

City of San Diego

CONTRACTOR'S NAME: KTA Construction, Inc.
ADDRESS: 821 Tavern Rd., Alpine, CA 91901
TELEPHONE NO.: 619-562-9464 FAX NO.: 619-562-1685
CITY CONTACT: Rosa Riego, Contract Specialist, Email: RRiego@sandiego.gov
Phone No. (619) 533-3426, Fax No. (619) 533-3633
R. Martin / A. Rekani / egz

BIDDING DOCUMENTS



FOR

ORIGINAL

Sewer and AC Water Group 837

BID NO.: K-17-1510-DBB-3
SAP NO. (WBS/IO/CC): B-13214, B-15071
CLIENT DEPARTMENT: 2011, 2013
COUNCIL DISTRICT: 4
PROJECT TYPE: JA.KA

THIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:

- PHASED-FUNDING
- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.
- PREVAILING WAGE RATES: STATE FEDERAL
- APPRENTICESHIP

BID DUE DATE:

2:00 PM

FEBRUARY 2, 2017

CITY OF SAN DIEGO

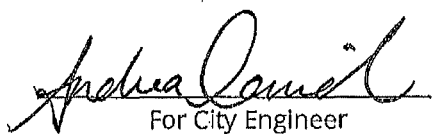
PUBLIC WORKS CONTRACTS

1010 SECOND AVENUE, 14th FLOOR, MS 614C

SAN DIEGO, CA 92101

ENGINEER OF WORK

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:


For City Engineer

12/19/2016
Date

Seal



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NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **Sewer and AC Water Group 837**. For additional information refer to Attachment A.
2. **FULL AND OPEN COMPETITION:** This contract is open to full competition and may be bid on by Contractors who are on the City's current Prequalified Contractors' List. For information regarding the Contractors Prequalified list visit the City's website: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$3,620,000**.
4. **BID DUE DATE AND TIME ARE: FEBRUARY 2, 2017, at 2:00 PM.**
5. **PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D.
6. **LICENSE REQUIREMENT:** The City has determined that the following licensing classification(s) are required for this contract: Class A or Class C34
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract.
 - 7.1. The City has incorporated **mandatory** SLBE-ELBE subcontractor participation percentages to enhance competition and maximize subcontracting opportunities. For the purpose of achieving the mandatory subcontractor participation percentages, a recommended breakdown of the SLBE and ELBE subcontractor participation percentages based upon certified SLBE and ELBE firms has also been provided to achieve the mandatory subcontractor participation percentages:

1. SLBE participation	7.1%
2. ELBE participation	15.2%
3. Total mandatory participation	22.3%
 - 7.2. The Bid may be declared non-responsive if the Bidder fails the following mandatory conditions:
 - 7.2.1. Include SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; **OR**
 - 7.2.2. Submit Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within **3 Working Days** of the Bid opening if the overall mandatory participation percentage is not met.

8. PRE-BID MEETING:

- 8.1.** Prospective Bidders are **encouraged** to attend the Pre-Bid Meeting. The purpose of the meeting is to discuss the scope of the Project, submittal requirements, the pre-qualification process and any Equal Opportunity Contracting Program requirements and reporting procedures. To request a sign language or oral interpreter for this visit, call the Public Works Contracts Division at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. The Pre-Bid meeting is scheduled as follows:

Date: **JANUARY 18, 2017**
Time: **10:00 AM**
Location: **1010 Second Avenue, Suite 1400 (Large Conf. Rm.)**
 San Diego, CA 92101

Attendance at the Pre-Submittal Meeting will be evidenced by the Bidder's representative's signature on the attendance roster. It is the responsibility of the Bidder's representative to complete and sign the attendance roster.

9. AWARD PROCESS:

- 9.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions of Award as stated within these documents and within the Notice of Intent to Award.
- 9.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening. The City will then award the Contract within approximately 14 days of receipt of properly signed Contract, bonds, and insurance documents.
- 9.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form by the City Attorney's Office.
- 9.4.** The low Bid will be determined by Base Bid plus all Alternates.
- 9.5.** Once the low bid has been determined, the City may, at its sole discretion, award the contract for the for the Base bid plus one or more alternates.

10. SUBMISSION OF QUESTIONS:

- 10.1.** The Director (or Designee) of the Public Works Department is responsible for opening, examining, and evaluating the competitive Bids submitted to the City for the acquisition, construction and completion of any public improvement except when otherwise set forth in these documents. All questions related to this solicitation shall be submitted to:

Public Works Contracts
1010 Second Avenue, 14th Floor
San Diego, California, 92101
Attention: Rosa Riego

OR:

RRiego@sandiego.gov

- 10.2.** Questions received less than 14 days prior to the date for opening of Bids may not be considered.
 - 10.3.** Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
 - 10.4.** Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.
- 11. PHASED FUNDING:** For Phased Funding Conditions, see Attachment B.
- 12. ADDITIVE/DEDUCTIVE ALTERNATES:**
- 12.1.** The additive/deductive alternates have been established to allow the City to compare the cost of specific portions of the Work with the Project's budget and enable the City to make a decision whether to incorporate these portions prior to award. The award will be established as described in the Bid. The City reserves the right to award the Contract for the Base Bid only or for the Base Bid plus one or more Alternates.
 - 12.2.** For water pipeline projects, the Plans typically show all cut and plug and connection work to be performed by City Forces. However, Bidders shall refer to Bidding Documents to see if all or part of this work will be performed by the Contractor.

INSTRUCTIONS TO BIDDERS

1. PREQUALIFICATION OF CONTRACTORS:

- 1.1. Contractors submitting a Bid must be pre-qualified for the total amount proposed, including all alternate items, prior to the date of submittal. Bids from contractors who have not been pre-qualified as applicable and Bids that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award. Complete information and links to the on-line prequalification application are available at:

<http://www.sandiego.gov/cip/bidopps/prequalification.shtml>

- 1.2. The completed application must be submitted online no later than 2 weeks prior to the bid opening. For additional information or the answer to questions about the prequalification program, contact David Stucky at 619-533-3474 or dstucky@sandiego.gov.
- 1.3. Due to the City's fiduciary requirement to safeguard vendor data, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on [PlanetBids™](#).

2. ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS: Bids will be received in electronic format (eBids) EXCLUSIVELY at the City of San Diego's electronic bidding (eBidding) site, at: <http://www.sandiego.gov/cip/bidopps/index.shtml> and are due by the date, and time shown on the cover of this solicitation.

- 2.1. BIDDERS MUST BE PRE-REGISTERED with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic bid.
- 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
- 2.3. The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.

- 2.4.** BIDS REMAIN SEALED UNTIL BID DEADLINE. eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter which has until the "Bid Due Date and Time" to change, rescind or retrieve its proposal should it desire to do so.
- 2.5.** BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME. Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, EOCP compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.
- 2.6.** RECAPITULATION OF THE WORK. Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.
- 2.7.** BIDS MAY BE WITHDRAWN by the Bidder only up to the bid due date and time.
- 2.7.1.** Important Note: Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.
- 2.8.** ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE. : To request a copy of this solicitation in an alternative format, contact the Public Works Contract Specialist listed on the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

3.7 ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT

- 3.1.** The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.
- 3.2.** By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.
- 3.3.** The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.
- 3.4.** The Bidder agrees to the construction of the project as described in Attachment "A-Scope of Work" for the City of San Diego, in accordance with the requirements set forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days (90 days for federally funded contracts and contracts valued at \$500,000 or less) from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.

4. BIDS ARE PUBLIC RECORDS: Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

5. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:

- 5.1.** **Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:

<http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml>.

- 5.2.** The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.
- 6. JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receiving the Contract forms. See 2-1.1.2, "Joint Venture Contractors" in The WHITEBOOK for details.
- 7. PREVAILING WAGE RATES WILL APPLY:** Refer to Attachment D.
- 8. SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract. Refer to Attachment E.
- 9. INSURANCE REQUIREMENTS:**
- 9.1.** All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
- 9.2.** Refer to sections 7-3, "LIABILITY INSURANCE", and 7-4, "WORKERS' COMPENSATION INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.
- 10. REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") http://www.greenbookspecs.org/	2015	PWPI070116-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/publicworks/edocref/greenbook	2015	PWPI070116-02
City of San Diego Standard Drawings* https://www.sandiego.gov/publicworks/edocref/standarddraw	2016	PWPI070116-03
Citywide Computer Aided Design and Drafting (CADD) Standards https://www.sandiego.gov/publicworks/edocref/drawings	2016	PWPI092816-04

Title	Edition	Document Number
California Department of Transportation (CALTRANS) Standard Specifications – http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-05
CALTRANS Standard Plans http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-06
California Manual on Uniform Traffic Control Devices Revision 1 (CA MUTCD Rev 1) - http://www.dot.ca.gov/trafficops/camutcd/	2014	PWPI092816-07
<p>NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/publicworks/edocref/index.shtml</p>		

- 11. CITY'S RESPONSES AND ADDENDA:** The City, at its discretion, may respond to any or all questions submitted in writing via the City's eBidding web site in the **form of an addendum**. No other responses to questions, oral or written shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addenda are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda at the time of bid submission.
- 12. CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Notice Inviting Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Notice Inviting Bids shall be the sole responsibility of each bidder. The Notice Inviting Bids creates or imposes no obligation upon the City to enter a contract.
- 13. CONTRACT PRICING:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth herein. The Bidder agrees to perform construction services for the City of San Diego in accordance with these contract documents for the prices listed below. The Bidder further agrees to guarantee the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee may be extended, by mutual consent of the parties, by the number of days required for the City to obtain all items necessary to fulfill all contractual conditions.
- 14. SUBCONTRACTOR INFORMATION:**
- 14.1. LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the **NAME** and **ADDRESS** of each Subcontractor who will perform work, labor, render services or who specially

fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a **CONSTRUCTOR, CONSULTANT** or **SUPPLIER**. The Bidder shall further state within the description, the **PORTION** of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3, "Subcontracts", which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

- 14.2. LISTING OF SUPPLIERS.** Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY)** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.
- 14.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES.** For subcontractors or suppliers to be used on additive or deductive alternate items, in addition to the above requirements, bidder shall further note "ALTERNATE" and alternate item number within the description.
- 15. SUBMITTAL OF "OR EQUAL" ITEMS:** See Section 4-1.6, "Trade Names or Equals" in The WHITEBOOK and as amended in the SSP.
- 16. AWARD:**
- 16.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award.
- 16.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.

- 16.3. This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.
17. **SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 2-3, "SUBCONTRACTS" in The GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.
18. **AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <http://www.sandiego.gov/cip/>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Public Works Contracts.
19. **ONLY ONE BID PER CONTRACTOR SHALL BE ACCEPTED:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.
20. **SAN DIEGO BUSINESS TAX CERTIFICATE:** The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, First floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.
21. **BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY) FOR DESIGN-BID-BUILD CONTRACTS:**
- 21.1. For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.
- 21.2. This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.

- 21.3. The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.
- 21.4. At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. Within twenty-four (24) hours after the bid due date and time, the first five (5) apparent low bidders must provide the City with the original bid security.
- 21.5. Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original within twenty-four (24) hours may cause the bid to be rejected and deemed **non-responsive**.

22. **AWARD OF CONTRACT OR REJECTION OF BIDS:**

- 22.1. This contract may be awarded to the lowest responsible and reliable Bidder.
- 22.2. Bidders shall complete ALL eBid forms as required by this solicitation. Incomplete eBids will not be accepted.
- 22.3. The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.
- 22.4. Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.
- 22.5. A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.
- 22.6. The City of San Diego will not discriminate in the award of contracts with regard to race, religion creed, color, national origin, ancestry, physical handicap, marital status, sex or age.
- 22.7. Each Bid package properly signed as required by these specifications shall constitute a firm offer which may be accepted by the City within the time specified herein.
- 22.8. The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

23. BID RESULTS:

- 23.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.
- 23.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

24. THE CONTRACT:

- 24.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.
- 24.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 24.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
- 24.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.

24.5. The award of the Contract is contingent upon the satisfactory completion of the above-mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.

25. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK: The Bidder shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 2-7, and the proposal forms (e.g., Bidding Documents). The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of Work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.

26. CITY STANDARD PROVISIONS: This contract is subject to the following standard provisions. See The WHITEBOOK for details.

26.1. The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.

26.2. The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.

26.3. The City of San Diego Municipal Code §22.3004 for Contractor Standards.

26.4. The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.

26.5. Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.

26.6. The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).

26.7. The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

27. PRE-AWARD ACTIVITIES:

- 27.1.** The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified in the herein and in the Notice of Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive**.
- 27.2.** The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

KTA Construction, Inc., a corporation, as principal, and
The Guarantee Company of North America USA, a corporation authorized to do
business in the State of California, as Surety, hereby obligate themselves, their successors and
assigns, jointly and severally, to The City of San Diego a municipal corporation in the sum of
Two Million Eight Hundred Seventy Thousand Nine Hundred One and Zero Cents
(\$2,870,901.00) for the faithful performance of the annexed contract, and in the sum of Two
Million Eight Hundred Seventy Thousand Nine Hundred One and Zero Cents
(\$2,870,901.00) for the benefit of laborers and materialmen designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract with the City of San Diego,
California, then the obligation herein with respect to a faithful performance shall be void;
otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials
for or performing labor in the execution of this contract, and shall pay all amounts due under the
California Unemployment Insurance Act then the obligation herein with respect to laborers and
materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit
of all persons, firms and corporations entitled to file claims under the provisions of Article 2.
Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil
Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or
referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby
waives notice of same.

