK 4155, PAGE 501, O.R.

(2) GRANT OF EASEMENT RECORDED MAY 10, 1957 AS INSTR. NO. 334 IN BOOK 4226, PAGE 588, O.R.

LEGEND:

INDICATES GROUND LEASE AREA
CONTAINS: 2,164,531 SQ. FT.
49.691 AC. ±

Last Update: 10/25/16
O:\3400-3499\3412\ESMTS\3412 GROUND LEASE.dwg

Exhibit C

ACCESS ONLY AREA

LEGAL DESCRIPTION

THAT PORTION OF PARCELS 1 AND 2, AS DESCRIBED BELOW, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING NORTHERLY OF THE SOUTHERLY LINE OF THE LAND DESCRIBED IN THE EASEMENT DEEDS GRANTED TO CALIFORNIA ELECTRIC POWER COMPANY, RECORDED FEBRUARY 13, 1957 AS INSTRUMENT NO. 1019, IN BOOK 4155, PAGE 501, AND MAY 10, 1957 AS INSTRUMENT NO. 334, IN BOOK 4226, PAGE 588, BOTH OF OFFICIAL RECORDS OF SAID COUNTY.

EXCEPTING THEREFROM THOSE PORTIONS IDENTIFIED AS ***PARKING AREA*** *AND* ***WELL AREA*** *DESCRIBED AS FOLLOWS:*

PARKING AREA:
THE WESTERLY 586.00 FEET OF SAID PARCEL 1, LYING NORTHERLY OF THE NORTHERLY LINE OF SAID DEEDS TO CALIFORNIA ELECTRIC COMPANY AND SOUTHERLY OF A LINE PARALLEL WITH AND DISTANT 594.00 FEET MEASURED AT A RIGHT ANGLE FROM THE CENTERLINE OF DUMAS STREET.

WELL AREA:
THE WESTERLY 239.00 FEET OF SAID PARCEL 2, LYING NORTHERLY OF THE NORTHERLY LINE OF SAID DEEDS TO CALIFORNIA ELECTRIC COMPANY.

PARCEL 1:
THE EAST 2/3RDS OF LOTS 13 AND 24 IN BLOCK 54 AS SHOWN ON MAP OF RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, RECORDS OF SAID COUNTY.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

A. BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 24; THENCE RUNNING SOUTH AND ALONG THE EAST LINE OF SAID LOT, A DISTANCE OF 594 FEET; THENCE WEST 440; THENCE NORTH 594 FEET TO THE NORTH BOUNDARY LINE OF SAID LOT 24; THENCE EAST ON AND ALONG SAID BOUNDARY LINE 440 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

B. COMMENCING AT THE NORTHWEST CORNER OF THE EAST 1/3 OF SAID LOT 24; THENCE WESTERLY ALONG THE NORTHERLY LINE OF SAID LOT 24, A DISTANCE OF 80 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING WESTERLY ON THE NORTHERLY LINE OF SAID LOT 24, A DISTANCE OF 117.74 FEET; THENCE SOUTHERLY AND PARALLEL WITH THE WESTERLY LINE OF THE EAST 1/3 OF SAID LOT, A DISTANCE OF 450 FEET; THENCE EASTERLY AND PARALLEL TO THE NORTHERLY LINE OF SAID LOT, A DISTANCE OF 117.74 FEET; THENCE NORTHERLY AND PARALLEL WITH THE WESTERLY LINE OF THE EAST 1/3 OF SAID LOT, A DISTANCE OF 450 FEET TO THE POINT OF BEGINNING.

C. ALL OF THE EAST 1/2 OF THE WEST 2/3RDS OF SAID LOT 24, AND THE NORTH 1/2 OF THE EAST 1/2 OF THE WEST 2/3RDS OF SAID LOT 13 LYING WITHIN A STRIP OF LAND 400 FEET WIDE BEING 200 FEET ON EACH SIDE OF, MEASURED AT RIGHT ANGLES TO, THE FOLLOWING DESCRIBED CENTER LINE:

Exhibit C

ACCESS ONLY AREA

BEGINNING AT A POINT IN THE NORTH LINE OF SAID LOT 24, DISTANT THEREON NORTH 89° 36' 13.5" WEST 200 FEET FROM THE SOUTHEAST CORNER OF LOT 45 OF SAID BLOCK 54, SAID SOUTHEAST CORNER OF LOT 45 BEING A POINT IN THE NORTH LINE OF SAID LOT 24; THENCE SOUTH 0° 20' 14" WEST 1163.86 FEET; THENCE SOUTHWESTERLY 1039.88 FEET ALONG A TANGENT CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 1200 FEET AND A CENTRAL ANGLE OF 49° 39' 03"; THENCE SOUTH 49° 59' 17" WEST 807.37 FEET TO POINT OF ENDING OF THE CENTER LINE HEREIN DESCRIBED, SAID POINT BEING NORTH 49° 59' 17" EAST 75.85 FEET FROM A POINT IN THE SOUTH LINE OF LOT 14 OF SAID BLOCK 54, DISTANCE THEREON 619.16 FEET FROM THE SOUTHEAST CORNER OF SAID LOT 14.

D. ALL THAT PORTION OF THE SOUTH 1/2 OF THE EAST 2/3RDS OF SAID LOT 13 DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 13; THENCE NORTHERLY 498.04 FEET ALONG THE EAST LINE OF SAID LOT 13; THENCE SOUTH 84° 04' 36" WEST 886.36 FEET TO A POINT ON THE WEST LINE OF SAID EAST 2/3 OF LOT 13, DISTANT THEREON NORTHERLY 397.85 FEET FROM THE SOUTHWEST CORNER OF SAID EAST 2/3RDS OF LOT 13; THENCE SOUTHERLY 397.85 FEET ALONG SAID WEST LINE TO THE SOUTHWEST CORNER, THENCE EASTERLY ALONG THE SOUTH LINE OF SAID LOT 13 TO THE POINT OF BEGINNING.

PARCEL 2:

ALL OF LOT 12, BLOCK 54, OF THE FORTY ACRE SURVEY OF THE RANCHO SAN BERNARDINO, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, OFFICIAL RECORDS OF SAID COUNTY; AND ALSO THAT PORTION OF LOT 25, IN SAID BLOCK 54, OF SAID FORTY ACRE SURVEY OF THE SAID RANCHO SAN BERNARDINO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 25; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHEAST CORNER OF THE LAND DEEDED TO ERASZMUS C. BIGGS BY DEED DATED JUNE 21, 1865, AND RECORDED IN BOOK "F" OF DEEDS, PAGE 612, RECORDS OF SAID COUNTY; THENCE WEST ALONG THE SOUTH LINE OF THE LAND SO DEEDED, 80 RODS, MORE OR LESS, TO THE WEST LINE OF SAID LOT 25; THENCE SOUTH ALONG THE WEST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID LOT 25, THENCE EAST ALONG THE SOUTH LINE OF SAID LOT 25, 80 RODS, MORE OR LESS TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION WITHIN THE SOUTH ONE-HALF OF SAID LOT 12.

ALSO EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

PARCEL AA:

BEGINNING ON THE WESTERLY LINE OF WATERMAN AVENUE, 82.5 FEET WIDE, DISTANT ALONG SAID WESTERLY LINE AND ITS SOUTHERLY PROLONGATION, NORTH 2,954 FEET FROM ITS INTERSECTION WITH THE CENTER LINE OF COLTON AVENUE, 82.5 FEET WIDE; THENCE WEST AT RIGHT ANGLES TO SAID WESTERLY LINE OF WATERMAN AVENUE, A DISTANCE OF 570 FEET; THENCE IN A NORTHWESTERLY DIRECTION TO A POINT ON THE WESTERLY LINE OF SAID LOT 12; DISTANT ALONG SAID WESTERLY LINE, NORTH 500 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE ALONG SAID WESTERLY LINE OF LOT 12, SOUTH 500 FEET TO SAID SOUTHWEST CORNER; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 12 EAST TO THE SOUTHEAST CORNER OF SAID LOT 12,

Exhibit C

ACCESS ONLY AREA

SAID SOUTHEAST CORNER BEING ON THE WESTERLY LINE OF SAID WATERMAN AVENUE; THENCE ALONG THE EASTERLY LINE OF SAID LOT 12; SAID EASTERLY LINE BEING ALSO SAID WESTERLY LINE OF WATERMAN AVENUE, NORTH TO THE POINT OF BEGINNING.

PARCEL BB:

BEGINNING AT A POINT IN THE CENTERLINE OF WATERMAN AVENUE, AN 82.5 FOOT STREET, DISTANT THEREON 646.58 FEET NORTHERLY OF THE INTERSECTION OF SAID CENTERLINE WITH THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH 84° 04' 36" WEST, 1326.92 FEET TO A POINT IN THE NORTH LINE OF THAT PROPERTY CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED OCTOBER 17, 1956, IN BOOK 4065, PAGE 513,OFFICIAL RECORDS OF SAN BERNARDINO COUNTY, SAID POINT BEING NORTH 84° 04' 36" EAST, 4.90 FEET FROM A POINT IN THE WEST LINE OF SAID LOT 12 WHICH IS 498.04 FEET NORTHERLY FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE SOUTHEASTERLY AND EASTERLY ALONG THE SAID NORTH LINE OF THE STATE OF CALIFORNIA PROPERTY AND ITS EASTERLY PROLONGATION TO THE INTERSECTION THEREOF WITH THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE NORTHERLY ALONG SAID CENTER LINE OF WATERMAN AVENUE, 352.16 FEET TO THE POINT OF BEGINNING.

PARCEL CC:

BEGINNING AT A POINT ON THE CENTERLINE OF WATERMAN AVENUE, DISTANT THEREON 646.58 FEET NORTH FROM THE INTERSECTION OF THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12 WITH THE SAID CENTERLINE OF WATERMAN AVENUE; THENCE SOUTH 83° 01" WEST, 150.65 FEET; THENCE NORTH 59° 13' 48" EAST, 61.72 FEET; THENCE NORTH 0° 50' 42" EAST, 636.60 FEET; THENCE NORTH 89° 33' 06" EAST, 13 FEET; THENCE NORTH 0° 26' 54" WEST, 38.18 FEET; THENCE SOUTH 89° 33' 06" WEST, 13 FEET; THENCE NORTH 3° 33' or EAST, 430.05 FEET, MORE OR LESS TO A POINT ON THE SOUTH PROPERTY LINE OF PARCEL OF LAND CONVEYED TO JOSEPH G. LAZAR, ET AL, BY DEED RECORDED SEPTEMBER 08, 1959 IN BOOK 4923, PAGE 75, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY; THENCE EAST ALONG SAID PROPERTY LINE TO A POINT ON THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE SOUTH 0° 26' 54" EAST, ALONG SAID CENTERLINE OF WATERMAN AVENUE TO THE POINT OF BEGINNING.

CONTAINING: *258,636 SQUARE FEET OR 5.937 ACRES MORE OR LESS.*

EXHIBIT "B" *ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.*

SUBJECT TO: *COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND RIGHTS-OF-WAY, IF ANY.*

PREPARED UNDER THE DIRECTION OF:

12/27/16

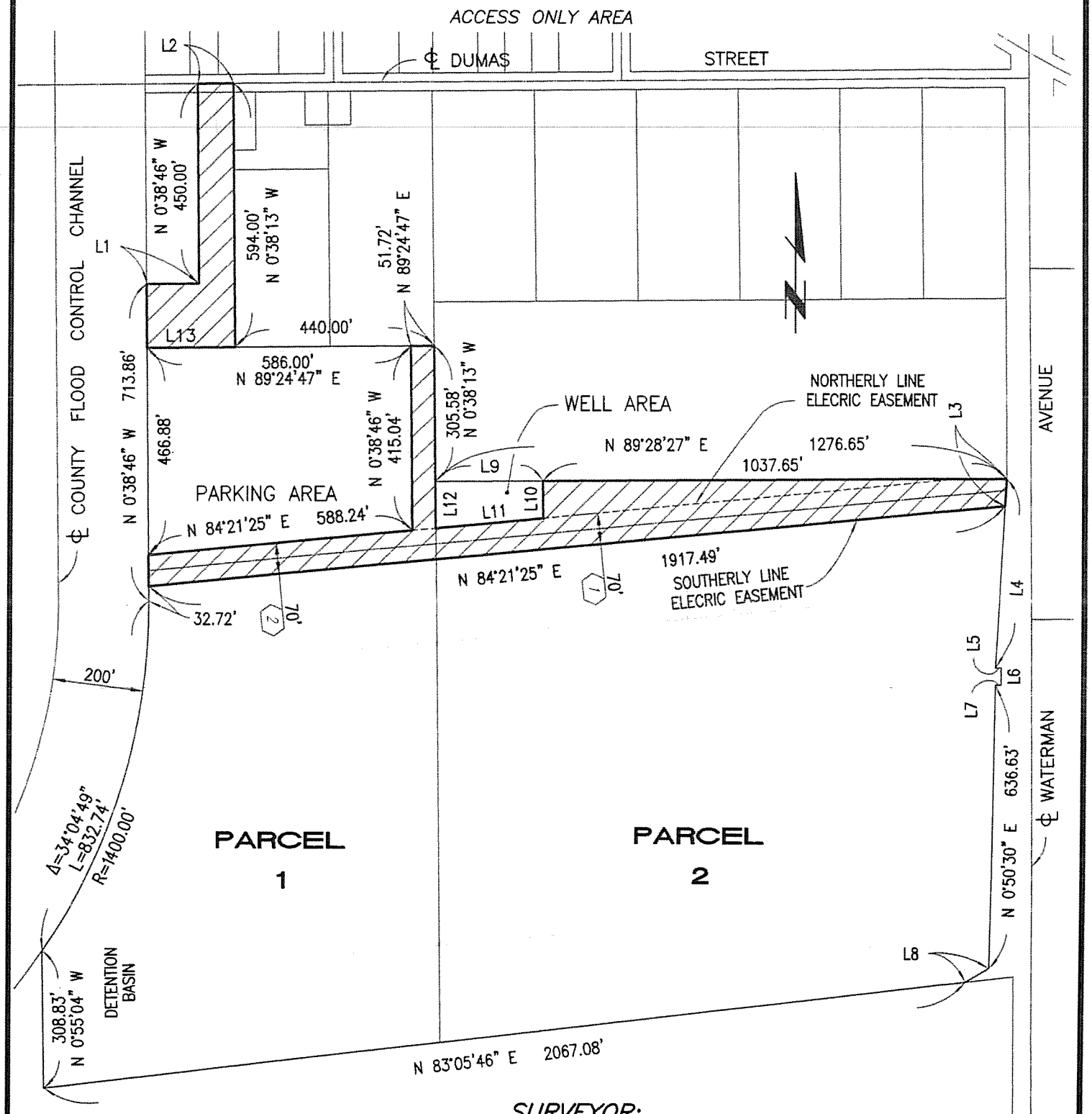
BRIAN L. THIENES
P.L.S. No. 5750
REG. EXP. 12/31/17

DATE

SCALE: 1" = 300'

Exhibit C

SHEET 1 OF 2



SEE SHEET 2 FOR
LINE TEBLE, EASEMENT NOTES, AND LEGEND

PREPARED BY:

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14349 FIRESTONE BOULEVARD
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PH.(714)521-4811 FAX(714)521-4173

SURVEYOR:

PREPARED UNDER THE DIRECTION OF:

12/27/16

BRIAN L. THIENES
P.L.S. NO. 5750
REG. EXP. DEC. 31, 2017

PROFESSIONAL LAND SURVEYOR
BRIAN L. THIENES
NO. 5750
STATE OF CALIFORNIA

Exhibit C

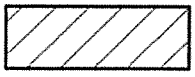
ACCESS ONLY AREA

LINE TABLE		
LINE #	LENGTH	BEARING
L1	117.74'	N 25°23'40" E
L2	80.07'	N 89°24'47" E
L3	61.35'	N 03°11'49" E
L4	424.40'	N 03°11'49" E
L5	13.00'	N 89°32'54" E
L6	38.18'	N 00°27'06" W
L7	13.00'	N 89°32'54" E
L8	61.72'	N 59°18'06" E
L9	239.00'	N 89°28'27" E
L10	83.49'	N 00°38'13" W
L11	239.92'	N 84°21'25" E
L12	104.89'	N 00°38'13" W
L13	197.72'	N 89°24'47" E

(1) *GRANT OF EASEMENT RECORDED FEBRUARY 13, 1957 AS INSTR. NO. 1019 IN BOOK 4155, PAGE 501, O.R.*

(2) *GRANT OF EASEMENT RECORDED MAY 10, 1957 AS INSTR. NO. 334 IN BOOK 4226, PAGE 588, O.R.*

LEGEND:



INDICATES ACCESS ONLY AREA
CONTAINS: 258,636 SQ. FT.
5.932 AC. ±

Last Update: 10/28/16
O:\3400-3499\3412\ESMTS\3412 ACCESS ESMT.dwg

Exhibit D

WELL AREA

LEGAL DESCRIPTION

THAT PORTION OF PARCEL 2, AS DESCRIBED BELOW, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, LYING NORTHERLY OF THE SOUTHERLY LINE OF THE LAND DESCRIBED IN THE EASEMENT DEEDS GRANTED TO CALIFORNIA ELECTRIC POWER COMPANY, RECORDED FEBRUARY 13, 1957 AS INSTRUMENT NO. 1019, IN BOOK 4155, PAGE 501, AND MAY 10, 1957 AS INSTRUMENT NO. 334, IN BOOK 4226, PAGE 588, BOTH OF OFFICIAL RECORDS OF SAID COUNTY.

EXCEPTING THEREFROM THAT PORTION WITHIN SAID PARCEL 2 DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID PARCEL 2; THENCE NORTH 89° 28' 27" EAST , 239.00' ALONG THE NORTH LINE OF SAID PARCEL 2; THENCE AT A RIGHT ANGLE TO SAID NORTH LINE SOUTH 00° 31' 33" EAST, 83.50 FEET TO THE NORTHERLY LINE OF SAID DEEDS TO CALIFORNIA ELECTRIC POWER COMPANY; THENCE SOUTH 84° 21' 25" WEST, 239.75 FEET ALONG SAID SOUTH LINE TO THE WESTERLY LINE OF SAID PARCEL 2; THENCE NORTH 00° 38' 13" WEST, 104.89 FEET ALONG SAID WESTERLY LINE TO POINT OF BEGINNING.

PARCEL 2:

ALL OF LOT 12, BLOCK 54, OF THE FORTY ACRE SURVEY OF THE RANCHO SAN BERNARDINO, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, OFFICIAL RECORDS OF SAID COUNTY; AND ALSO THAT PORTION OF LOT 25, IN SAID BLOCK 54, OF SAID FORTY ACRE SURVEY OF THE SAID RANCHO SAN BERNARDINO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 25; THENCE NORTH ALONG THE EAST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHEAST CORNER OF THE LAND DEEDED TO ERASZMUS C. BIGGS BY DEED DATED JUNE 21, 1865, AND RECORDED IN BOOK "F" OF DEEDS, PAGE 612, RECORDS OF SAID COUNTY; THENCE WEST ALONG THE SOUTH LINE OF THE LAND SO DEEDED, 80 RODS, MORE OR LESS, TO THE WEST LINE OF SAID LOT 25; THENCE SOUTH ALONG THE WEST LINE OF SAID LOT 25, 26 RODS, MORE OR LESS, TO THE SOUTHWEST CORNER OF SAID LOT 25, THENCE EAST ALONG THE SOUTH LINE OF SAID LOT 25, 80 RODS, MORE OR LESS TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION WITHIN THE SOUTH ONE-HALF OF SAID LOT 12.