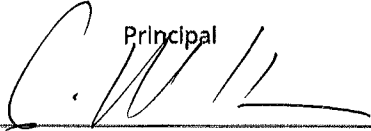
The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of
this bond.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

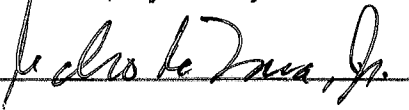
Dated February 23, 2017

Approved as to Form

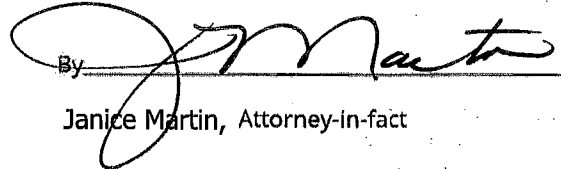
KTA Construction, Inc.


By  Principal

Paul M. Henderson
Printed Name of Person Signing for Principal

Mara W. Elliott, City Attorney
By 
Deputy City Attorney

The Guarantee Company of North America USA
Surety

By 
Janice Martin, Attorney-in-fact

Approved:
By 
Stephen Samara
Principal Contract Specialist
Public Works Department

1800 Sutter Street, Suite 880
Local Address of Surety

Concord, CA 94520
Local Address (City, State) of Surety

(818) 936-2845
Local Telephone No. of Surety

Premium \$ 24,596.00 *

Bond No. 12109262

*Premium is for contract term and subject to adjustment based on final contract price.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA

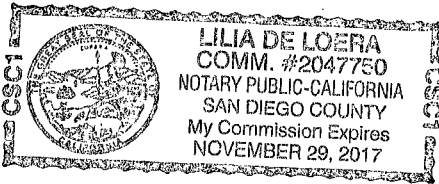
County of San Diego

On FEB 23 2017 before me, Lilia De Loera, Notary Public,
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Janice Martin

Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(ies), and that by ~~his~~/her/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



Place Notary Seal Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature

Signature of Notary Public Lilia De Loera

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

Signer is Representing: _____

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

Signer is Representing: _____



**THE
GUARANTEE™**

The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Lawrence F. McMahon, Maria Vhanneza Guise, Sarah Myers, Charlotte Aquino, James D. Castle, Jennifer L. Clampert, Janice Martin
Alliant Insurance Services, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon **THE GUARANTEE COMPANY OF NORTH AMERICA USA** as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of **THE GUARANTEE COMPANY OF NORTH AMERICA USA** at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner – Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, **THE GUARANTEE COMPANY OF NORTH AMERICA USA** has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 23rd day of February, 2012.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

Stephen C. Ruschak, Vice President

Randall Musselman, Secretary

STATE OF MICHIGAN
County of Oakland

On this 23rd day of February, 2012 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2018
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

I, Randall Musselman, Secretary of **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by **THE GUARANTEE COMPANY OF NORTH AMERICA USA**, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 23rd day of February, 2017

Randall Musselman, Secretary

ATTACHMENTS

ATTACHMENT A
SCOPE OF WORK

SCOPE OF WORK

1. **SCOPE OF WORK:** The construction consists of replacing in place 2,151.17 linear feet of 8" PVC sewer main in addition to another 616.51 linear feet of new 8" PVC sewer main (new trench). A total of 4616.32 linear feet of AC Water main shall be replaced with PVC. The total sewer main abandonment is 2,106 linear feet, which occur in the easements within the canyon. The construction also includes replumbs, the need of traffic control, manholes and other appurtenances in accordance with these specifications and drawings numbered 38804-01-D through 38804-21-D.

1.1. The Work shall be performed in accordance with:

1.1.1. The Notice Inviting Bids and Plans numbered **38804-01-D** through **38804-21-D**, inclusive.

2. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$3,620,000**.

3. **LOCATION OF WORK: The location of the Work is as follows:**

The project is located in the center of Valencia Park. The work will be bounded by the following streets: San Mateo Drive, Trinidad Way, Las Flores Terrace, Olvera Avenue and Los Angeles Place. See Appendix E, Location Map.

4. **CONTRACT TIME:** The Contract Time for completion of the Work shall be **210 Working Days**.

5. **CONTRACTOR'S LICENSE CLASSIFICATION:** In accordance with the provisions of California Law, the Contractor shall possess valid, appropriate license(s) at the time that the Bid is submitted. Failure to possess the specified license(s) may render the Bid as **non-responsive** and ineligible for award.

5.1. The City has determined that the following licensing classifications are required for this contract:

Option	Classification
1	CLASS A
2	CLASS C34

5.2. The Bidder shall satisfy the licensing requirement by meeting **at least** one of the listed options.

ATTACHMENT B
PHASED FUNDING PROVISIONS

PHASED FUNDING PROVISIONS

1. PHASED FUNDING:

- 1.1. For phased funded contracts, the City typically secures enough funds for the first 90 days of the contract prior to award. Within 10 Working Days after Bid opening date the Apparent Low Bidder must contact the Project Manager to discuss fund availability and the duration of the first phase and submit the Pre-Award Schedule to the City for approval and preparation of the first Phased Funding Schedule Agreement.
- 1.2. The Apparent Low Bidder will be required to provide a Pre-award Schedule in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK" and 9-3, "PAYMENT" prior to award of Contract.
- 1.3. If the Bid submitted by the Apparent Low Bidder is rejected by the City for any reason, the next Apparent Low Bidder is to provide the Pre-Award Schedule within 5 Working Days after receiving notice. This process will continue until the City selects an Awardee or rejects all Bids.
- 1.4. The first Phased Funding Schedule Agreement must show the fund availability for the first phase. Upon selection of the Awardee and acceptance by the City of the Pre-Award Schedule, the City will present the first Phased Funding Schedule Agreement to you.
- 1.5. At the City's request, meet with the City's project manager before execution of the first Phased Funding Schedule Agreement to discuss their comments and requests for revision to the Pre-Award Schedule.
- 1.6. Your failure to perform the any of the following may result in the Bid being rejected as non-responsive:
 1. Meet with the City's project manager, if requested to do so, to discuss and respond to the City's comments regarding the Pre-Award Schedule,
 2. Revise the Pre-Award Schedule as requested by the City within the specified 22 Working Days timeframe, or
 3. Execute the first Phased Funding Schedule Agreement within a day after receipt.

PHASED FUNDING SCHEDULE AGREEMENT

Check one:

- First Phased Funding Schedule Agreement
- Final Phased Funding Schedule Agreement

The particulars left blank such as the total number of phases, and the amounts assigned to each phase will be completed with funding specific information from the Pre-Award Schedule and subsequent Schedules submitted to and approved by the City.

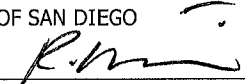
BID NUMBER: K-17-1510-DBB-3

CONTRACT OR TASK TITLE: Sewer & AC Water Group 837

CONTRACTOR: KTA Construction, Inc.

Funding Phase	Phase Description		Phase Start	Phase Finish	Not-to-Exceed Amount
PHASE 1	SEWER	Work to be completed in Phase 1 shall include, Bonds, Traffic Control, Mobilization, Clearing, Video Taping of Pre-Existing Conditions, a Flow Diversion Plan, Pollution Control Measures, Storage/Staging Area Protection, Clean & Televising of Existing Sewer Mains, Installation of Sewer Mains, Manholes, Sewer Laterals, Replumbs, Trench Shoring, Connection to Existing Manholes, Archeo, Paleo, & NAM Monitoring, Temp. Trench Cap, and Traffic Control.	NTP	8/31/17	\$716,000.00
	WATER	Work to be completed in Phase 1 shall include, Bonds, Traffic Control, Mobilization, Pollution Control Measures, Storage/Staging Area Protection, the Installation of 8" & 12" water mains, 1" water services and 6" fire hydrants, Temp. trench cap and associated work such as traffic control.			\$120,000.00
PHASE 2	SEWER	Traffic Control, Flow Diversion Plan, Pollution Control Measures, Protect Staging Area, Installation of Sewer Mains, Laterals & Replumbs, Connection to Ex. Sewer Manholes, Trench Shoring, Trench Repair, Asphalt Grind & Overlay Trenches, Test Sewer Lines, Abandon Ex. Sewer.	9/1/17	Notice of Completion	\$736,000.00
	WATER	Traffic Control, Installation of 8" & 12" Water Mains, 1" Water Services, 6" Fire Hydrants, Blow-Off Assembly, Air & Vac Assembly, Chlorinate & Test Water Mains, Trench Repair, Grind & Overlay Trenches, Cold Mill AC Pavement, Pavement Repair, Asphalt Overlay & Striping, Crack Seal, Cross Gutters, Curb Ramps, Sidewalk R & R, Pavement Restoration at Final Connection.			\$1,298,901.00
Total					\$2,870,901.00

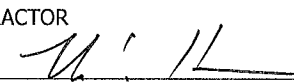
Notes: (1) City Supplement 9-3.6, "PHASED FUNDING COMPENSATION" applies.
 (2) The total of all funding phases shall be equal to the TOTAL BID PRICE as shown on BID SCHEDULE 1 - PRICES.
 (3) This PHASED FUNDING SCHEDULE AGREEMENT will be incorporated into the CONTRACT and shall only be revised by a written modification to the CONTRACT.

CITY OF SAN DIEGO
 By: 

Name: Reyhaneh Martin
 Project Manager

Department Name: Public Works Department

Date: 2/28/17

CONTRACTOR
 By: 

Name: Mike Henderson

Title: President and CEO

Date: 2-23-17

ATTACHMENT C
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ATTACHMENT D
PREVAILING WAGES

PREVAILING WAGES

1. **PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
 - 1.1. **Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
 - 1.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
 - 1.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
 - 1.2. **Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed.

- 1.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
- 1.3.1.** For contracts entered into on or after April 1, 2015, Contractor and their subcontractors shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- 1.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 1.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.
- 1.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 1.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."
- 1.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

1.9. Contractor and Subcontractor Registration Requirements. This project is subject to compliance monitoring and enforcement by the DIR. As of March 1, 2015, no contractor or subcontractor may be listed on a bid or proposal for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5. As of April 1, 2015, a contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, or enter into any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration to the City upon request.

1.9.1. A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

ATTACHMENT E
SUPPLEMENTARY SPECIAL PROVISIONS

SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

- 1) The **2015 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK") currently in effect.
- 2) The **2015 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK").
 - a) General Provisions (A) for all Contracts.

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

- 1-2 TERMS AND DEFINITIONS.** To the City Supplement, item 54, "Normal Working Hours", ADD the following:

The **Normal Working Hours** are 8:30 AM to 3:30 PM.

SECTION 2 - SCOPE AND CONTROL OF WORK

- 2-3.2 Self Performance.** DELETE in its entirety and SUBSTITUTE with the following:

1. You shall perform, with your own organization, Contract Work amounting to at least 50% of the base Bid **AND** 50% of any alternates.

- 2-7 SUBSURFACE DATA.** To the City Supplement, ADD the following:

4. In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests of subsurface conditions at the Work Site:

- a) Preliminary Geotechnical Investigation Report, dated November 22, 2016, by Twining, Inc.

5. The reports listed above are available for review by contacting the Contract Specialist or visiting:

<ftp://ftp.sannet.gov/OUT/ECP/2-7%20SUBSURFACE%20DATA/>

2-14.3 Coordination. To the City Supplement, ADD the following:

2. Other adjacent City projects are scheduled for construction for the same time period in the vicinity of **Encanto Neighborhood: Southeastern**. See **Appendix F** for the approximate locations. Coordinate the Work with the adjacent projects as listed below:
 - a) Slurry Seal Group 1701, Janice Jaro, (619) 533-4661
 - b) Slurry Seal Group 1603, Katherine Wong, (619) 527-8035
 - c) AC Overlay Group 1508-JOC4, Brian Wang, (619) 527-7638

2-16 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM. To the City Supplement, item 1, DELETE in its entirety.

SECTION 4 - CONTROL OF MATERIALS

ADD:

4-1.3.6 Preapproved Materials. To the City Supplement, ADD the following:

3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

4-1.6 Trade Names or Equals. To the City Supplement, ADD the following:

11. You shall submit your list of proposed substitutions for an "equal" item **no less than 15 Working Days prior to the Bid due date** and on the City's Product Submittal Form available at:

<http://www.sandiego.gov/publicworks/edocref/index.shtml>

SECTION 5 - UTILITIES

5-2 PROTECTION. To the City Supplement, item 2, ADD the following:

- g) Refer to **Appendix L** for more information on the protection of AMI devices.

5-6 COOPERATION. ADD the following:

1. Notify SDG&E at least **10 Working Days** prior to excavating within 10 feet of SDG&E Underground High Voltage Transmission Power Lines (69 KV and higher).

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

ADD:

6-3.2.1.1 Environmental Document.