ALSO EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

PARCEL AA:

BEGINNING ON THE WESTERLY LINE OF WATERMAN AVENUE, 82.5 FEET WIDE, DISTANT ALONG SAID WESTERLY LINE AND ITS SOUTHERLY PROLONGATION, NORTH 2,954 FEET FROM ITS INTERSECTION WITH THE CENTER LINE OF COLTON AVENUE, 82.5 FEET WIDE; THENCE WEST AT RIGHT ANGLES TO SAID WESTERLY LINE OF WATERMAN AVENUE, A DISTANCE OF 570 FEET; THENCE IN A NORTHWESTERLY DIRECTION TO A POINT ON THE WESTERLY LINE OF SAID LOT 12; DISTANT ALONG SAID WESTERLY LINE, NORTH 500 FEET FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE ALONG SAID WESTERLY LINE OF LOT 12, SOUTH 500 FEET TO SAID SOUTHWEST CORNER; THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 12 EAST TO THE SOUTHEAST CORNER OF SAID LOT 12, SAID SOUTHEAST CORNER BEING ON THE WESTERLY LINE OF SAID WATERMAN AVENUE;

Exhibit D

WELL AREA

THENCE ALONG THE EASTERLY LINE OF SAID LOT 12; SAID EASTERLY LINE BEING ALSO SAID WESTERLY LINE OF WATERMAN AVENUE, NORTH TO THE POINT OF BEGINNING.

PARCEL BB:

BEGINNING AT A POINT IN THE CENTERLINE OF WATERMAN AVENUE, AN 82.5 FOOT STREET, DISTANT THEREON 646.58 FEET NORTHERLY OF THE INTERSECTION OF SAID CENTERLINE WITH THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12; THENCE SOUTH 84° 04' 36" WEST, 1326.92 FEET TO A POINT IN THE NORTH LINE OF THAT PROPERTY CONVEYED TO THE STATE OF CALIFORNIA BY DEED RECORDED OCTOBER 17, 1956, IN BOOK 4065, PAGE 513,OFFICIAL RECORDS OF SAN BERNARDINO COUNTY, SAID POINT BEING NORTH 84° 04' 36" EAST, 4.90 FEET FROM A POINT IN THE WEST LINE OF SAID LOT 12 WHICH IS 498.04 FEET NORTHERLY FROM THE SOUTHWEST CORNER OF SAID LOT 12; THENCE SOUTHEASTERLY AND EASTERLY ALONG THE SAID NORTH LINE OF THE STATE OF CALIFORNIA PROPERTY AND ITS EASTERLY PROLONGATION TO THE INTERSECTION THEREOF WITH THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE NORTHERLY ALONG SAID CENTER LINE OF WATERMAN AVENUE, 352.16 FEET TO THE POINT OF BEGINNING.

PARCEL CC:

BEGINNING AT A POINT ON THE CENTERLINE OF WATERMAN AVENUE, DISTANT THEREON 646.58 FEET NORTH FROM THE INTERSECTION OF THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID LOT 12 WITH THE SAID CENTERLINE OF WATERMAN AVENUE; THENCE SOUTH 83° 01" WEST, 150.65 FEET; THENCE NORTH 59° 13' 48" EAST, 61.72 FEET; THENCE NORTH 0° 50' 42" EAST, 636.60 FEET; THENCE NORTH 89° 33' 06" EAST, 13 FEET; THENCE NORTH 0° 26' 54" WEST, 38.18 FEET; THENCE SOUTH 89° 33' 06" WEST, 13 FEET; THENCE NORTH 3° 33' or EAST, 430.05 FEET, MORE OR LESS TO A POINT ON THE SOUTH PROPERTY LINE OF PARCEL OF LAND CONVEYED TO JOSEPH G. LAZAR, ET AL, BY DEED RECORDED SEPTEMBER 08, 1959 IN BOOK 4923, PAGE 75, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY; THENCE EAST ALONG SAID PROPERTY LINE TO A POINT ON THE CENTER LINE OF SAID WATERMAN AVENUE; THENCE SOUTH 0° 26' 54" EAST, ALONG SAID CENTERLINE OF WATERMAN AVENUE TO THE POINT OF BEGINNING.

CONTAINING: *22,504 SQUARE FEET OR 0.517 ACRES MORE OR LESS.*

EXHIBIT "B" *ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.*

SUBJECT TO: *COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS AND RIGHTS-OF-WAY, IF ANY.*

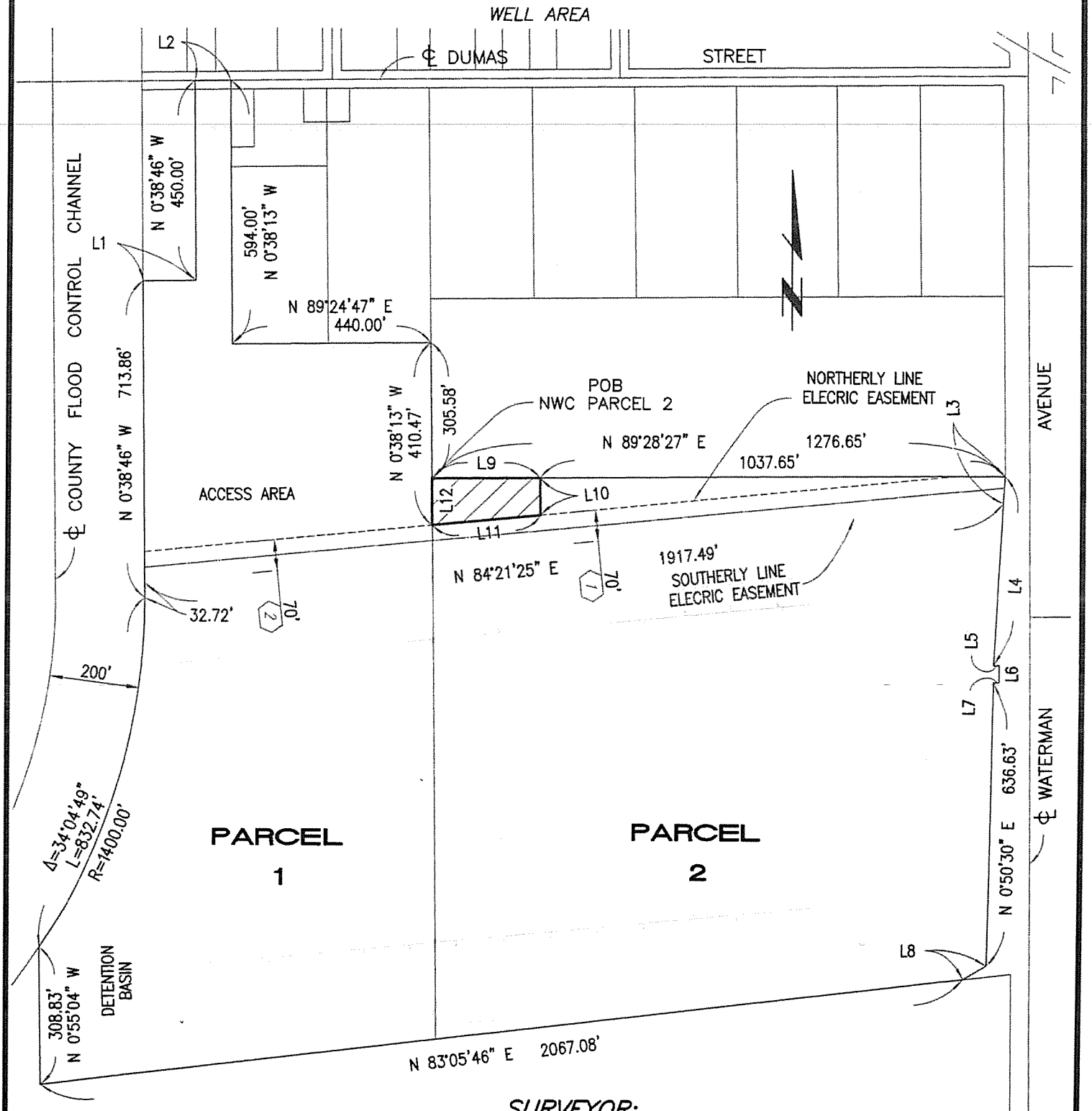
PREPARED UNDER THE DIRECTION OF:

12/27/16

BRIAN L. THIENES *DATE*
P.L.S. No. 5750
REG. EXP. 12/31/17

SCALE: 1" = 300'

Exhibit D



SEE SHEET 2 FOR
LINE TEBLE, EASEMENT NOTES, AND LEGEND

PREPARED BY:

Thienes Engineering, Inc.
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REG. EXP. DEC. 31, 2017

12/27/16
DATE

PROFESSIONAL LAND SURVEYOR
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Exhibit D

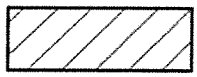
WELL AREA

LINE TABLE		
LINE #	LENGTH	BEARING
L1	117.74'	N 25°23'40" E
L2	80.07'	N 89°24'47" E
L3	61.35'	N 03°11'49" E
L4	424.40'	N 03°11'49" E
L5	13.00'	N 89°32'54" E
L6	38.18'	N 00°27'06" W
L7	13.00'	N 89°32'54" E
L8	61.72'	N 59°18'06" E
L9	239.00'	N 89°28'27" E
L10	83.50'	N 00°31'33" W
L11	239.75'	N 84°21'25" E
L12	104.89'	N 00°38'13" W

(1) *GRANT OF EASEMENT RECORDED FEBRUARY 13, 1957 AS INSTR. NO. 1019 IN BOOK 4155, PAGE 501, O.R.*

(2) *GRANT OF EASEMENT RECORDED MAY 10, 1957 AS INSTR. NO. 334 IN BOOK 4226, PAGE 588, O.R.*

LEGEND:



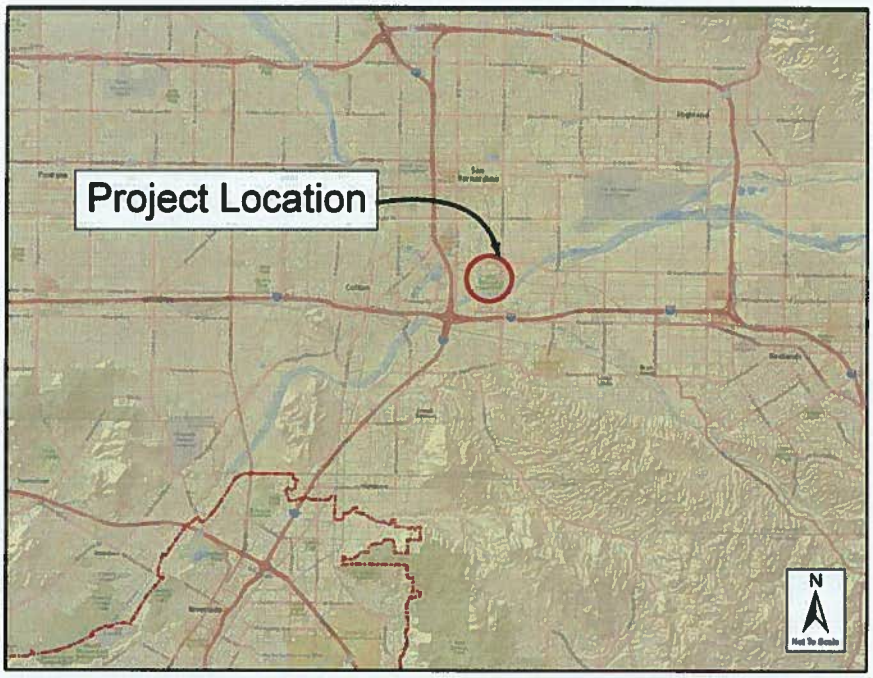
INDICATES WELL AREA
CONTAINS: 22,504 SQ. FT.
0.517 AC. ±

Last Update: 10/25/16
O:\3400-3499\3412\ESMTS\3412 WELL AREA.dwg

Exhibit E

Warren 4R Well & Rice-Thorne Pipeline Replacement

(Final Planning and Water Resources Report)



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QUICK FACTS	
Ward:	N/A (Outside City Limits – City of San Bernardino)
Neighborhood:	N/A
Improvement Type:	Replacement of Warren 4 Well and Relocation of the Rice-Thorne Pipeline
Preliminary Cost Estimate:	Well & Waterline Replacement Cost: $3,600,000 Allocated Contingency: $500,000
Priority:	High
Work Order # :	WO# 1709464 (Warren 4R Well) WO# 1709465 (Rice-Thorne Pipeline)
Account # :	6230000-470803xx (Well Construction) 6230000-470735xx (Pipeline Relocation)
CEQA Action:	To be covered under the Developer's CEQA study

Background

The City of Riverside Public Utilities/Water Department (RPU) is proposing to abandon and replace the existing Warren 4 well and approximately 1,250 LF of the existing Rice-Thorne pipeline in the Warren Tract within the City of San Bernardino. A new well (Warren 4R) and re-aligned section of 24-inch Rice-Thorne pipeline will be constructed by the developer, Hillwood Enterprises, L.P. (Hillwood), to facilitate development of the site for a warehouse. The Warren 4 well is part of the Waterman System which produces potable water out of the Bunker Hill Basin. The existing 18-inch/30-inch diameter Rice-Thorne irrigation pipeline conveys non-potable groundwater from the Bunker Hill Basin to the Riverside Canal.

The existing Warren 4 well is located approximately 255 feet west of Waterman Avenue and was originally drilled by the City of Riverside in 1948. It was drilled to a depth of 1,102 feet below ground surface (bgs) and screened from 1,008 to 1,102 feet bgs. Warren 4 is a naturally developed 20-inch diameter well and discharges to the Waterman Transmission Main (TM). The well provides high water quality to the Waterman TM.

RPU is planning to locate the Warren 4R replacement well approximately 1,200 feet northwest of the existing well and approximately 840 feet southeast of the existing Thorne 12 well.

The existing Rice-Thorne pipeline conveys non-potable groundwater from the Bunker Hill Basin to the Riverside Canal via gravity flow. It is also used to convey blow-off water from Warren 1 well and serve as a drain for the Waterman TM when needed. The existing 18-inch/30-inch portion of the Rice-Thorne pipeline was installed in 1940. The ~1,250 LF portion to be relocated runs west by northwest across the property and is located within the proposed warehouse footprint and thus will need to be relocated. The replacement pipeline will consist of approximately 1,700 linear feet of 24-inch pipeline running along the southern and western property boundary and will lie outside of the footprint of the proposed warehouse.

The Warren and Thorne Tracts (site) are located in the City of San Bernardino, just north of Interstate 10 and west of Waterman Avenue. The Thorne Tract was originally acquired by the Riverside Water Company in 1887 and was used to supplement natural stream flow by developing artesian groundwater wells. The City of Riverside purchased the adjacent 52 acre Warren Tract from the Sylvia Warren estate in 1930. The site is currently leased to J.G. Golf Enterprise, who operates the San Bernardino Public Golf Course. Hillwood's proposed 1,064,880 square foot warehouse development will occupy most of the site and is scheduled for construction completion by the summer of 2018.

Project Location

The project is generally located within the City of San Bernardino northeast of the intersection of Interstate (I)-215 and I-10 Freeways, immediately north of the Santa Ana River. As shown in Figure 1, Warren 4R is proposed to be located approximately 1,200 feet northwest of the existing Warren 4 within the same City-owned property, approximately 2,000 feet southwest of the intersection of South Waterman Avenue and East Orange Show Road. The approximate GPS coordinates of the proposed Warren 4R well are: 34° 4'30.27" N longitude,117°16'59.41" W latitude (34.075075°,-117.283169°); Zone VI (Easting: 6248783.052, Northing: 2336377.030).

The proposed well site is within a paved entranceway to the San Bernardino Golf Course driving range parking lot. This site was appropriately located so as to not impact construction of the future warehouse and provides adequate separation from Thorne 12 to reduce the risk of groundwater pumping interference or influence.

Geologic Setting

The site is located upstream of the San Jacinto Fault. The San Jacinto Fault Zone is the most seismically active fault zone in Southern California and stretches from Imperial Valley to the Cajon Pass. The San Jacinto Fault zone does not have a continuous trace but rather consists of multiple sub-parallel fault strands. Numerous fault splays have been identified within the San Jacinto Fault Zone, some within the area of the Warren and Thorne Tract (Catchings et al, 2008 Open-File Report 2008-1197).

Geothermal temperatures commonly occur within certain areas of the Bunker Hill Basin with this site being one of the locations. The Paine Hot well, located east of the proposed replacement well and north of Warren 4 has continued to produce warm water since it was first drilled in the early 1900s. Historically, the Warren wells have also produced warm water - to the extent that a cooling tower was constructed and used for a time. Based on well log information and historical records, the geothermal groundwater seems to occur between 550 to 900 feet below ground surface. Currently, geothermal groundwater does not cause any problems at the existing Warren 1, Warren 4, or Thorne 12 wells.

Assets to Protect in Place

The existing Warren 1 is an active potable well located on San Bernardino County Flood Control (Flood Control) property, between the southern property boundary and the Santa Ana River. Warren 1 well discharges to the Waterman Transmission Main (TM) and blows-off to the Rice-Thorne pipeline. According to Water Operations staff, electricity to Warren 1 is provided by an electrical connection fed from the existing Warren 2 well. A new electrical service to Warren 1 must be established prior to abandonment of Warren 2. Warren 1 shall be protected in place and must remain active throughout the construction process.

Thorne 12 is an active potable well located within the northwest section of the property and provides high quality groundwater to the Waterman TM. Thorne 12 shall be protected in place and must remain active throughout the construction process. Thorne 12 currently discharges into the 24-inch Dumas Street pipeline via a 10-inch steel (STL) waterline. It is proposed to replace this 10-inch STL waterline with a new 24-inch waterline which will serve as a combined discharge pipeline for both the Thorne 12 and replacement Warren 4R wells. An existing blow-off pipeline runs south approximately 240 feet from Thorne 12 and heads west 190 feet along the property line and across the levee, discharging into the Flood Control Twin Creek Channel as shown in Figure 2.

Thorne 3 is an inactive irrigation well that is used for monitoring purposes. Thorne 3 is located along the Flood Control levee, outside of the southwest property corner. Thorne 3 shall be protected in place and continue to be used for monitoring purposes.

The existing 36-inch RCP segment of the Waterman Transmission Main was installed in 1946 and is a major water supply line to the City of Riverside. This transmission main must be kept in operation throughout the developer's construction. This waterline runs along S. Waterman Avenue and partially onto RPU property at the existing San Bernardino Golf Course. The developer will be responsible to protect this pipeline in place during construction work and minimize earthmoving equipment loading above the pipe. If the developer will be over-excavating above the pipeline, RPU will need to be notified and confirmatory pot-holing shall be performed by the developer to verify pipeline depth. RPU inspectors shall be on site for any potholing and excavation activities occurring over the pipeline.

Hydraulic Analysis

The estimated production of Warren 4R is 2,500 gallons per minute (GPM), which requires either a 14-inch or 16-inch discharge pipeline (see Table 1 below). Installation of a 16-inch diameter pipeline is proposed as this is a commonly available standard pipe size.

Table 1 - Velocity Analysis at 2,500 GPM

Pipe Diameter (in)	Velocity (ft/sec)
10	10.2
12	7.1
14	5.2
16	4.0
18	3.2

There is an existing 24-inch waterline along Dumas Street with a capacity of 8,460 GPM at a maximum velocity 6 feet per second (FPS). It is proposed to discharge both the existing Thorne 12 well and proposed Warren 4R well at a combined flow rate of 5,000 GPM into the Dumas Street waterline which connects to the Waterman TM.

Table 2 - Velocity Analysis at 5,000 GPM

Pipe Diameter (in)	Velocity (ft/sec)
16	8.0
18	6.3
20	5.1
24	3.5
30	2.3

The Dumas Street 24-inch waterline conveys groundwater pumped from Thorne 12 and Meeks & Daley 59 wells to the Waterman TM. (Meeks & Daley 59 well is a backup supply that would only pump into RPU's system in an emergency situation). Warren 4R will have an 8-inch well blow-off pipeline that will connect to the existing Thorne 12 blow-off pipeline as shown in Figure 2.