1. The City of San Diego has prepared an **Addendum To Mitigated Negative Declaration No. 255100** for **Sewer and AC Water Group 837**, as referenced in the Contract Appendix. You shall comply with all requirements of the **AMND No. 255100** as set forth in Contract **Appendix A**.
2. Compliance with the City's environmental document shall be included in the Contract Price.

6-3.2.2 Archeological and Native American Monitoring Program. To the City Supplement, ADD the following:

4. You shall coordinate your activities and Schedule with the activities and schedules of the archaeologist monitor. Notify the Engineer before noon of the Working Day before monitoring is required. See 2-11, "INSPECTION" for details.

6-3.2.3 Paleontological Monitoring Program. To the City Supplement, ADD the following:

3. You shall coordinate your activities and Schedule with the activities and schedules of the paleontologist monitor. Notify the Engineer before noon of the Working Day before monitoring is required. See 2-11, "INSPECTION" for details.

6-7.1 General. To the City Supplement, item 3, ADD the following:

- d) 30 Days for full depth asphalt final mill and resurfacing work required per SDG-107.
- e) Where shutdowns of 16 inch and larger pipes are required, there is a shutdown moratorium from May until October. Plan and schedule Work accordingly. No additional payment or Working Days will be granted for delays due to the moratorium.

6-8.3 Warranty. To the City Supplement, item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. Warranty and repair all defective materials and workmanship for a period of 1 year. This call back warranty period shall start on the date that the Work was accepted by the City. Additionally, you shall warranty the Work against all latent and patent defects for a period of 10 years.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3 INSURANCE. DELETE in its entirety and SUBSTITUTE with the following:

7-3 INSURANCE.

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

7-3.1 Policies and Procedures.

1. You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.
4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.
5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance.

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.

2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

<u>General Annual Aggregate Limit</u>	<u>Limits of Liability</u>
Other than Products/Completed Operations	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

7-3.2.2 Commercial Automobile Liability Insurance.

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").
2. All costs of defense shall be outside the limits of the policy.

7-3.2.3 Contractors Pollution Liability Insurance.

1. You shall procure and maintain at your expense or require your Subcontractor, as described below, to procure and maintain the Contractors Pollution Liability Insurance including contractual liability coverage to cover liability arising out of cleanup, removal, storage, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than \$2,000,000 limit for bodily injury and property damage.
2. All costs of defense shall be outside the limits of the policy. Any such insurance provided by your Subcontractor instead of you shall be approved separately in writing by the City.

3. For approval of a substitution of your Subcontractor's insurance, you shall certify that all activities for which the Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim.
4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability.
5. Occurrence based policies shall be procured before the Work commences and shall be maintained for the Contract Time. Claims Made policies shall be procured before the Work commences, shall be maintained for the Contract Time, and shall include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work without advancing the retroactive date.
6. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance.

1. You shall provide at your expense or require your Subcontractor to provide, as described below, Contractors Hazardous Transporters Pollution Liability Insurance including contractual liability coverage to cover liability arising out of transportation of hazardous or toxic, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than \$2,000,000 limit per occurrence/aggregate for bodily injury and property damage.
2. All costs of defense shall be outside the limits of the policy. The deductible shall not exceed \$25,000 per claim. Any such insurance provided by a subcontractor instead of you shall be approved separately in writing by the City.
3. For approval of the substitution of Subcontractor's insurance the Contractor shall certify that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance.
4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured"

claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this contract, and shall include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work under this Contract without advancing the retroactive date.

5. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.3 Rating Requirements. Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.

7-3.3.1 Non-Admitted Carriers. The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7-3.4 Evidence of Insurance. Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance.

7-3.5.1.1 Additional Insured.

1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its

- respective elected officials, officers, employees, agents, and representatives as additional insured.
3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products,
 - c) your Work, e.g., your completed operations performed by you or on your behalf, or
 - d) premises owned, leased, controlled, or used by you.
 4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products, or
 - c) premises owned, leased, controlled, or used by you.

7-3.5.1.2

Primary and Non-Contributory Coverage. The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

7-3.5.1.3

Project General Aggregate Limit. The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

7-3.5.2

Commercial Automobile Liability Insurance.

7-3.5.2.1

Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

7-3.5.3 Contractors Pollution Liability Insurance Endorsements.

7-3.5.3.1 Additional Insured.

1. The policy or policies shall be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products,
 - c) your work, e.g., your completed operations performed by you or on your behalf, or
 - d) premises owned, leased, controlled, or used by you.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of § 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.3.2 Primary and Non-Contributory Coverage. The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

7-3.5.3.3 Severability of Interest. For Contractors Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.

7-3.5.4.1 Additional Insured.

1. The policy or policies shall be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products,
 - c) your work, e.g., your completed operations performed by you or on your behalf, or
 - d) premises owned, leased, controlled, or used by you.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of §2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.4.2 Primary and Non-Contributory Coverage. The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

7-3.5.4.3 Severability of Interest. For Contractors Hazardous Transporters Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

- 7-3.6 Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.
- 7-3.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.
- 7-3.8 Notice of Changes to Insurance.** You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.
- 7-3.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.
- 7-3.10 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).**
1. For Contracts with required engineering services (e.g., Design-Build, preparation of engineered Traffic Control Plans (TCP), and etc) by you, you shall keep or require all of your employees or Subcontractors, who provide professional engineering services under this contract, Professional Liability coverage with a limit of **\$1,000,000** per claim and **\$2,000,000** annual aggregate in full force and effect.
 2. You shall ensure the following:
 - a) The policy retroactive date is on or before the date of commencement of the Project.
 - b) The policy will be maintained in force for a period of 3 years after completion of the Project or termination of this Contract, whichever occurs last. You agree that for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.
 3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
 - a) Certify this to the City in writing and
 - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth above.

7-4 **NOT USED.** DELETE in its entirety and SUBSTITUTE with the following:

7-4 **WORKERS' COMPENSATION INSURANCE AND EMPLOYERS LIABILITY INSURANCE.**

1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.
2. Limits for this insurance shall be not less than the following:

<u>Workers' Compensation</u>	<u>Statutory Employers Liability</u>
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit
3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.

7-4.1. **Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

ADD:

7-16.1.3 **Weekly Updates Recipients.**

1. Submit a weekly correspondence with updates, traffic control issues and locations, lane closures, and any other pertinent information (with additional contact names given during award process) to the following recipients:

Andrea Demich, Senior Engineer, ADemich@sandiego.gov

Reyhaneh Martin, Project Manager, RDMartin@sandiego.gov

Young Dan, Project Engineer, YDan@sandiego.gov

Resident Engineer, TBA, XXX@sandiego.gov

7-16.3 Exclusive Community Liaison Services. To the City Supplement, ADD the following:

2. You shall retain an Exclusive Community Liaison for the Project that shall implement Work in accordance with the specifications described in 7-16.2 "Community Outreach Services" and 7-16.3 "Exclusive Community Liaison Services".

7-20 ELECTRONIC COMMUNICATION. To the City Supplement, ADD the following:

2. Virtual Project Manager shall be used on this Contract.

7-21.1 General. To the City Supplement, item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. During the construction phase of projects, the minimum waste management reduction goal is 90% of the inert material (a material not subject to decomposition such as concrete, asphalt, brick, rock, block, dirt, metal, glass, and etc.) and 65% of the remaining project waste. You shall provide appropriate documentation, including a Waste Management Form attached as an appendix, and evidence of recycling and reuse of materials to meet the waste reduction goals specified.

SECTION 9 - MEASUREMENT AND PAYMENT

ADD:

9-3.7 Compensation Adjustments for Price Index Fluctuations. To the City Supplement ADD the following:

5. This Contract is not subject to the provisions of The "WHITEBOOK" for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

SECTION 203 - BITUMINOUS MATERIALS

203-3.4.4 Rubber Polymer Modified Slurry (RPMS). To the City Supplement, ADD the following:

1. RPMS shall be used on this Contract.

SECTION 209 - PRESSURE PIPE

209 PRESSURE PIPE. To the City Supplement, ADD the following:

2. PVC products, specifically type C900 and C905, as manufactured or distributed by J-M Manufacturing Company or JM Eagle shall not be used on the Contract for pressurized pipe.

SECTION 217 - BEDDING AND BACKFILL MATERIALS

217-2.2 **Stones, Boulders, and Broken Concrete.** To Table 217-2.2, DELETE in its entirety and SUBSTITUTE with the following:

TABLE 217-2.2

Zone	Zone Limits	Maximum Size (greatest dimension)	Backfill Requirements in Addition to 217-2.1
Street or Surface Zone	From ground surface to 12" (300 mm) below pavement subgrade or ground surface	2.5" (63 mm)	As required by the Plans or Special Provisions.
Street or Surface Zone Backfill of Tunnels beneath Concrete Flatwork		Sand	Sand equivalent of not less than 30.
Trench Zone	From 12" (300 mm) below pavement subgrade or ground surface to 12" (300 mm) above top of pipe or box	6" (150 mm)	
Deep Trench Zone (Trenches 3' (0.9 m) wide or wider)	From 60" (1.5 m) below finished surface to 12" (300 mm) above top of pipe or box	Rocks up to 12" (300 mm) excavated from trench may be placed as backfill	
Pipe Zone	From 12" (300 mm) above top of pipe or box to 6" (150 mm) below bottom of pipe or box exterior	2.5" (63 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour).
Overexcavation	Backfill more than 6" (150 mm) below bottom of pipe or box exterior	6" (150 mm)	Sand equivalent of not less than 30 or a coefficient of permeability greater than 1-½ inches/hour (35 mm per hour). Trench backfill slurry (100-E-100) per 201-1 may also be used.

SECTION 302 – ROADWAY SURFACING

302-4.12.2.1 General. To the City Supplement, ADD the following:

3. When Type I is to be applied over Type III, corrective action in accordance with 302-4.11.1.2, "Reduction in Payment Based on WTAT" such as reductions in payment, non-payment, or removal of Type III material not meeting specifications as directed by the Engineer shall be executed prior to the application of the Type I material.

302-4.12.4 Measurement and Payment. To the City Supplement, item 2, Bid Description Table, ADD the following:

BID DESCRIPTION	UNIT
Rubber Polymer Modified Slurry (RPMS) Type I Over Type III and Striping	SF

302-7.4 Payment. To the City Supplement, item 1, last sentence, DELETE in its entirety and SUBSTITUTE with the following:

Payment shall not be made for additional fabric for overlapped areas.

SECTION 304 – METAL FABRICATION AND CONSTRUCTION

304-5 PAYMENT. To the City Supplement, REVISE section "304-5" to "304-6".

SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

306-1 GENERAL. ADD the following:

Build the Project in accordance with the water high-lining phasing shown on the Plans and in phases as follows:

1. Phase I: San Mateo Drive and Las Alturas Terrace
2. Phase II: Trinidad Way, Las Flores Terrace, San Onofre Terrace and Mira Flores Drive

When installing pipelines within the City's streets, the total time allowed for the completion of Work shall not exceed 10 Working Days per 500' of pipeline installation.

306-7.8.2.1 General. To the City Supplement, item 2, ADD the following:

- a) Specified test pressure for Class 235 pipe shall be 150 psi.
- b) Specified test pressure for Class 305 pipe shall be 200 psi.

306-15.2 Shoring and Bracing. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

1. The Bid item for "Trench Shoring" shall include full compensation for furnishing, installing, maintaining, and removing all sheeting, shoring, or bracing for any conditions encountered that require shoring including the preparation of engineered Shoring Plans in accordance with 7-10.4.2.2, "Shoring Plan". No additional payment shall be made.

306-17.2 Payment. To the City Supplement, ADD the following:

10. Payment shall not be made for any equipment failure or damage caused by trenchless operation.

SECTION 700 – MATERIALS

700-9.1 Pedestrian Barricade. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

3. Pedestrian barricades shall be constructed in accordance with the City of San Diego Standard Drawing SDE-103, "Pedestrian Barricade".
4. Assembly shall be commercial quality galvanized material.

SECTION 701 – CONSTRUCTION

701-2 PAYMENT. To the City Supplement, ADD the following:

19. The payment for Pedestrian Barricades shall be included in the Bid item for each "Pedestrian Barricade".

SECTION 900 – MATERIALS

900-1.2 Payment. To the City Supplement, item 2, DELETE in its entirety and SUBSTITUTE with the following:

2. The Payment for your high-lining materials (fittings, valves, and hardware), including delivery and unloading, shall be paid for under the linear foot Bid item "Furnished Materials for Contractor High-line Work".

SECTION 901 - INSTALLATION AND CONNECTION

901-2.5 **Payment.** To the City Supplement, item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. Traffic control, saw cutting the trench area, trench caps, and other spot repairs in the vicinity of the disturbed area at each restored connection shall be included in the square foot Bid item for "Pavement Restoration for Final Connection". Asphalt overlay and slurry seal Work shall be paid for under separate Bid items.

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP) SECTION A - GENERAL REQUIREMENTS

4.1 **Nondiscrimination in Contracting Ordinance.** To the City Supplement, subsection 4.1.1, paragraph (2), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

SUPPLEMENTARY SPECIAL PROVISIONS

APPENDICES

APPENDIX A

ADDENDUM TO MITIGATED NEGATIVE DECLARATION



THE CITY OF SAN DIEGO

ADDENDUM TO MITIGATED NEGATIVE DECLARATION No. 255100

Project No. 494519
Addendum to MND No. 255100
SCH No. 2011091045

SUBJECT: Sewer and AC Water Group 837

I. PROJECT DESCRIPTION

The Sewer and AC Water Group 837 project is a sewer and water main replacement project within the Valencia Park community of the City of San Diego. Construction of the project encompasses replacing and improving existing Asbestos Concrete (AC) water mains, as well as replacing and improving Polyvinyl Chloride (PVC) sewer main lines. All of this is necessary in order to improve the reliability and modernize these existing aging systems.

With regards to the proposed sewer improvements, the proposal encompasses replacing in place 715.62 linear feet of existing 8-inch PVC sewer lines; providing 715.62 linear feet of new 8-inch PVC sewer main lines within newly provided trenching sections, and abandonment of 2,106 linear feet of existing sewer main lines. Proposed depths of the sewer improvements will range from 10 to 20 feet below existing grade within existing City of San Diego Right-of-Way. Improvements are proposed to be located below San Mateo Drive (between Los Angeles Place and Trinidad Way), Las Flores Terrace (between Olvera Avenue and Miraflores Drive), San Onofre Terrace (between Olvera Avenue and Las Flores Terrace) and provided below a small section of Miraflores Drive (east of San Onofre Terrace).

With respect to the proposed water main improvements, the proposal encompasses replacing in place 4,259.38 linear feet of existing water main lines. Proposed depths of the water main improvements will range from 3 to 5 feet below existing grade within existing City of San Diego Right-of-Way. Improvements are proposed to be located below San Mateo Drive (between Los Angeles Place and Trinidad Way), Las Flores Terrace (between Olvera Avenue and Miraflores Drive), San Onofre Terrace (between Olvera Avenue and Las Flores Terrace) and Miraflores Drive (between San Onofre Terrace and Las Flores Terrace).

In general, the project proposes to utilize the open-trench method for all pipeline replacement segments, at approximately 3 to 5 feet in width, and utilize whenever possible, horizontal directional drilling for connecting sewer lateral re-plumbs to residential sites. Potholing will be implemented to examine potential conflicts with existing utilities, and to ensure proper reconnection of sewer laterals to sewer mains.

Additional improvements include the installation of new manholes, water services, tees, crosses, reducers, gate valves, trench shoring, resurfacing, curb ramps, traffic controls, and provide related appurtenances.

II. ENVIRONMENTAL SETTING

The project will occur within the Encanto Neighborhoods Community Planning Area, contained within existing developed public right-of-way and no impacts to biological resources are anticipated. Furthermore, the project is consistent Section 15162 of the State CEQA Guidelines. Surrounding land uses include existing single-family residential.

III. PROJECT BACKGROUND

A Citywide Pipelines Projects Mitigated Negative Declaration (MND) No. 255100 was prepared by the City of San Diego's Development Services Department (DSD) and was certified by the City Council on November 30, 2011 (Resolution No. 307122). The Citywide Pipelines Projects MND provides for the inclusion of subsequent pipeline projects that are located within the public right-of-way and would not result in any direct impacts to sensitive biological resources.

Therefore, in accordance with Section 15164 of the State CEQA Guidelines this addendum has been prepared. Additionally, in accordance with requirements in Section 128.0306 of the San Diego Municipal Code, and State CEQA Guidelines Section 15064(c), no public review period is required for this addendum.

Paleontological Resources

The Citywide Pipelines Project MND No. 255100 analyzed paleontological resources in relation to pipeline projects, which included mitigation to reduce impacts to paleontological resources to below a level of significance. A portion of the project area is underlain by the San Diego - Sandstone (Tsdss) geologic formation that, with respect to paleontological fossil resource potential, is assigned a high sensitivity rating. Based on the sensitivity of the affected formation and proposed 20-foot excavation depths, construction of Sewer and AC Water Group Job 837 could result in potentially significant impacts to fossil resources.

To reduce potential impacts to below a level of significance for the project, excavation within previously undisturbed formations at a depth of 10 or more feet, for either new trench alignments and/or for replacement of pipelines within the same trench alignment occurring at a deeper depth than the previously existing pipeline, would be monitored by a qualified paleontologist or paleontological monitor. Any significant paleontological resources encountered would be recovered and curated in accordance with the mitigation monitoring and Reporting Program (MMRP) detailed in Section VI.

IV. ENVIRONMENTAL DETERMINATION

The City previously prepared and certified the **Mitigated Negative Declaration (No. 255100 / SCH No. 2011091045)**. Based on all available information in light of the entire record, the analysis in this Addendum, and pursuant to Section 15162 of the State CEQA Guidelines, the City has determined the following:

- There are no substantial changes proposed in the project which will require major revisions

of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- Substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete or was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous environmental document;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous environmental document;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous environmental would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Based upon a review of the current project, none of the situations described in Sections 15162 and 15164 of the State CEQA Guidelines apply. No changes in circumstances have occurred, and no new information of substantial importance has manifested, which would result in new significant or substantially increased adverse impacts as a result of the project. Therefore, this Addendum has been prepared in accordance with Section 15164 of the CEQA State Guidelines. Public review of this Addendum is not required per CEQA.

V. IMPACT ANALYSIS

The subsequent impact analysis is to demonstrate that environmental impacts associated with the project are consistent with the previously certified MND. The following includes the project-specific environmental review pursuant to the CEQA. The analysis in this document evaluates the adequacy of the MND relative to the project.

Paleontological Resources

The Citywide Pipelines Project MND No. 255100 analyzed paleontological resources in relation to pipeline projects, which included mitigation to reduce impacts to paleontological resources to below a level of significance. A portion of the project area is underlain by the San Diego – Sandstone (Tsdss) geologic formation that, with respect to paleontological fossil resource potential, is assigned a high sensitivity rating. Based on the sensitivity of the affected formation and proposed 20-foot

excavation depths, construction of Sewer and AC Water Group Job 837 could result in potentially significant impacts to fossil resources.

To reduce potential impacts to below a level of significance for the project, excavation within previously undisturbed formations at a depth of 10 or more feet, for either new trench alignments and/or for replacement of pipelines within the same trench alignment occurring at a deeper depth than the previously existing pipeline, would be monitored by a qualified paleontologist or paleontological monitor. Any significant paleontological resources encountered would be recovered and curated in accordance with the mitigation monitoring and Reporting Program (MMRP) detailed in Section VI.

VI. MITIGATION, MONITORING AND REPORTING PROGRAM

PALEONTOLOGICAL RESOURCES

I. Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other Institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
 - b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
 - c. MMC shall notify the PI that the PME has been approved.
4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
5. Approval of PME and Construction Schedule
After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

III. During Construction

- A. Monitor Shall be Present During Grading/Excavation/Trenching
 1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**
 2. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
 3. The monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process

1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
- C. Determination of Significance
1. The PI shall evaluate the significance of the resource.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
 - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.
 - (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
 - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
 - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
 - (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching Projects
- The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.

- b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
- c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
- d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via the RE via fax by 8AM on the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

V. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring.
 - a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with the San Diego Natural History Museum
The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 4. MMC shall provide written verification to the PI of the approved report.
 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.
 4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

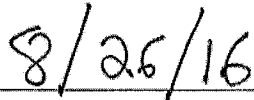
VII. IMPACT SIGNIFICANCE

This Addendum also identifies that all significant project impacts would be mitigated to below a level of significance, consistent with the previously certified MND.

VIII. CERTIFICATION

Copies of the addendum, the final MND, the **Mitigation Monitoring and Reporting Program** and associated project-specific technical appendices, if any, may be reviewed in the office of the Development Services Department, or purchased for the cost of reproduction.


 Mark Brunette, Senior Planner
 Development Services Department


 Date of Final Report

Analyst: Chris Tracy, AICP, Associate Planner

Attachments:

- Figure 1: Location Map
- Mitigated Negative Declaration No. 255100/SCH No. 2011091045

The Addendum to Mitigated Negative Declaration No. 255100 was not circulated for public review pursuant to San Diego Municipal Code (SDMC) Chapter 6, Article 9, Paragraph 69.0211 (Addenda to Environmental Reports). The final Addendum was distributed to the following City of San Diego staff members for informational purposes in accordance with CEQA Section 15164.

DISTRIBUTION:

City of San Diego

Development Services

Peter Kann, Development Project Manager

Chris Tracy, Environmental Analyst

Public Works

Mahmoud Oriqat, Project Manager

Carl Spier, Senior Engineer

Dan Young, Project Engineer

Juan Baligad, Senior Planner

Peter Fogec, Associate Planner

Carrie Purcell, Engineering and Capital Projects

The City of
SAN DIEGO Public Works

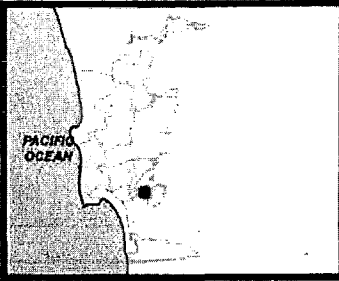
SEWER & AC WATER GROUP 837

SENIOR ENGINEER
 CARL SPIER, PE
 619-533-5126



PROJECT MANAGER
 MAHMOUD ORIQAT, PE
 619-533-5232

PROJECT ENGINEER
 YOUNG DAN
 619-533-3749

FOR QUESTIONS ABOUT THIS PROJECT
 Call: (619) 533-4207
 Email: engineering@sandiego.gov



Legend

-  SEWER
-  WATER



COMMUNITY NAME: ENCANTO NEIGHBOHOOD: SOUTHEASTERN

COUNCIL DISTRICT: 4
 Sewer and AC Water Group 837



SAP ID: B-13214 (S) /
 B-15071 (W)
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MITIGATED NEGATIVE DECLARATION

Project No. 255100
SCH No. 2011091045

SUBJECT: Citywide Pipeline Projects: COUNCIL APPROVAL to allow for the replacement, rehabilitation, relocation, point repair, new trenching, trenchless construction, and abandonment of water and/or sewer pipeline alignments and associated improvements such as curb ramps, sewer lateral connections, water service connections, manholes, new pavement/slurry, the removal and/or replacement of street trees and the removal and/or replacement of street lights. This environmental document covers the analysis for ~~five~~ four (4) near-term pipeline projects (Harbor Drive Pipeline, Water Group 949, ~~Sewer Group 787~~, Water Group 914, and Sewer/Water Group 732), as well as any subsequent future pipeline projects. The construction footprint for a typical pipeline project, including staging areas and other areas (such as access) would be located within the City of San Diego Public Right-of-Way (PROW) and/or within public easements and may include planned pipeline construction within private easements from the PROW to the service connection. A signed agreement between the City and the property owner would be required for work conducted on private property. Project types that would be included in the analysis contained herein would consist of sewer and water group jobs, trunk sewers, large diameter water pipeline projects, new and/or replacement manholes, new/or replacement fire hydrants, and other necessary appurtenances. All associated equipment would be staged within the existing PROW adjacent to the work areas. The near-term and future projects covered in the document would not impact *Sensitive Biological Resources* or *Environmentally Sensitive Lands (ESL)* as defined in the Land Development Code and would not encroach into the City's Multi-Habitat Planning Area (MHPA). Applicant: The City of San Diego Engineering and Capital Projects Department AND Public Utilities Department.

Update 10/20/2011

Revisions to this document have been made when compared to the Draft Mitigated Negative Declaration (DMND) dated September 9, 2011. In response to the Comment Letter received from The California Department of Fish and Game, further description and graphics of Water Group 949 as it relates to the MHPA has been added to the Final MND. Please note that Sewer Group 787, which is adjacent to the MHPA, has been removed from the project description and is no longer covered in this MND.

The modifications to the FMND are denoted by ~~strikeout~~ and underline format. In accordance with the California Environmental Quality Act, Section 15073.5 (c)(4), the addition of new information that clarifies, amplifies, or makes insignificant modification does not require recirculation as there are no new impacts and no new mitigation identified. An environmental document need only be recirculated when there is identification of new significant environmental impact or the addition of a new mitigation measure required to avoid a significant environmental impact. The addition

of corrected mitigation language within the environmental document does not affect the environmental analysis or conclusions of the MND.

Construction for the near-term and any future projects is anticipated to occur during the daytime hours Monday through Friday, but may occur during the weekend, if necessary. The contractor would comply with all applicable requirements described in the latest edition of the *Standard Specifications for Public Works Construction ("GREENBOOK")* and the latest edition of the *City of San Diego Standard Specifications for Public Works Construction ("WHITEBOOK")*. The City's supplement addresses unique circumstances to the City of San Diego that are not addressed in the GREENBOOK and would therefore take precedence in the event of a conflict. The contractor would also comply with the California Department of Transportation *Manual of Traffic Controls for Construction and Maintenance Work Zones*. If the Average Daily Traffic (ADT) within a given project(s) vicinity is 10,000 ADT or greater, a traffic control plan would be prepared and implemented in accordance with the *City of San Diego Standard Drawings Manual of Traffic Control for Construction and Maintenance Work Zones*. For proposals subject to 10,000 ADT or less, traffic control may be managed through shop drawings during construction. Construction methods to be employed would consist of, but not be limited to:

Open Trenching: The open trench method of construction would be used for complete replacement and new alignment portions of the project. Trenches are typically four feet wide and are dug with excavations and similar large construction equipment.