Rice-Thorne Pipeline Replacement

The existing 18-inch portion of the Rice-Thorne pipeline runs west by northwest across the property and is located in the proposed building footprint; and thus will need to be relocated. The replacement pipeline will consist of approximately 1,700 linear feet of 24-inch pipeline running along the southern and western property boundary. The pipeline will need to be designed to maintain a sufficient slope to facilitate a minimum flow of 3,000 gpm under gravity flow. Water Planning estimates a constant minimum slope of 0.07% to provide the minimum required flow rate within a 24-inch pipeline. The estimated cost for the relocation of this segment of pipe is $600,000.

Replacement Well Characteristics

Given the high construction cost and lifespan of groundwater wells, construction material has become an important factor in the construction and development of wells. High strength low alloy (HSLA) and 316L Stainless Steel (316L SS) are the preferred steel materials for well construction due to their high resistance to corrosion and bacterial growth compared to mild steel or copper-bearing steel. HSLA steel typically requires a rehabilitation interval of 5-7 years whereas stainless steel typically has a rehabilitation interval of 7-10 years[1]. Even though 316L SS has a greater initial construction cost, the overall life-cycle cost of a 316L SS well compared to an HSLA well tends to be lower over the course of 75-years due to the 316L SS well requiring less rehabilitation. For these reasons, it's recommended that the Warren 4R well be constructed of 316SS from the upper screened interval to the bottom of the well; to help reduce construction costs, it is recommended that HSLA steel be utilized for the section of well above the upper screened interval.

[1] Well Rehabilitation and Replacement Priority Ranking, Geoscience 2015

The static water level for Warren 4R is estimated to be about 130' and the pumping water level is estimated to be about 200'. The existing Warren 4 well's pumping water level is 230' however this pumping level was not used because it is representative of a deep screen interval and a less efficient well.

The Warren 4R well is anticipated to have relatively good water quality, and to be similar to Thorne 12. Thorne 12 well has always remained just north of the Crafton-Redlands Plume, and has generally been impacted by low concentrations of TCE from the Norton Plume (0.55 – 2.4ppb over last 10 years). Anticipated water quality for Warren 4R is as follows: DBCP <0.01ppb, arsenic 5ppb, hexavalent chromium 1.6ppb, nitrate (N) 3ppm, perchlorate 0.7ppb, TDS 420ppm, TCE 0.7ppb, gross alpha particle activity 9 pCi/L, and uranium 9 pCi/L.

Water Facility Abandonments

The Thorne 5, Thorne 6, Thorne 7, Thorne 8, Thorne 9, Thorne 10, Thorne 11, Warren 2, Warren 3, and Warren 4 wells located on the property will require proper well abandonment. Warren 4 is an active production well that provides high quality groundwater to the Waterman TM, and abandonment of this well must be coordinated with the construction of the proposed replacement Warren 4R well. Thorne 10 and Thorne 11 wells are actively used by the current tenant to irrigate the golf course; abandonment of these two wells will need to be coordinated with the current tenants. Appendix A presents a list of facilities and the necessary actions needed.

A 16-inch pipeline connecting Warren 4 and Warren 3 to the Waterman Pipeline will need to be properly abandoned, in addition to the existing 18- & 30-inch segment of the Rice-Thorne pipeline to be relocated. If the portion of Rice-Thorne pipeline to be abandoned is not removed during grading activities, it should be backfilled with appropriate material to prevent future pipeline collapse. Careful coordination with RPU will need to occur during the pipeline abandonment work to ensure that water is not introduced into the Rice-Thorne pipeline and the Warren 1 well remains active during abandonment work.

All abandonment and demolition work of the aforementioned water wells shall be performed as per State of California regulations and any applicable local regulations. The Developer will need to provide RPU with copies of the well destruction reports upon completion of the well abandonment work.

Well Design Criteria & Proposed Improvements with Basis of Design

The proposed location and preliminary design criteria for Warren 4R is based on the recommendations outlined by Water Resources staff.

Well Depth	Perforation Interval	Static Water Level	Pumping Water Level	Production Target
1,200' bgs	300' – 1,100' bgs, within water bearing zones	130' bgs	200' bgs	2,500 gpm

Based on well log information, it's estimated that the Warren 4R well should be drilled to a depth of 1,200' bgs and completed to a depth of about 1,130' bgs. The screen intervals and well completion depth will be dependent on observations and data collected during the drilling and geophysical process. Based on well completion records, the screen intervals are estimated to occur from about 300-400' bgs, 550-640' bgs, 740-810' bgs, 840-890' bgs, and 1010-1100' bgs. However, a few of these zone estimates may end up producing hot groundwater or may include clay layers, and will need to be adjusted based on collected data.

Final design shall be determined after completion of the pilot borehole, logging of the drill cuttings, review of the geophysical logs/lithologic samples, and isolated aquifer zone testing. Isolated aquifer zone testing subsequent to completion of the pilot boring will be completed to identify specific screening concentrations with depth prior to completing the final well design. Additional design/construction considerations outlined within the North Orange Well Field Evaluation Report (Appendix B)[2] and included by Water Planning and Resources staff that shall be completed are as follows:

1. The Consultant Design Team shall work closely with RPU Water Operations and Engineering staff for review and comment of preliminary design plans at the 30%, 60%, and 90% design levels. It is recommended that prior to design work, the Consultant Design Team provide a technical memorandum outlining the well design and equipment details, and proposed pipeline alignments for RPU review.
2. Installation of ~1,700 LF of 24-inch ML&C waterline to replace the ~1,250 LF of 18-inch RCP Rice-Thorne line to be abandoned. The waterline shall be installed with an adequate slope to facilitate a minimum of 3,000 GPM gravity flow rate and shall connect into the 18-in RCP and 30-in RCP portions of the Rice-Thorne line as presented in Figure 1.
3. The proposed 24-inch waterline shall be designed and constructed for eventual use as a pressurized pipeline, but will be utilized as a gravity flow drain line in the

[2] Appendix B obtained from North Orange Well Field Evaluation, Well Siting, and Non-Potable Water Supply Assessment, GEOSCIENCE, Finalized as of February 11, 2015.

immediate future. The existing 18-inch RCP waterline was originally constructed with a 3,000 GPM design capacity under gravity flow.

4. Installation of a manway and manhole junction structure at the East-West to South-North direction change of the proposed 24-inch waterline as seen in Figure 1.
5. Installation of a 24-inch butterfly valve on the immediate eastern side of the manway and installation of 24-inch butterfly valves at the eastern and western end connections to the existing 18- & 30-inch RCP portions, respectively.
6. Abandonment of existing 18-inch Rice-Thorne line shall be coordinated with Water Operations to ensure water is not introduced during abandonment work.
7. Installation of air/vacuum valves as necessary along new 24-inch waterline to maintain gravity flow and prevent vacuum conditions.
8. Installation of all Warren 4R well related facilities shall meet State of California and County of San Bernardino Department of Public Health requirements on utility separations.
9. Drill well to a depth of 1,200 ft bgs using reverse circulation rotary drilling, two-pass methodology (i.e., 17.5-in. pilot borehole and 32-in. reamed borehole).
10. Construct well with a 20-inch inside diameter (ID) HSLA steel blank casing above the upper screen interval and 316L SS blank casing and louvered well screen for the rest of the well. Allow for accommodation of pressure transducer, sounding tube, gravel tube, and camera tube. Aforementioned appurtenances shall be made of 316L SS.
11. Installation of a dielectric coupling between the HSLA steel blank casing and 316L SS casing.
12. Due to the long-term cost effectiveness of higher grade steel walls, it is recommended that the louvered section of the well be constructed of stainless steel material. It is further recommended that the higher grade, 316L, stainless steel be utilized, as it offers greater resistance to pitting from shock chlorination, longer well life, and reduced rehab and maintenance burden.
13. Installation of a gravel envelope to stabilize formation materials.
14. Installation of 14' x 24' (W x L) prefabricated Roll-Apart Well House.
15. Installation of new switchgear and transformer for electrical service from Southern California Edison (SCE) to Warren 4R. All related electrical wiring shall be made of copper.
16. Installation of a manual transfer switch for use with a portable backup generator.
17. Installation of intrusion alarm, electronic security system, and 8' high security fence around the well building and above ground piping.

18. Provide all necessary SCADA programming and initial SCADA set up. Warren 4R shall be programmed to not blow-off while Thorne 12 blow-off is occurring and vice versa.
19. Conduct zone testing prior to the final reaming pass to collect depth-discrete water samples to help determine perforation intervals in final well design.
20. Provide inspection (by a consultant and RPU staff) on critical phases of well drilling and development, including formation logging, geophysical log observation, and casing installation. In order to ensure that the samples are representative of the formation, samples must be taken from an approved sample collection device and not from the shaker/sand separator assembly.
21. Grade project site to allow for proper drainage away from proposed Warren 4R.
22. Replace existing Thorne 12 well 10-inch STL discharge waterline with ~225 LF of 24-inch ML&C waterline (see Figure 2). The replacement 24-inch waterline shall be used as the common discharge for both Thorne 12 and proposed Warren 4R wells.
23. Installation of approximately 1,200 LF of 16-inch waterline from proposed Warren 4R well to connect to the proposed 24-inch waterline (see Figure 2).
24. Installation of a 16-inch butterfly valve immediately before connection of the 16-inch waterline to the 24-inch waterline, to allow isolation of Warren 4R well discharge waterline from Thorne 12.
25. Installation of approximately 950 LF of 8-inch blow-off piping from proposed Warren 4R to the existing 8-inch STL Thorne 12 well blow-off piping (see Figure 2).
26. Installation of a valve on the new 8-inch Warren 4R blow-off and a new valve on the existing Thorne 12 blow-off pipeline near the point of interconnection. Blow-off water from Warren 4R shall never be allowed to enter the blow-off pipeline of Thorne 12 and vice versa.
27. Installation of one (1) well pump with a 250-HP motor and variable frequency drive (VFD), at a design TDH of 310 feet. Discharge pressure at the interconnection point of the new 24-inch common well discharge line and the existing 24-inch ML&C pipelines is estimated to be 43 psi or 1100 feet HGL at a ground elevation of 1000 feet. Warren 4R pumping suction head is estimated to be approximately 800 ft HGL or 200 ft bgs, as predicted from historical water level data. Anticipated production rate is 2,500 GPM with a column and waterline friction loss of approximately 8 feet.
28. Provide a minimum of 2,500 GPM water production from the new Warren 4R well.
29. Abandonment and demolition existing water facilities as discussed under the Water Facility Abandonment section and as presented in Appendix A. All wells and underground piping not indicated to be protected in place

Warren 4R Site Assessment

A site visit was conducted on September 2, 2016. Photographs of the well site and the surrounding project area are shown in Appendix C. The following is a brief overview of the site assessment:

- The proposed well site is within an asphalt paved entranceway to the San Bernardino Golf Course driving range.
- There are electrical poles and overhead wiring near the well site, but they should not directly impact well construction.
- Construction of well and waterlines may require demolition of existing driving range netting and asphalt pavement.
- There is a large concrete water utility vault north of existing Thorne 12 well that should be avoided during design and construction of replacement 24-inch ML&C waterline to Dumas Street.