Rehabilitation: Rehabilitation of alignment involves installing a new lining in old pipelines. The insertion is done through existing manhole access points and does not require removal of pavement or excavation of soils.

Abandonment: Pipeline abandonment activities would be similar to rehabilitation methods in that no surface/subsurface disturbance would occur. This process may involve slurry or grout material injected into the abandoned lines via manhole access. The top portion of the manhole is then typically removed and the remaining space backfilled and paved over.

Potholing: Potholing would be used to verify reconnection of laterals to main where lines would be raised or realigned (higher than existing depth, but still below ground) or to verify utility crossings. These "potholes" are made by using vacuum type equipment to open up small holes into the street of pavement.

Point Repairs: Point repairs include replacing a portion of a pipe segment by open trench excavation methods in which localized structural defects have been identified. Generally, point repairs are confined to an eight-foot section of pipe.

The following near term project(s) have been reviewed by the City of San Diego, Development Services Department (DSD) for compliance with the Land Development Code and have been determined to be exempt from a Site Development Permit (SDP) and/or a Coastal Development Permit (CDP). These projects would involve excavation in areas having a high resource sensitivity and potential for encountering archaeological and paleontological resources during construction related activities. Therefore, mitigation would be required to reduce potential significant impacts to archaeological and paleontological resources to below a level of significance. With respect to Storm Water, all projects would be reviewed for compliance with the City's Storm Water Standards

Manual. All projects that are not-exempt from the Standard Urban Storm Water Mitigation Plan (SUSMP) would incorporate appropriate Permanent Best Management Practices (BMPs) and construction BMPs into the project design(s) and during construction, as required. As such, all projects would comply with the requirement of the Municipal Storm Water Permit.

HARBOR DRIVE PIPELINE (PROJECT NO. 206100)

The Harbor Drive Pipeline includes the replacement of 4.4 miles of 16-inch cast iron (CI) and asbestos cement (AC) pipe that comprises the Harbor Drive 1st and 2nd Pipelines (HD-1 and HD-2) at a depth no greater than five (5) feet. Facility age and cast iron main replacement are the primary drivers for these projects, but due to the history of AC breaks in the area, approximately 1.0 mile of AC replacement is also included. The project is anticipated to be awarded in Fiscal Year 2013.

HD-1 and HD-2 were built primarily in the 1940's and 1950's and were made out of cast iron or asbestos cement and serve the western most part of the University Heights 390 Zone and the northern section of the Point Loma East 260 Zone. The pipelines also serve as redundancy to each other. Several segments were replaced by various City of San Diego Public Utilities Department projects throughout the years and those segments are not a part of the current scope. Previously replaced segments were 16 inch PVC, except for the bridge crossing which used 24-inch CMLC. The pipeline is located entirely within the PROW, will not require any easements, and is not adjacent to the MHPA or located within any designated historical districts. The following streets would be affected by this project: West Laurel, Pacific Highway, North Harbor Drive (within the roadway, under the bridge and within landscape areas), Nimitz Boulevard, Rosecrans Street, Evergreen Street, Hugo Street, Locust Street, Canon Street, Avenida De Portugal, and Point Loma Avenue.

Mitigation for the Harbor Drive Pipeline: Historical Resources (Archaeological Monitoring)

WATER GROUP 949 (PROJECT NO. 232719)

Water Group 949 would consist of the replacement and installation of 5.27 miles of water mains within the Skyline- Paradise Hills, University, Clairemont Mesa, Southeastern San Diego (Greater Golden Hills) community planning areas. 16,931 Linear Feet (LF) of 16-inch cast iron water mains would be replace-in-place with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. The remaining 10,913 LF of new 16-inch PVC would be installed in new trenches. All work within Regents Road, Site 2 (Figure 8), adjacent to the MHPA would only occur within the developed footprint such as the paved right of way, and concrete sidewalk or slab areas. In addition, all work within 100 feet of the MHPA would observe mitigation such as but not limited to, bird breeding season measures, avoidance of discharge into the MHPA, and avoidance of direct lighting towards the MHPA areas. As such, no impacts to MHPA and/or sensitive resources would occur. The project would also include replacement and reinstallation of valves, water services, fire hydrants, and other appurtenances and would also included the construction of curb ramps, and street resurfacing. Traffic control measures and Best Management Practices (BMPs) would be implemented during construction. Any street tree removal, relocation, and/or trimming would be done under the supervision of the City Arborist. All staging of construction equipment will be located outside of any potentially sensitive areas. The following streets and nearby alleyways would be affected by this project: Tuther Way, Cielo Drive, Woodman Street, Skyline Drive, Regents Road, Hidalgo Avenue, Clairemont Mesa Boulevard, Luna Avenue, B Street, F Street, Ash Street, 25th Street, and 27th Street.

Mitigation Required for Water Group 949: This project would require the implementation of MHPA Land Use Adjacency Guidelines in the University and Clairemont Mesa Community Planning areas that are adjacent (within 100 feet) to the MHPA and Historical Resources (Built Environment) mitigation for the area of the project located within the Greater Golden Hill Historic District.

SEWER GROUP 787 (PROJECT NO. 231928)

Sewer Group 787 would consist of the replacement of 26,436 lineal feet (LF) of existing 16-inch cast iron sewer pipe with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. A total of 1,267 LF of new 16-inch PVC sewer alignment would be installed in new trenches. In addition, the project would abandon 1,606 LF of existing 16-inch cast iron pipe. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. The project would affect the following streets and nearby alleyways: 42nd Street, Monroe Avenue, Edgware Road, Polk Avenue, Orange Avenue, Menlo Avenue, 47TH Street, Dwight Street, Myrtle Avenue, Manzanita Place, Heather Street, Dahlia Street, Poplar Street, Columbine Street, Pepper Drive, Juniper Street, Marigold Street, Sumac Drive, 44TH Street, Laurie Lane, and Roseview Place all within the City Heights and Kensington Talmadge Community Planning Areas.

Mitigation Required for Water Group 787: This project would require the implementation of MHPA Land Use Adjacency Guidelines in the City Heights and Kensington Talmadge Community Planning areas that are adjacent (within 100 feet) to the MHPA, Historical Resources (Archaeological and Paleontological Monitoring).

WATER GROUP 914 (PROJECT NO. 233447)

Water Group 914 would consist of the replacement and installation of approximately 21,729 lineal feet (LF) of existing 6-inch, 8-inch and 12-inch cast iron pipes and 6-inch asphalt concrete pipes with new 8-inch, 12-inch and 16-inch polyvinyl chloride (PVC) pipe. Also included would be the construction of two underground pressure regulator stations that measure 54 square-feet and 6.5 feet deep each. 17,472 LF would be located in existing trenches and 4,257 LF would be located in new trench lines. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. However two 300 LF parallel line sections (600 LF total) of the water alignment would be installed by trenchless methodology utilizing two (2) 40 square foot launch and receiver pits. The trenchless installation would occur at the intersection of Coronado Avenue and Ebers Street and is designed to avoid a recorded archaeological resource at this intersection. The trenchless methodology would employ directional underground boring that would install the pipe at a depth deeper than the recorded resource. In addition, a 4-inch AC water segment of approximately 520 LF located along Point Loma Avenue between Guizot Street and Santa Barbara Street will be abandoned in place. The project would affect the following streets and nearby alleyways: Point Loma Avenue, Santa Barbara Street, Bermuda Avenue, Pescadero Avenue, Cable Street, Orchard Avenue, Froude Street, Sunset Cliffs Boulevard, Savoy Circle, and Del Monte Avenue all within the Ocean Beach and Peninsula Community Planning Areas.

Mitigation for Water Group 914: Historical Resources (Archaeological Monitoring) and (Built Environment)

SEWER AND WATER GROUP 732 (PROJECT NO. 206610)

Sewer and Water Group Job 732 would consist of the installation of approximately 5,500 total linear feet (LF) of 8 inch Polyvinyl Chloride (PVC) sewer pipe, and approximately 3,000 total linear feet (LF) of 12 inch PVC water pipe. Approximately, 1,035 LF of water pipe would be rehabilitated using trenchless technology in the same trench, with the remainder of the installation accomplished through open trenching. Related work would include construction of new manholes, replacement and re-plumbing of sewer laterals, installation of curb ramps, pavement restoration, traffic control, and storm water best management practices. Construction of the project would affect portions of the following streets and adjacent alleys in the Peninsula Community Plan area: Xenophon Street, Yonge Street, Zola Street, Alcott Street, Browning Street, Plum Street, Willow Street, Evergreen Street, Locust Street, and Rosecrans Street.

Mitigation Required for Sewer and Water Group 732: Historical Resources (Archaeological and Paleontological Monitoring).SUBSEQUENT PIPELINE PROJECT REVIEW (LONG TERM)

Applications for the replacement, rehabilitation, relocation, point repair, open trenching and abandonment of water and/or sewer pipeline alignments within the City of San Diego PROW as indicated in the Subject block above and in the Project Description discussion of the Initial Study would be analyzed for potential environmental impacts to Historical Resources (Archaeology, Paleontology and the Built Environment) and Land Use (MSCP/MHPA), and reviewed for consistency with this Mitigated Negative Declaration (MND). Where it can be determined that the project is "consistent" with this MND and no additional potential significant impacts would occur pursuant to State CEQA Guideline § 15162 (i.e. the involvement of new significant environmental effects of a substantial increase in the severity of previously identified effects) or if the project would result in minor technical changes or additions, then an Addendum to this MND would be prepared pursuant to §15164. Where future projects are found not to be consistent with this MND, then a new Initial Study and project specific MND shall be prepared.

- I. PROJECT DESCRIPTION: See attached Initial Study.
- II. ENVIRONMENTAL SETTING: See attached Initial Study.
- III. DETERMINATION:

The City of San Diego conducted an Initial Study which determined that the near term projects and any future subsequent projects could have a significant environmental effect in the following areas(s): Land Use (MSCP/MHPA Land Use Adjacency), Historical Resources (Built Environment), Historical Resources (Archaeology) and Paleontology. When subsequent projects are submitted to DSD, the Environmental Analysis Section (EAS) will determine which of the project specific mitigation measures listed in Section V. would apply. Subsequent revisions in the project proposal create the specific mitigation identified in Section V of this Mitigated Negative Declaration. Projects as revised now avoid or mitigate the potentially significant environmental effects previously identified, and the preparation of an Environmental Impact Report will not be required.

IV. DOCUMENTATION:

The attached Initial Study documents the reasons to support the above Determination.

V. MITIGATION, MONITORING AND REPORTING PROGRAM (MMRP):

A. GENERAL REQUIREMENTS – PART I

Plan Check Phase (prior to permit issuance)

1. Prior to Bid Opening/Bid Award or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD) (plans, specification, details, etc.) to ensure the MMRP requirements have been incorporated.
2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, "ENVIRONMENTAL/MITIGATION REQUIREMENTS."
3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website:

<http://www.sandiego.gov/development-services/industry/standtemp.shtml>

4. The **TITLE INDEX SHEET** must also show on which pages the "Environmental/Mitigation Requirements" notes are provided.

B. GENERAL REQUIREMENTS – PART II

Post Plan Check (After permit issuance/Prior to start of construction)

1. **PRE CONSTRUCTION MEETING IS REQUIRED TEN (10) WORKING DAYS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.** The PERMIT HOLDER/OWNER is responsible to arrange and perform this meeting by contacting the CITY RESIDENT ENGINEER (RE) of the Field Engineering Division and City staff from MITIGATION MONITORING COORDINATION (MMC). Attendees must also include the Permit holder's Representative(s), Job Site Superintendent and the following consultants as necessary:

Biologist, Archaeologist, Native American Monitor, Historian and Paleontologist

Note: Failure of all responsible Permit Holder's representatives and consultants to attend shall require an additional meeting with all parties present.

CONTACT INFORMATION:

- a) The PRIMARY POINT OF CONTACT is the RE at the **Field Engineering Division 858-627-3200**
- b) For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call RE and MMC at **858-627-3360**

2. MMRP COMPLIANCE: This Project, Project Tracking System (PTS) No. 255100, or for subsequent future projects the associated PTS No, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD's ED, MMC and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e. to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc)

Note:

Permit Holder's Representatives must alert RE and MMC if there are any discrepancies in the plans or notes, or any changes due to field conditions. All conflicts must be approved by RE and MMC BEFORE the work is performed.