Cost Estimate

Presented in Table 3 is the anticipated total cost for the drilling, equipping, piping of Warren 4R and replacement of the portion of Rice-Thorne line. Total Warren 4 well and Rice-Thorne line replacement cost is estimated at $3,600,000. A contingency of $500,000 is allocated for any miscellaneous project expenses. The total project cost is not anticipated to exceed $4,100,000. Based on feedback from the Design Team, analyses of past bids, and recent well driller quotes, this is appropriate for a planning-level cost estimate.

Table 3 – Cost Estimate for Warren 4R & Rice-Thorne Line Replacement

	Item	Qty	Unit	Unit Cost	Cost
1	Drilling of Warren 4R Well	1	LS	$1,400,000	$1,400,000
2	Equipping Warren 4R (pre-fab building, electrical, SCADA, piping, pump unit, etc.)	1	LS	$750,000	$750,000
3	Furnish & Install 24-inch Pipe ($12/in/lf)	225	LF	$288	$64,800
4	Furnish & Install 16-inch Pipe ($13/in/lf)	1,200	LF	$208	$249,600
5	Furnish & Install 8-inch Pipe ($15/in/lf)	950	LF	$120	$114,000
6	Furnish & Install Rice-Thorne Line 24-inch	1,700	LF	$288	$489,600
				Construction Subtotal (rounded):	$3,100,000
7	Engineering[1]				$500,000
				Anticipated Total Project Cost:	$3,600,000
8	Contingency[2]				$500,000
				Total Project Cost Not to Exceed:	$4,100,000

Notes:

1. *Includes Design, Construction Management, Inspection, & Hydrogeologist services*
2. *Contingency includes funds for miscellaneous project expenses.*

Note: The standard unit cost for pipe installation including appurtenances, backfill, and paving is $25/diameter-inch/linear foot; however, due to the economy of scale in larger diameter pipe construction and construction within a vacant unpaved lot, a revised unit cost of $12 to $15/diameter-inch/linear foot was used.

Apart from the well drilling and development work, it is not anticipated that any other night-time construction will be required for this project.

Site Access

Existing Warren 1 and Thorne 3 wells are located on Flood Control easements and can be accessed through Flood Control access points. However, Warren 1 access through the Flood Control entry point is rather cumbersome, as it is located beneath the Waterman Avenue Bridge which limits vehicular access, especially for large vehicles such as maintenance trucks and drill rigs. Access through the San Bernardino Golf Course site to Warren 1 will be necessary and needed from the developer. Routine maintenance access to both Warren 1 and Thorne 3 shall also be made available during construction and occupancy in case of complications with Flood Control.

Access to Thorne 12 is located off of Dumas Street and will need to be maintained during construction and occupancy. The proposed Warren 4R well will also require access off of Dumas Street. Occasional site access may be necessary along the Rice-Thorne pipeline easement for pipeline maintenance work. Continuous access and

parking within leased properties for RPU employees to all aforementioned facilities throughout construction and occupancy will be necessary.

Paving and Right of Way Requirements

Warren 4R and associated waterlines will be installed within both paved and unpaved portions of City-owned property or public street right-of-way.

Environmental Impacts

It is recommended that the Developer include this scope of work (on-site utilities relocations, well relocation/abandonments) as part of their CEQA study for their proposed warehouse development. A copy of the filed Notice of Determination will need to be provided to RPU by the Developer.

Community Impacts and Public Outreach

This project will benefit the Riverside community and RPU's water customers by improving water supply reliability.

Impact on Other Projects

It is not anticipated that this project will impact any other RPU or City of Riverside Public Works projects. However, scheduling of water supply line shutdowns will need to be coordinated with Water Operations.

Project Funding

For this project, an agreement will be prepared between RPU and the real estate developer. The developer will fund and complete the design and construction of the proposed utility relocations/abandonments.

Gate 1 Meeting

A Gate 1 Meeting between RPU Water Engineering and Operations staff was held on October 12, 2016. Comments received were reviewed by Water Planning and incorporated in the planning report where appropriate.

Tentative Project Schedule

The preliminary project schedule has been set to allow for project construction to begin in Fiscal Year 2017. Design is anticipated to take approximately 25 weeks and construction is anticipated to take approximately 40 weeks. The project schedule is shown in the attached Appendix E.

FIGURE 1: PROJECT AREA OVERVIEW EXHIBIT

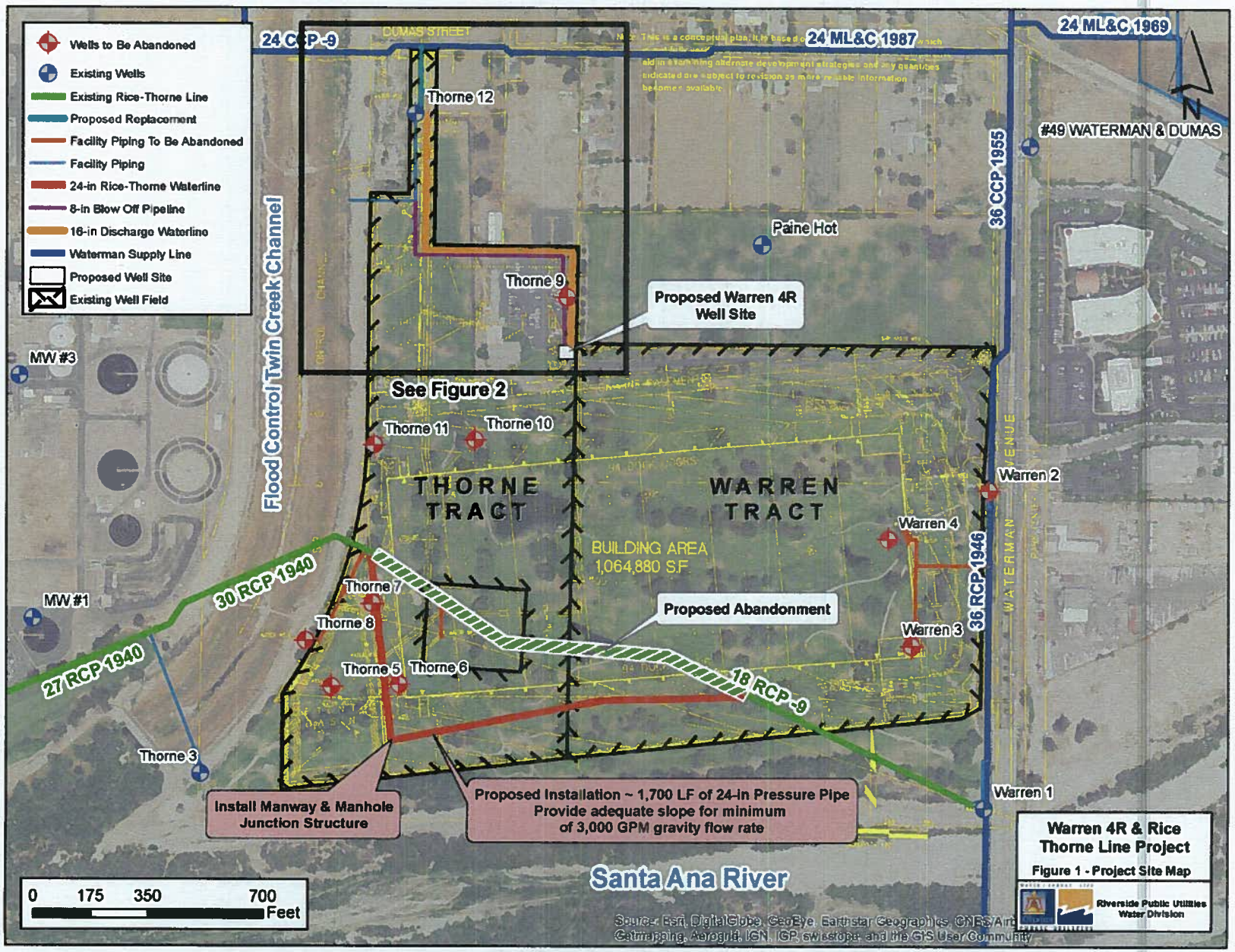
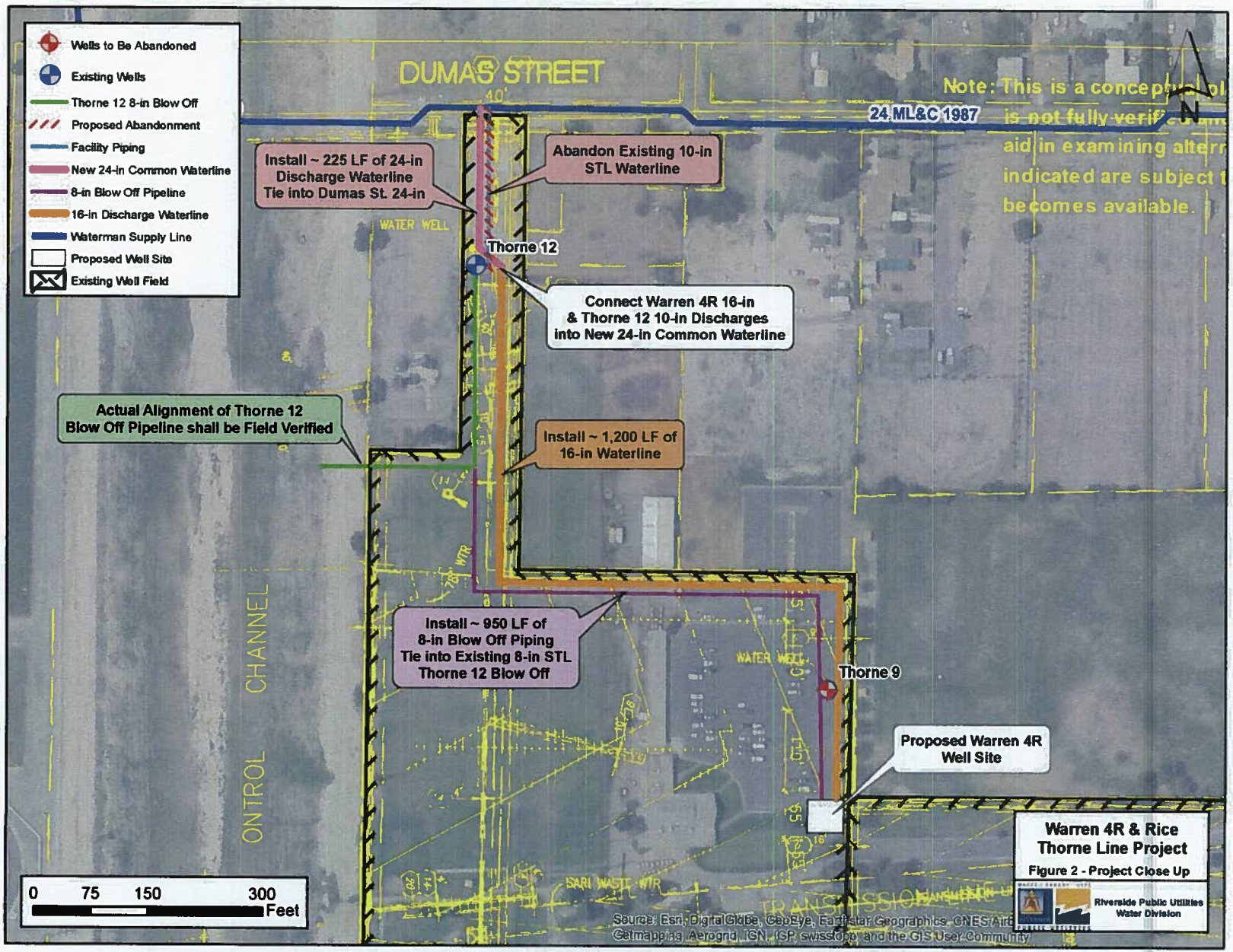