- 3. OTHER AGENCY REQUIREMENTS:** Evidence that any other agency requirements or permits have been obtained or are in process shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency as applicable.
- 4. MONITORING EXHIBITS:** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline's work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.
- 5. OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner's representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

Document Submittal/Inspection Checklist

<i>Issue Area</i>	<i>Document submittal</i>	<i>Associated Inspection/Approvals/Note</i>
General	Consultant Qualification Letters	Prior to Pre-construction Mtg.
General	Consultant Const. Monitoring	Prior to or at Pre-Construction Mtg.
Biology	Biology Reports	Limit of Work Verification
Historical	Historical Reports	Historical observation (built envirnmt)
Archaeology	Archaeology Reports	Archaeology observation
Paleontology	Paleontology Reports	Paleontology observation
Final MMRP		Final MMRP Inspection

SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS:

A. LAND USE [MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP) For PROJECTS WITHIN 100 FEET OF THE MHPA]

I. Prior to Permit Issuance

A. Prior to issuance of any construction permit, the DSD Environmental Designee (ED) shall verify the Applicant has accurately represented the project's design in the Construction Documents (CDs) that are in conformance with the associated discretionary permit conditions and Exhibit "A", and also the City's Multi-Species Conservation Program (MSCP) Land Use Adjacency Guidelines for the Multiple Habitat Planning Area (MHPA), including identifying adjacency as the potential for direct/indirect impacts where applicable. In addition, all CDs where applicable shall show the following:

1. **Land Development / Grading / Boundaries** –MHPA boundaries on-site and adjacent properties shall be delineated on the CDs. The ED shall ensure that all grading is included within the development footprint, specifically manufactured slopes, disturbance, and development within or adjacent to the MHPA..
2. **Drainage / Toxins** –All new and proposed parking lots and developed area in and adjacent to the MHPA shall be designed so they do not drain directly into the MHPA, All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials prior to release by incorporating the use of filtration devices, planted swales and/or planted detention/desiltation basins, or other approved permanent methods that are designed to minimize negative impacts, such as excessive water and toxins into the ecosystems of the MHPA.
3. **Staging/storage, equipment maintenance, and trash** –All areas for staging, storage of equipment and materials, trash, equipment maintenance, and other construction related activities are within the development footprint. Provide a note on the plans that states: *"All construction related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owners Representative to ensure there is no impact to the MHPA."*
4. **Barriers** –All new development within or adjacent to the MHPA shall provide fencing or other City approved barriers along the MHPA boundaries to direct public access to appropriate locations, to reduce domestic animal predation, and to direct wildlife to appropriate corridor crossing. Permanent barriers may include, but are not limited to, fencing (6-foot black vinyl coated chain link or equivalent), walls, rocks/boulders, vegetated buffers, and signage for access, litter, and educational purposes.
5. **Lighting** – All building, site, and landscape lighting adjacent to the MHPA shall be directed away from the preserve using proper placement and adequate shielding to protect sensitive habitat. Where necessary, light from traffic or other incompatible uses, shall be shielded from the MHPA through the utilization of including, but not limited to, earth berms, fences, and/or plant material.
6. **Invasive Plants** – Plant species within 100 feet of the MHPA shall comply with the Landscape Regulations (LDC142.0400 and per table 142-04F, Revegetation and Irrigation Requirements) and be non invasive. Landscape plans shall include a note that states: *"The ongoing maintenance requirements of the property owner shall*

prohibit the use of any planting that are invasive, per City Regulations, Standards, guidelines, etc., within 100 feet of the MHPA."

7. **Brush Management** –All new development adjacent to the MHPA is set back from the MHPA to provide the required Brush Management Zone (BMZ) 1 area (LDC Sec. 142.0412) within the development area and outside of the MHPA. BMZ 2 may be located within the MHPA and the BMZ 2 management shall be the responsibility of a HOA or other private entity.
8. **Noise**- Due to the site's location adjacent to or within the MHPA, construction noise that exceeds the maximum levels allowed shall be avoided, during the breeding seasons for protected avian species such as: *California Gnatcatcher (3/1-8/15)*; *Least Bell's vireo (3/15-9/15)*; and *Southwestern Willow Flycatcher (5/1-8/30)*. If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys shall be required in order to determine species presence/absence. When applicable, adequate noise reduction measures shall be incorporated. Upon project submittal EAS shall determine which of the following project specific avian protocol surveys shall be required.

COASTAL CALIFORNIA GNATCATCHER

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MARCH 1 AND AUGUST 15, THE BREEDING SEASON OF THE COASTAL CALIFORNIA GNATCATCHER, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- a. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE HABITAT AREAS WITHIN ADJACENT TO THE MHPA THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE COASTAL CALIFORNIA GNATCATCHER. SURVEYS FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. IF GNATCATCHERS ARE PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MARCH 1 AND AUGUST 15, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED GNATCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

1. BETWEEN MARCH 1 AND AUGUST 15, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED GNATCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION

ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

2. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE COASTAL CALIFORNIA GNATCATCHER. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (AUGUST 16).

* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

- b. IF COASTAL CALIFORNIA GNATCATCHERS ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 1 AND AUGUST 15 AS FOLLOWS:

1. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR COASTAL CALIFORNIA GNATCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
2. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

LEAST BELL'S VIREO (State Endangered/Federally Endangered)

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MARCH 15 AND SEPTEMBER 15, THE BREEDING SEASON OF THE LEAST BELL'S VIREO, UNTIL THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- A. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE WETLAND AREAS THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE LEAST BELL'S VIREO. SURVEYS FOR THE THIS SPECIES SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF THE LEAST BELL'S VIREO IS PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MARCH 15 AND SEPTEMBER 15, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED LEAST BELL'S VIREO HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

BETWEEN MARCH 15 AND SEPTEMBER 15, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED LEAST BELL'S VIREO OR HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF ANY OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED

UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR

AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN, NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE LEAST BELL'S VIREO. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED

TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (SEPTEMBER 16).

* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. IF LEAST BELL'S VIREO ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MARCH 15 AND SEPTEMBER 15 AS FOLLOWS:

- I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR LEAST BELL'S VIREO TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
- II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

SOUTHWESTERN WILLOW FLYCATCHER (Federally Endangered)

1. Prior to the first reconstruction meeting, the City Manager (or appointed designee) shall verify that the following project requirements regarding the southwestern willow flycatcher are shown on the construction plans:

NO CLEARING, GRUBBING, GRADING, OR OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR BETWEEN MAY 1 AND SEPTEMBER 1, THE BREEDING SEASON OF THE SOUTHWESTERN WILLOW FLYCATCHER, UNTIL

THE FOLLOWING REQUIREMENTS HAVE BEEN MET TO THE SATISFACTION OF THE CITY MANAGER:

- A. A QUALIFIED BIOLOGIST (POSSESSING A VALID ENDANGERED SPECIES ACT SECTION 10(a)(1)(A) RECOVERY PERMIT) SHALL SURVEY THOSE WETLAND AREAS THAT WOULD BE SUBJECT TO CONSTRUCTION NOISE LEVELS EXCEEDING 60 DECIBELS [dB(A)] HOURLY AVERAGE FOR THE PRESENCE OF THE SOUTHWESTERN WILLOW FLYCATCHER. SURVEYS FOR THIS SPECIES SHALL BE CONDUCTED PURSUANT TO THE PROTOCOL SURVEY GUIDELINES ESTABLISHED BY THE U.S. FISH AND WILDLIFE SERVICE WITHIN THE BREEDING SEASON PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. IF THE SOUTHWESTERN WILLOW FLYCATCHER IS PRESENT, THEN THE FOLLOWING CONDITIONS MUST BE MET:

BETWEEN MAY 1 AND SEPTEMBER 1, NO CLEARING, GRUBBING, OR GRADING OF OCCUPIED SOUTHWESTERN WILLOW FLYCATCHER HABITAT SHALL BE PERMITTED. AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; AND

BETWEEN MAY 1 AND SEPTEMBER 1, NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN ANY PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES WOULD RESULT IN NOISE LEVELS EXCEEDING 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED SOUTHWESTERN WILLOW FLYCATCHER HABITAT. AN ANALYSIS SHOWING THAT NOISE GENERATED BY CONSTRUCTION ACTIVITIES WOULD NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF OCCUPIED HABITAT MUST BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE CITY MANAGER AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES DURING THE BREEDING SEASON, AREAS RESTRICTED FROM SUCH ACTIVITIES SHALL BE STAKED OR FENCED UNDER THE SUPERVISION OF A QUALIFIED BIOLOGIST; OR AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A QUALIFIED ACOUSTICIAN,

NOISE ATTENUATION MEASURES (e.g., BERMS, WALLS) SHALL BE IMPLEMENTED TO ENSURE THAT NOISE LEVELS RESULTING FROM CONSTRUCTION ACTIVITIES WILL NOT EXCEED 60 dB(A) HOURLY AVERAGE AT THE EDGE OF HABITAT OCCUPIED BY THE SOUTHWESTERN WILLOW FLYCATCHER. CONCURRENT WITH THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND THE CONSTRUCTION OF NECESSARY NOISE ATTENUATION FACILITIES, NOISE MONITORING* SHALL BE CONDUCTED AT THE EDGE OF THE OCCUPIED HABITAT AREA TO ENSURE THAT NOISE LEVELS DO NOT EXCEED 60 dB(A) HOURLY AVERAGE. IF THE NOISE ATTENUATION TECHNIQUES IMPLEMENTED ARE DETERMINED TO BE INADEQUATE BY THE QUALIFIED ACOUSTICIAN OR BIOLOGIST, THEN THE ASSOCIATED CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL SUCH TIME THAT ADEQUATE NOISE ATTENUATION IS ACHIEVED OR UNTIL THE END OF THE BREEDING SEASON (SEPTEMBER 1).

* Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. IF SOUTHWESTERN WILLOW FLYCATCHER ARE NOT DETECTED DURING THE PROTOCOL SURVEY, THE QUALIFIED BIOLOGIST SHALL SUBMIT SUBSTANTIAL EVIDENCE TO THE CITY MANAGER AND APPLICABLE RESOURCE AGENCIES WHICH DEMONSTRATES WHETHER OR NOT MITIGATION MEASURES SUCH AS NOISE WALLS ARE NECESSARY BETWEEN MAY 1 AND SEPTEMBER 1 AS FOLLOWS:

- I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR SOUTHWESTERN WILLOW FLYCATCHER TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.
- II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

II. Prior to Start of Construction

A. Preconstruction Meeting

The Qualified Biologist/Owners Representative shall incorporate all MHPA construction related requirements, into the project's Biological Monitoring Exhibit (BME).

The Qualified Biologist/Owners Representative is responsible to arrange and perform a focused pre-con with all contractors, subcontractors, and all workers involved in grading or other construction activities that discusses the sensitive nature of the adjacent sensitive biological resources.

III. During Construction

A. The Qualified Biologist/Owners Representative, shall verify that all construction related activities taking place ~~within~~ or adjacent to the MHPA are consistent with the CDs, the MSCP/MHPA Land Use Adjacency Guidelines. The Qualified Biologist/Owners Representative shall monitor and ensure that:

1. **Land Development /Grading Boundaries** - The MHPA boundary and the limits of grading shall be clearly delineated by a survey crew prior to brushing, clearing, or grading. Limits shall be defined with orange construction fence and a siltation fence (can be combined) under the supervision of the Qualified Biologist/Owners Representative who shall provide a letter of verification to RE/MMC that all limits were marked as required. ~~Within or a~~ Adjacent to the MHPA, all manufactured slopes associated with site development shall be included within the development footprint.
2. **Drainage/Toxics** - No Direct drainage into the MHPA shall occur during or after construction and that filtration devices, swales and/or detention/desiltation basins that drain into the MHPA are functioning properly during construction, and that permanent maintenance after construction is addressed. These systems should be maintained approximately once a year, or as often a needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g. clay compounds) when necessary and appropriate.
3. **Staging/storage, equipment maintenance, and trash** - Identify all areas for staging, storage of equipment and materials, trash, equipment maintenance, and other construction related activities on the monitoring exhibits and verify that they are within the development footprint. Comply with the applicable notes on the plans
4. **Barriers** - New development adjacent to the MHPA provides city approved barriers along the MHPA boundaries
5. **Lighting** - Periodic night inspections are performed to verify that all lighting adjacent to the MHPA is directed away from preserve areas and appropriate placement and shielding is used.
6. **Invasives** - No invasive plant species are used ~~in or~~ adjacent (within 100 feet) to the MHPA ~~and that within the MHPA, all plant species must be native.~~
7. **Brush Management** - BMZ1 is within the development footprint and outside of the MHPA, and that maintenance responsibility for the BMZ 2 located within the MHPA is identified as the responsibility of an HOA or other private entity.
8. **Noise** - For any area of the site that is adjacent to ~~or within~~ the MHPA, construction noise that exceeds the maximum levels allowed, shall be avoided, during the breeding seasons, for protected avian species such as: *California Gnatcatcher* (3/1-8/15); *Least Bell's vireo* (3/15-9/15); and *Southwestern Willow Flycatcher* (5/1-8/30). If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species presence/absence. When applicable, adequate noise reduction measures shall

be incorporated.

IV. Post Construction

A. Preparation and Submittal of Monitoring Report

The Qualified Biologist/Owners Representative shall submit a final biological monitoring report to the RE/MMC within 30 days of the completion of construction that requires monitoring. The report shall incorporate the results of the MMRP/MSCP requirements per the construction documents and the BME to the satisfaction of RE/MMC.

B. HISTORICAL RESOURCES (ARCHAEOLOGY)

Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego Historical Resources Guidelines (HRG). If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search (1/4 mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4 mile radius.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a Precon Meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM)

and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Construction Manager and/or Grading Contractor.

- a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.
 3. Identify Areas to be Monitored
 - b. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
 - c. The AME shall be based on the results of a site specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
 - d. MMC shall notify the PI that the AME has been approved.
 4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as age of existing pipe to be replaced, depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
 5. Approval of AME and Construction Schedule
After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

III. During Construction

A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are

encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
 4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
 4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
 - (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.

- (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
- (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
 - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98) and State Health and Safety Code (Sec. 7050.5) shall be undertaken:

A. Notification

1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the Development Services Department to assist with the discovery notification process.
2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

B. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can

be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.

2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** determined to be Native American
1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
 - c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County.
 - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains are **NOT** Native American
1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of

V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVr and submit to MMC via fax by 8AM of the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction and IV-Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

- A. Submittal of Draft Monitoring Report
1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. **It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe as a result of delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.**
 - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with State of California Department of Parks and Recreation
The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines, and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 4. MMC shall provide written verification to the PI of the approved report.
 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued
 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
 2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV – Discovery of Human Remains, Subsection C.
 3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
 5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC of the approved report.
 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

C. PALEONTOLOGICAL RESOURCES

I. Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the

project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.

2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
 - a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored
 - a. a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
 - b. b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
 - c. c. MMC shall notify the PI that the PME has been approved.
- d. 4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction

documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.

5. Approval of PME and Construction Schedule

After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

III. During Construction

A. Monitor Shall be Present During Grading/Excavation/Trenching

1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**
2. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.
3. The monitor shall document field activity via the Consultant Site Visit Record (CSVr). The CSVr's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.

C. Determination of Significance

1. The PI shall evaluate the significance of the resource.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
 - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to

- (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
 - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
 - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
 - (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching Projects
- The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
 - c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVr and submit to MMC via the RE via fax by 8AM on the next business day.

- b. Discoveries
 - All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.
 - c. Potentially Significant Discoveries
 - If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 - 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
 - C. All other procedures described above shall apply, as appropriate.

V. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring,
 - a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with the San Diego Natural History Museum
 - The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
 - 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 - 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 - 4. MMC shall provide written verification to the PI of the approved report.
 - 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
 - 1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
 - 1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
 - 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 - 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.

4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

D. Final Monitoring Report(s)

1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

D. HISTORICAL RESOURCES (BUILT ENVIRONMENT)

When a future project requires implementation of this mitigation measure, the following paragraph shall be included in the subsequent environmental document and applicable Historic District name, boundary and district guidelines, if applicable shall be inserted as noted below in [brackets]:

The project is located within the [[insert District name]] Historic District, bounded by [[enter District boundary]] All work within the District boundary must be consistent with the City's Historical Resources Regulations, the U.S. Secretary of the Interior's Standards and the [[enter district guidelines if applicable]] District Design Guidelines. The following mitigation measures are required within the District boundary and shall ensure consistency with these regulations, Standards and guidelines.

- A. Prior to beginning any work at the site, a Pre Construction meeting that includes Historic Resources and MMC staff shall be held at the project site to review these mitigation measures and requirements within the District boundary.
- B. A Historic Sidewalk Stamp Inventory prepared by a qualified historic consultant or archaeologist and approved by HRB staff is required prior to the Pre-Construction (Pre-Con) meeting. The Inventory shall include photo documentation of all existing stamps within the project area keyed to a project site plan.
- C. Existing sidewalk stamps shall be preserved in place. Where existing sidewalk stamps must be impacted to accommodate right-of-way improvements, the following actions are required:
 1. A mold of the sidewalk stamp will be made to allow reconstruction of the stamp if destroyed during relocation.
 2. The sidewalk stamp shall be saw-cut to preserve the stamp in its entirety; relocated as near as possible to the original location; and set in the same orientation.
 3. If the sidewalk stamp is destroyed during relocation, a new sidewalk stamp shall be made from the mold taken and relocated as near as possible to the original location and set in the same orientation.
- D. No new sidewalk stamps shall be added by any contractor working on the project.
- E. Existing historic sidewalk, parkway and street widths shall be maintained. Any work that requires alteration of these widths shall be approved by Historic Resources staff.
- F. Existing historic curb heights and appearance shall be maintained. Any work that requires alteration of the existing height or appearance shall be approved by Historic Resources staff.

- G. Sections of sidewalk which may be impacted by the project shall be replaced in-kind to match the historic color, texture and scoring pattern of the original sidewalks. If the original color, scoring pattern or texture is not present at the location of the impact, the historically appropriate color, texture and scoring pattern found throughout the district shall be used.
- H. Truncated domes used at corner curb ramps shall be dark gray in color.
- I. Existing historic lighting, such as acorn lighting shall remain. New lighting shall be consistent with existing lighting fixtures, or fixtures specified in any applicable District Design Guidelines.
- J. Existing mature street trees shall remain. New street trees shall be consistent with the prevalent mature species in the District and/or species specified in any applicable District Design Guidelines.
- K. Any walls located within the right-of-way or on private property are considered historic and may not be impacted without prior review and approval by Historic Resources staff.

VI. PUBLIC REVIEW DISTRIBUTION:

Draft copies or notice of this Mitigated Negative Declaration were distributed to:

United States Government

- Fish and Wildlife Service (23)
- MCAS Miramar (13)
- Naval Facilities Engineering Command Southwest (8)

State of California

- Department of Fish and Game (32A)
- State Clearing House (46)
- Resources Agency (43)
- Native American Heritage Commission (56)
- State Historic Preservation Officer (41)
- Regional Water Quality Control Board (44)
- Water Resources (45)
- Water Resources Control Board (55)
- Coastal Commission (48)
- Caltrans District 11 (31)

County of San Diego

- Department of Environmental Health (75)
- Planning and Land Use (68)
- Water Authority (73)

City of San Diego

- Office of the Mayor (91)
- Council President Young, District 4 (MS 10A)
- Councilmember Lightner, District 1 (MS 10A)
- Councilmember Faulconer, District 2 (MS 10A)
- Councilmember Gloria, District 3 (MS 10A)
- Councilmember DeMaio, District 5 (MS 10A)

Councilmember Zapf, District 6 (MS 10A)
Councilmember Emerald, District 7 (MS 10A)
Councilmember Alvarez, District 8 (MS 10A)
Historical Resource Board (87)
City Attorney (MS 56A)
 Shannon Thomas (MS 93C)
Engineering and Capital Projects
 Marc Cass (MS 908A)
 Allison Sherwood (MS 908A)
 Matthew DeBeliso (MS 908A)
 Akram Bassyouni (MS 908A)
 Michael Ninh (MS 908A)
 Roman Anissi (MS 908A)
 Daniel Tittle (MS 908A)
Development Services Department
 Myra Herrmann (MS 501)
 Kristen Forburger (MS 401)
 Jeanne Krosch (MS 401)
 Kelley Stanco (MS 501)
Library Dept.-Gov. Documents MS 17 (81)
 Balboa Branch Library (81B)
 Beckwourth Branch Library (81C)
 Benjamin Branch Library (81D)
 Carmel Mountain Ranch Branch (81E)
 Carmel Valley Branch Library (81F)
 City Heights/Weingart Branch Library (81G)
 Clairemont Branch Library (81H)
 College-Rolando Branch Library (81I)
 Kensington-Normal Heights Branch Library (81K)
 La Jolla/Riford branch Library (81L)
 Linda Vista Branch Library (81M)
 Logan Heights Branch Library (81N)
 Malcolm X Library & Performing Arts Center (81O)
 Mira Mesa Branch Library (81P)
 Mission Hills Branch Library (81Q)
 Mission Valley Branch Library (81R)
 North Clairemont Branch Library (81S)
 North Park Branch Library (81T)
 Oak Park Branch Library (81U)
 Ocean Beach Branch Library (81V)
 Otay Mesa-Nestor Branch Library (81W)
 Pacific Beach/Taylor Branch Library (81X)
 Paradise Hills Branch Library (81Y)
 Point Loma/Hervey Branch Library (81Z)
 Rancho Bernardo Branch Library (81AA)
 Rancho Peñasquitos Branch Library (81BB)
 San Carlos Branch Library (81DD)
 San Ysidro Branch Library (81EE)
 Scripps Miramar Ranch Branch Library (81FF)

Serra Mesa Branch Library (81GG)
 Skyline Hills Branch Library (81HH)
 Tierrasanta Branch Library (81II)
 University Community Branch Library (81JJ)
 University Heights Branch Library (81KK)
 Malcolm A. Love Library (457)

Other Interested Individuals or Groups

Community Planning Groups

Community Planners Committee (194)
 Balboa Park Committee (226 + 226A)
 Black Mountain Ranch –Subarea I (226C)
 Otay Mesa - Nestor Planning Committee (228)
 Otay Mesa Planning Committee (235)
 Clairemont Mesa Planning Committee (248)
 Greater Golden Hill Planning Committee (259)
 Serra Mesa Planning Group (263A)
 Kearny Mesa Community Planning Group (265)
 Linda Vista Community Planning Committee (267)
 La Jolla Community Planning Association (275)
 City Heights Area Planning Committee (287)
 Kensington-Talmadge Planning Committee (290)
 Normal Heights Community Planning Committee (291)
 Eastern Area Planning Committee (302)
 North Bay Community Planning Group (307)
 Mira Mesa Community Planning Group (310)
 Mission Beach Precise Planning Board (325)
 Mission Valley Unified Planning Organization (331)
 Navajo Community Planners Inc. (336)
 Carmel Valley Community Planning Board (350)
 Del Mar Mesa Community Planning Board (361)
 Greater North Park Planning Committee (363)
 Ocean Beach Planning Board (367)
 Old Town Community Planning Committee (368)
 Pacific Beach Community Planning Committee (375)
 Pacific Highlands Ranch – Subarea III (377A)
 Rancho Peñasquitos Planning Board (380)
 Peninsula Community Planning Board (390)
 Rancho Bernardo Community Planning Board (400)
 Sabre Springs Community Planning Group (406B)
 Sabre Springs Community Planning Group (407)
 San Pasqual - Lake Hodges Planning Group (426)
 San Ysidro Planning and Development Group (433)
 Scripps Ranch Community Planning Group (437)
 Miramar Ranch North Planning Committee (439)
 Skyline - Paradise Hills Planning Committee (443)
 Torrey Hills Community Planning Board (444A)
 Southeastern San Diego Planning Committee (449)
 Encanto Neighborhoods Community Planning Group (449A)

College Area Community Council (456)
Tierrasanta Community Council (462)
Torrey Highlands – Subarea IV (467)
Torrey Pines Community Planning Group (469)
University City Community Planning Group (480)
Uptown Planners (498)

Town/Community Councils - PUBLIC NOTICE ONLY

Town Council Presidents Association (197)
Harborview Community Council (246)
Carmel Mountain Ranch Community Council (344)
Clairemont Town Council (257)
Serra Mesa Community Council (264)
Rolando Community Council (288)
Oak Park Community Council (298)
Webster Community Council (301)
Darnell Community Council (306)
La Jolla Town Council (273)
Mission Beach Town Council (326)
Mission Valley Community Council (328 C)
San Carlos Area Council (338)
Ocean Beach Town Council, Inc. (367 A)
Pacific Beach Town Council (374)
Rancho Penasquitos Community Council (378)
Rancho Bernardo Community Council, Inc. (398)
Rancho Penasquitos Town Council (383)
United Border Community Town Council (434)
San Dieguito Planning Group (412)
Murphy Canyon Community Council (463)

Other Interested Individuals or Groups


San Diego Unified Port District (109)
San Diego County Regional Airport Authority (110)
San Diego transit Corporation (112)
San Diego Gas & Electric (114)
Metropolitan Transit Systems (115)
San Diego Unified School District (125/132)
San Ysidro Unified School District (127)
San Diego Community College District (133)
The Beach and Bay Beacon News (137)
Sierra Club (165)
San Diego Canyonlands (165A)
San Diego Natural History Museum (166)
San Diego Audubon Society (167)
Jim Peugh (167A)
California Native Plant Society (170)
San Diego Coastkeeper (173)
Endangered Habitat League (182 and 182A)
South Coastal Information Center @ San Diego State University (210)

San Diego Historical Society (211)
Carmen Lucas (206)
Clint Linton (215b)
San Diego Archaeological Center (212)
Save Our Heritage Organization (214)
Ron Christman (215)
Louie Guassac (215A)
San Diego County Archaeological Society (218)
Kumeyaay Cultural Heritage Preservation (223)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution (NOTICE ONLY 225A-T)
San Diego Historical Society (211)
Theresa Acerro (230)
Unified Port of San Diego (240)
Centre City Development Corporation (242)
Centre City Advisory Committee (243)
Balboa Avenue CAC (246)
Theresa Quiros (294)
Fairmount Park Neighborhood Association (303)
John Stump (304)
San Diego Baykeeper (319)
Debbie Knight (320)
Mission Hills Heritage (497)

VII. RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the draft Mitigated Negative Declaration finding or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.
- (x) Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public input period. The letters and responses follow.

Copies of the draft Mitigated Negative Declaration, the Mitigation, Monitoring and Reporting Program and any Initial Study material are available in the office of the Entitlements Division for review, or for purchase at the cost of reproduction.