FIGURE 2: PROJECT SITE EXHIBIT



APPENDICES

APPENDIX A – RPU WATER FACILITY ACTION LIST

Facility	Use	Status	Impact	Action
Warren 1	Potable	Active	Indirect impact	Protect in place
Warren 2	Potable	Inactive	Direct impact	To be destroyed
Warren 3	Potable	Inactive	Direct impact	To be destroyed
Warren 4	Potable	Active	Direct impact	To be replaced
Thorn 12	Potable	Active	Direct impact	Protect in place
Thorn 3	Non-potable	Inactive	Indirect impact	Protect in place
Thorn 5	Non-potable	Inactive	Direct impact	To be destroyed
Thorn 6	Non-potable	Inactive	Direct impact	To be destroyed
Thorn 7	Non-potable	Inactive	Direct impact	To be destroyed
Thorn 8	Non-potable	Inactive	Indirect impact	To be destroyed
Thorn 9	Monitoring	Active	Direct impact	To be destroyed
Thorn 10	Non-potable	Active	Direct impact	To be destroyed
Thorn 11	Non-potable	Active	Direct impact	To be destroyed
Thorn 12 pipeline	Supply main	Active	No Impact	Protect in place
Warren 3 & 4 pipeline	Supply main	Active	Direct Impact	To be abandoned
Rice-Thorn Pipeline	Non-potable TM	Active	Direct Impact	To be relocated
Waterman Pipeline	Potable Supply TM	Active	No Impact	Protect in place

2.0 CONCEPTUAL WELL DESIGN

Based on an initial review of the local geohydrology and existing wells constructed in the North Orange area, a conceptual well design was prepared for the proposed potable and non-potable production wells (i.e., Wells A, B, NP1, and NP2). It is anticipated that the new wells will be constructed of 20-inch inside diameter (ID) stainless steel blank casing and louvered well screen with a wall thicknesses of 5/16-inch and an anticipated well screen consisting of 3/32-inch (0.094-inch) horizontal slots. It should be recognized that the recommended diameter and wall thickness of the well casing and screen is for preliminary design purposes only and would be modified based upon review of actual borehole lithologic samples, geophysical logs, and isolated aquifer zone testing results. The conceptual well design is shown on Figure 3 and summarized as follows.

North Orange Well
Conceptual Design of Casing and Screen

Interval [ft bgs]	Borehole Diameter [in.]	Casing Diameter [in.]	Wall Thickness [in.]	Screen Slot Size [in.]	Material Type
+0.5 – 50	48	36 OD	3/8	-	Conductor Casing (ASTM A139 Grade B Steel)
+1 – 120	Annulus	-	-	-	Sanitary Seal (10.3 Sack Sand-Cement Slurry)
+1 – 130	Annulus	3	Sch. 40	-	2 x Gravel Feed Pipes (Stainless Steel)
120 – 123	30	-	-	-	Fine Sand Layer
123 – 490	30	-	-	-	¼ in. x 16 Custom Blend Filter Pack Material
+1 – 198	30	2	Sch. 40	-	Sounding Tube (Stainless Steel)
+1 – 200	30	20 ID	5/16	-	Blank Casing (Stainless Steel)
200 – 450	30	20 ID	5/16	0.094 (3/32 in.)	Ful-Flo Louvered Screen (Stainless Steel)
450 – 470	30	20 ID	5/16	-	Blank Casing w/ Endplate (Stainless Steel)
470 - 490	30	-	-	-	Filter Pack Beneath Casing

The proposed wells would be drilled using reverse circulation rotary drilling, two-pass methodology (i.e., 17.5-in. pilot borehole and 30-in. reamed borehole), and installation of a gravel envelope to stabilize formation materials.

2.1 Well Construction Materials

The serviceable life expectancy of a well is greatly affected by the material from which it is constructed. Generally speaking, a well constructed of mild steel will have a 30 year service life and will require rehabilitation at least once every 3 years. Use of copper-bearing and high-strength low-alloy (HSLA) steel materials for well construction will result in service lives of 30 to 60 years and will require rehabilitation every 5 to 7 years. Wells constructed of 304L stainless steel will have service life expectancies of approximately 75 years or more and will require rehabilitation every 10 years. Wells constructed of 316L stainless steel will have service life expectancies of 90 years or more with a rehabilitation interval of greater than 10 years. For example, a copper-bearing steel well may require as many as eight rehabilitation events over its 45-year life while a stainless steel well may require as few as four over the same 45 year period. Over a 90-year evaluation period, one 316L stainless steel well would require approximately 8 rehabilitation events. Over that same 90-year evaluation period, a copper-bearing steel well would have to be replaced once and would require approximately 17 rehabilitation events. Consequently, wells constructed from more corrosion resistant materials exhibit greater reliability and experience longer periods of uninterrupted service.

Initial construction costs are lower for lower grade steel materials, however, over time, costs shift in favor of the more corrosion resistant materials (i.e., stainless steel). This is due to the additional costs required for more frequent well replacements and rehabilitation events for wells constructed of less corrosion resistant materials. Due to a history of declining yield in the area due to clogging of well screens, and the long-term cost effectiveness of higher grade steel wells, it is recommended that wells in this area be constructed of stainless steel materials. It is further recommended that higher grade 316L stainless steel be utilized as it offers greater resistance to pitting from shock chlorination, and offers greater well life.

2.2 Engineer's Estimates of Construction

Engineer's estimates of contractor costs for drilling, construction, development, and testing of a well as designed herein is provided in Table 1 and summarized below. Cost estimates for both 304L and 316L stainless steel well materials are included. These estimated costs are based on recent winning bids for similar construction projects in the Southern California area. It should be noted that these engineer's estimates may require revision should significant time (i.e., approximately 6 to 12 months) pass between the date of this report and initiation of the bidding process.

APPENDIX C - SITE PHOTOS

Photo 1 – Looking southeast at proposed Warren 4R well site towards Waterman Avenue.

Photo 2 – Looking northeast at existing Thorne 9 well towards Dumas Street.

Photo 3 – Looking west along property line towards Flood Control Twin Creek channel.

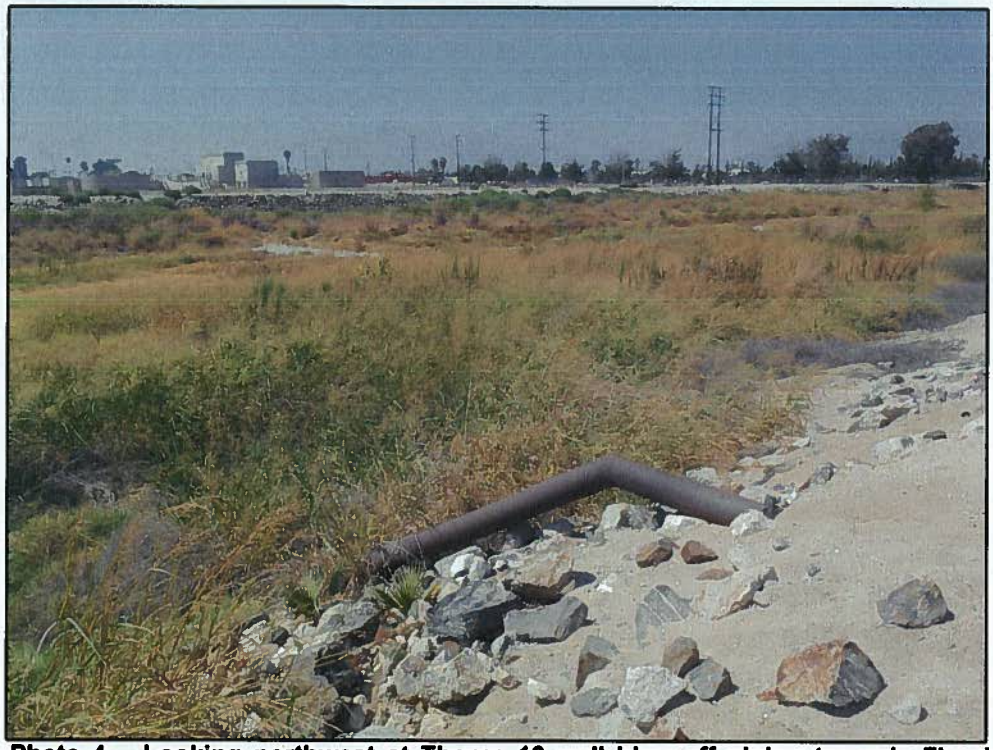


Photo 4 – Looking northwest at Thorne 12 well blow-off piping towards Flood Control Twin Creek channel and W Orange Show Road.

Photo 5 – Looking south at existing Thorne 12 well site towards Santa Ana River.

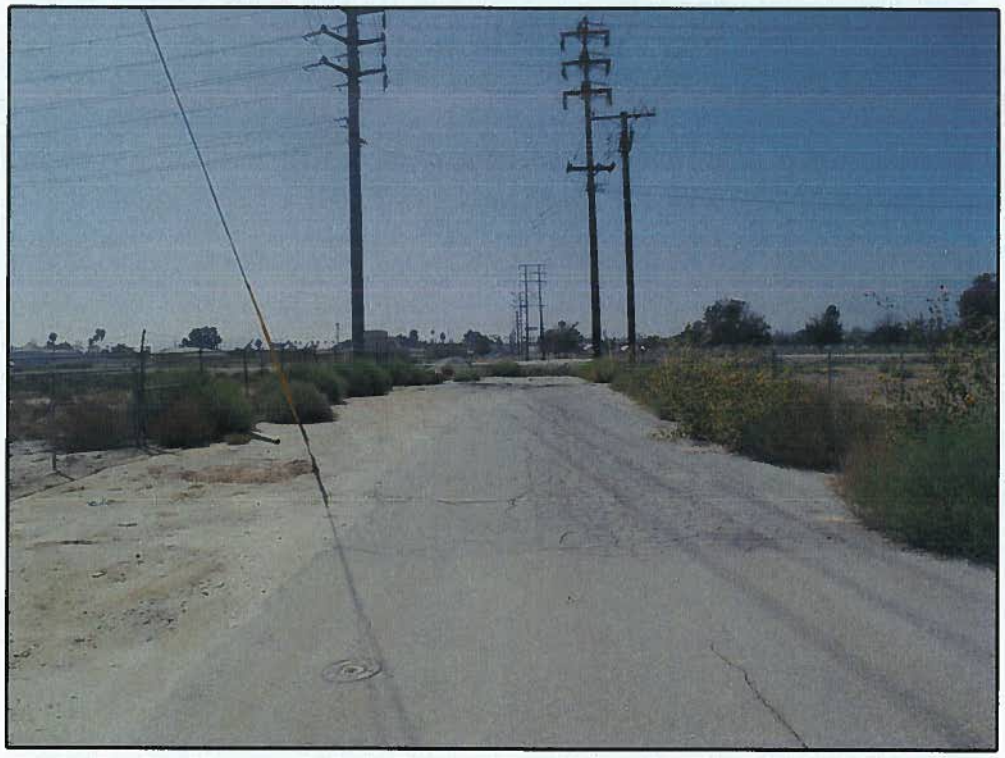


Photo 6 – Looking west along Dumas Street towards Flood Control Twin Creek channel.

APPENDIX D - GATE 1 SIGN-IN SHEET

Gate Sign-Off Sheet

Gate 1 Meeting: Planning - Warren 4R & Rice-Thorne Line **10/12/2016**

Team Function	Name	Signature	Comments	Date
Design Prinicipal Engineer	Oscar Khoury			10/12/16
Planning Senior Engineer	Blake Yamamoto			10-12-16
Design Prinicipal Engineer	John Farley			
Contract Admin. Principal Engineer	Eric Escobar			
Water Resources Engineering Manager	Arshad Syed			
Water Resources Interim Principal Engineer	Michael Plinski			
Water Superintendent Field Maintenance	Rick Small			
Water Quality Manager	David Garcia			
Chief Water Operator	Cliff Bellinghausen			
Water Resources Analyst	Greg Herzog			
Water Superintendent Field Construction	Andy Lindsay			
Real-Estate Assets	Irene Martinez	N/A	Project to occur within City-owned property	

APPENDIX E - PROJECT SCHEDULE

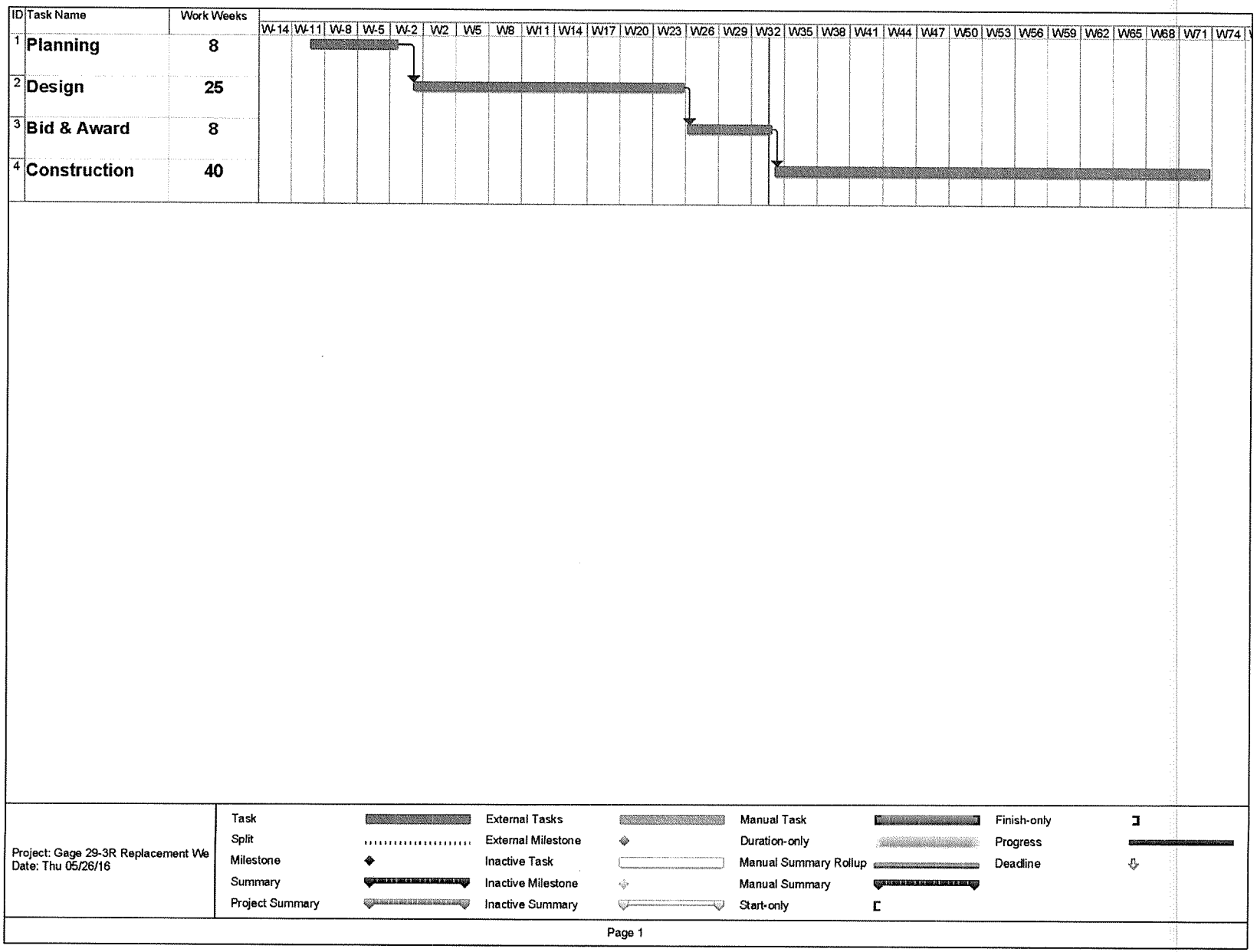


EXHIBIT F

INSURANCE REQUIREMENTS

Each contractor performing any portion of the Well Relocation Work shall secure and maintain, at its own expense, and with companies with a Best rating of no less than A and a Financial Rating of at least VII, the following minimum insurance coverages:

A. Workers' compensation insurance (statutory limits in accordance with the laws of the state in which the Well Relocation Work shall be performed) and employer's liability insurance with limits not less than:

(i) $1,000,000 bodily injury by accident (each accident);
(ii) $1,000,000 bodily injury by disease (policy limit); and
(iii) $1,000,000 bodily injury by disease (each employee).

B. Business automobile liability insurance, including liability arising out of "any auto" or all owned, non-owned, leased and hired automobiles, trucks, trailers and semi-trailers with limits of not less than $1,000,000 each accident.

C. Commercial general liability insurance, written on an occurrence basis only (a "modified occurrence" or "claims made" policy is not acceptable), providing coverage for bodily injury, property damage, personal and advertising injury and contractual liability, for premises-operations (including, but not limited to, explosion, collapse and underground coverage) and for products-completed operations, with limits not less than:

(i) $1,000,000 bodily injury and property damage per occurrence limit,
(ii) $2,000,000 annual general aggregate limit,
(iii) $1,000,000 personal injury and advertising injury limit, and
(iv) $2,000,000 annual products-completed operations aggregate limit.

Such commercial general liability policy shall name, by endorsement, the City and its officers, agents and employees as additional insureds, which endorsement shall state that it includes completed operations coverage. It is further agreed and the endorsement shall provide that such insurance afforded by this policy for the benefit of the additional insureds shown shall be primary insurance but only as respects any claims, loss or liability arising out of the operations of the named insureds, and any insurance maintained by the additional insureds shall be non-contributing.