Myra Herrmann, Senior Planner
Development Services Department

September 14, 2011
Date of Draft Report

October 24, 2011
Date of Final Report

Analysts; J. Szymanski/M. Herrmann

Attachments:

- Figure 1 - Harbor Drive Pipeline Location Map
 - Figure 2 - Water Group 949 Site 1 Location Map
 - Figure 3- Water Group 949 Site 2 Location Map
 - Figure 4- Water Group 949 Site 3 Location Map
 - Figure 5- Sewer Group 787 Location Map
 - Figure 6- Water Group 914 Location Map
 - Figure 7- Sewer and Water Group 732 Location Map
 - Figure 8- Water Group 949-Site 2 with the MHPA
- Initial Study Checklist



STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouses and Planning Unit



Manuel G. Torres, Sr.
Commissioner

RESPONSE TO COMMENTS

CALIFORNIA STATE CLEARINGHOUSE AND PLANNING UNIT (10/14/2011)

October 14, 2011

Jeffrey Szymanski
City of San Diego
1723 First Avenue, MS-501
San Diego, CA 92101

Subject: Chrysler Pipelines Projects 2011
SCCH#: 2011091042

Dear Jeffrey Szymanski:

The State Clearinghouse submitted the above titled Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Detail Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on October 13, 2011, and the comments from the reviewing agencies (as) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within the area of jurisdiction of the agency or which are required to be carried out or approved by the agency. These comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification on the enclosed comments, we recommend that you contact the reviewing agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 444-6613 if you have any questions regarding the environmental review process.

Sincerely,


Scott Metzger
Director, State Clearinghouses

Enclosure
cc: Resources Agency

160 TWENTY STREET, 2ND, BOX 504, SACRAMENTO, CALIFORNIA 95812-0044
TEL: (916) 445-0913 FAX: (916) 445-0915

I. Comment acknowledged no response is necessary.

2011 Clean Water Act Data

SC# 2011091043
 Project Title Citywide Pipeline Projects 2011
 Lead Agency San Diego, City of

RESPONSE TO COMMENTS

CALIFORNIA STATE CLEARING HOUSE AND PLANNING UNIT (08/14/2011)

Type MND **Highways** **Designation** **Construction**
Description Consent Approval to allow the replacement, rehabilitation, relocation, extension, joint repair, new trenching, trench construction, and abandonment of water and/or sewer alignments and associated improvements such as curb ramps, sewer lateral connections, water service connections, manholes, new pavement/facility, the removal and/or replacement of street trees and the removal and/or replacement of street lights. The construction includes grading areas and other areas (such as access) should be located within the City of San Diego Public Right-of-Way and/or within public easements. The proposed may include planned pipeline construction with private easements from the ROW to the service connections. A signed agreement between the City and the property owner would be required for work conducted on private property. Project types that would be included in this analysis consisted of repair and water group jobs, tank repairs, large diameter water pipeline projects, manholes and other necessary improvements. All associated equipment would be staged in existing right-of-ways adjacent to the proposed work areas. The proposed project would not impact Sensitive Biological Resources or Environmentally Sensitive Lands (ESL) as defined by the Land Development Code and would not encroach on the City's Multi-Habitat Planning Area (MHPA). Applicant: The City of San Diego Engineering and Capital Projects Department AND Public Utilities Department.

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Lead Agency Contact
Name Jeffrey Szemanski
Agency City of San Diego
Phone 619 445 5324
email
Address 1222 East Avenue, MS-501
City San Diego **State** CA **Zip** 92101
Fax

Project Location
County San Diego
City San Diego
Region
East/West Citywide
Cross Streets
Parcel No.
Township **Range** **Section** **Base**

Proximity to:
Highways
Airports
Railways
Waterways
Schools
Land Use Citywide

Project Issues Archeological-Historical Landmark, Other Issues
Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Culture, Division of Archaeology; California Highway Patrol; California, District 11; CA Department of Public Health; State Water Resources Control Board, Division of Financial Assistance; Regional Water Quality Control Board, Region 9; Native American Heritage Commission; Public Utilities Commission

Note: Blank in data fields result from restricted information provided by lead agency.

State Clearinghouse Data Base

Date Received 03/14/2011 Start of Review 03/14/2011 End of Review 10/13/2011

RESPONSE TO COMMENTS

CALIFORNIA STATE CLEARING HOUSE AND PLANNING UNIT (10/14/2011)

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Note: Blanks in data fields represent insufficient information provided by lead agency.

DEPARTMENT OF TRANSPORTATION
DISTRICT 11
PLANNING DIVISION
4255 TAYLOR STREET, MS 240
SAN DIEGO, CA 92116
PHONE (619) 688-0967
FAX (619) 688-4239
TTY 711
www.dot.ca.gov



File your permit
in the correct district!

RECEIVED
SEP 29 2011
STATE CLEARING HOUSE

September 28, 2011

Mr. Jeffrey Szymanski
City of San Diego Development Services Center
1222 First Avenue MS 501
San Diego, CA 92101

11-SD-Var
PM Var/our
Citywide Pipeline Projects 2011
SCM# 2011091045

clear project

Dear Mr. Szymanski:

The California Department of Transportation (Caltrans) appreciates the opportunity to comment on the Draft Mitigated Negative Declaration (MND) for the North-South District Interconnection System Project (Project). The project is identified in the MND to cross State Route 52 (SR-52) and State Route 94 (SR-94). Caltrans would like to submit the following comments:

2. Any work performed within Caltrans Right-of-Way (R/W) will require an approved encroachment permit by Caltrans. All Caltrans standards for utility encroachments shall be met.

3. Additionally, any work performed within Caltrans R/W must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. If these materials are not included with the encroachment permit application, the applicant will be required to acquire and provide these to Caltrans before the permit application will be accepted. Identification of avoidance and/or mitigation measures will be a condition of the encroachment permit approval as well as procurement of any necessary regulatory and resource agency permits.

Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised for all encroachment permits.

If you have any questions on the comments Caltrans has provided, please contact Marisa Hampton of the Development Review Branch at (619) 688-6954.

Sincerely,

JACOB ARMSTRONG, Chief
Development Review Branch

Caltrans improves mobility across California

RESPONSE TO COMMENTS

DEPARTMENT OF TRANSPORTATION (9/28/2011)

- The comment letter has been forwarded to the applicant department and it is acknowledged that any work conducted within the Caltrans R/W will require an approved encroachment permit by Caltrans.
- The applicant department acknowledges that they must provide the certified CEQA document to Caltrans prior to the approval of an encroachment permit.

NATIVE AMERICAN HERITAGE COMMISSION

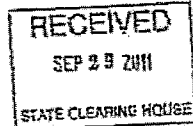
111 BARTON MALL, ROOM 304
 OAKLAND, CA 94612
 (415) 833-4301
 Fax: (415) 842-4300
 Web Site: www.nahc.org
 us_nahc@stateofcal.org

clear
 10/13/2011
 8



September 27, 2011

Mr. Jeffrey Szymanski, Environmental Planner
 City of San Diego Development Services Department
 1222 First Avenue, MS 501
 San Diego, CA 92101



Re: SCH#2011091045: CEQA Notice of Completion, proposed Mitigated Negative Declaration for the "Citywide Pipeline Projects 2011, City Project No. 255100," located in the City of San Diego, San Diego County, California.

Dear Mr. Szymanski:

The Native American Heritage Commission (NAHC), the State of California "Trustee Agency" for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21870 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 804). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as "consulting parties" under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

4. The California Environmental Quality Act (CEQA—CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a "significant effect" requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the "area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: Native American cultural resources were identified in several areas of the City of San Diego.

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

5. Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you

RESPONSE TO COMMENTS

NATIVE AMERICAN HERITAGE COMMISSION (9/29/2011)

4. Comment noted. Staff acknowledges that Native American cultural resources have been identified within several areas of the City of San Diego. Archaeological and Native American monitoring has been included as mitigation within the MND and would preclude a substantial adverse change in the significance of historical resources.
5. Comment noted. The draft MND was sent to all individuals on the recommended list from the NAHC, with the exception of the Inter-Tribal Cultural Resource Council. This new group will be included in the distribution of the final MND and will also added to the City's list for distribution of draft environmental documents which include a discussion of archaeological and/or Native American cultural resources.

RESPONSE TO COMMENTS

NATIVE AMERICAN HERITAGE COMMISSION (9/29/2011) continued

make contact with the list of Native American Contacts on the attached list of Native American contacts. To see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.55, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends avoidance as defined by CEQA Guidelines §15270(d) in pursuing a project that would damage or destroy Native American cultural resources and Section 21053.2 that requires documentation, data recovery of cultural resources.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 et seq.), 36 CFR Part 800.3 (f) (2) & 5, the President's Council on Environmental Quality (CEQ), 42 U.S.C. 4371 et seq. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 Secretary of the Interior's Standards for the Treatment of Historic Properties were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Order No. 11593 (Preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's Standards include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to 'research' the cultural landscape that might include the 'area of potential effect.'

Confidentiality of historic properties of religious and cultural significance should also be considered as protected by California Government Code §8254 (1) and may also be protected under Section 804 of the NHPA or at the Secretary of the Interior's discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibly threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.56, California Government Code §37491 and Health & Safety Code Section 7050.5 provides for provisions for accidentally discovered archeological resources during construction and mandates the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (516) 653-9261.

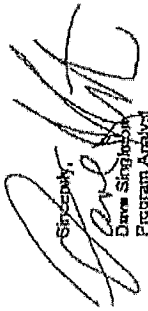
2

- 6. Please see Response to Comment 5. In addition, the MND includes mitigation requirements that would require the preparation of background research including a 1/4 mile radius archeological record search at the South Central Information Center prior to the commencement of construction. The record search of the surrounding area would provide the historic context and inform the consultant of the cultural landscape for the APE of the project.
- 7. Comment acknowledged.
- 8. Please see Section III and IV of the MMRP under Historical Resources (Archaeology). Mitigation measures are in place in case of discovery of human remains and archaeological resources during construction that would ensure compliance with Public Resources Code Section 5097.56, California Government Code §27491 and Health and Safety Code Section 7050.5
- 9. Comment noted. The City has gone to great efforts to establish and maintain productive working relationships with the Native American community.

RESPONSE TO COMMENTS

NATIVE AMERICAN HERITAGE COMMISSION (9/29/2011) continued

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Dave Singh
Program Analyst

CC: Sisk/ Clearinghouse

Attachment: Native American Contact List

NAIVE AMERICAN HERITAGE COMMISSION (9/29/2011) continued

Jamul Indian Village
Kenneth Mezz, Chairperson
P.O. Box 612
Jamul, CA 91936
jamulrez@sctdv.net
(619) 869-4785
(619) 869-48178 - Fax

Inaja Band of Mission Indians
Rebecca Osuna, Spokesperson
2005 S. Escondido Blvd.
Escondido, CA 92025
(760) 737-7828
(760) 747-8568 Fax

Mesa Grande Band of Mission Indians
Mark Romero, Chairperson
P.O. Box 270
Santa Ysabel, CA 92070
mesagrandeband@msn.com
(760) 762-3818
(760) 782-9692 Fax

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road
Lakeside, CA 92040
(619) 742-5587 - cell
(619) 742-5587
(619) 443-0861 FAX

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Kumeyaay Cultural Heritage Preservation
Paul Cuero
36190 Church Road, Suite 5
Campo, CA 91906
(619) 478-9048
(619) 478-8505
(619) 478-5818 Fax

Ewilaapaayn Tribal Office
WJB Micklin, Executive Director
4054 Willows Road
Alpine, CA 91901
wmicklin@learningrock.net
(619) 445-6315 - voice
(619) 445-9125 - fax

Kwaaymil Laguna Band of Mission Indians
Carmen Lucas
P.O. Box 775
Pine Valley, CA 91962
(619) 709-4207

Ewilaapaayn Tribal Office
Michael Garcia, Vice Chairperson
4054 Willows Road
Alpine, CA 91901
michaeltg@learningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

This is current only as of the date of this document.

Liability of this Act does not relieve any person of the statutory responsibility as defined in Section 1099.2 of the Health and Safety Code, (Title 17) 17.99 of the Public Resources Code and Section 5097.2 of the Public Resources Code.

This Act is applicable for contacting local Native Americans with regard to cultural resources for the proposed
ICR#20110918AR, CEQA, Notice of Contingency, proposed Biological Negative Declaration for the Citywide Pipelines Projects 2011; located
in the City of San Diego, San Diego, California.

NATIVE AMERICAN CONTACTS
San Diego County
September 27, 2011

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road Diegueno
Lakeside, CA 92040
we@barona-nsn.gov
(619) 443-6512
619-443-0681

Sycuan Band of the Kumeyaay Nation
Denny Tucker, Chairperson
5459 Sycuan Road Diegueno/Kumeyaay
El Cajon, CA 92021
sstiya@sycuan-nsn.gov
(619) 445-2613
619 445-1927 Fax

La Posta Band of Mission Indians
Dwandelyn Parada, Chairperson
PO Box 1120 Diegueno/Kumeyaay
Boulevard, CA 91905
jparada@lapostacasino.
(619) 478-2113
619-478-2125

Viejas Band of Kumeyaay Indians
Anthony R. Pico, Chairperson
PO Box 908 Diegueno/Kumeyaay
Alpine, CA 91903
jrothaufr@viejas-nsn.gov
(619) 445-3810
(619) 445-5337 Fax

San Pasqual Band of Mission Indians
Allen E. Lawson, Chairperson
PO Box 365 Diegueno
Valley Center, CA 92082
allen@sanpasqualband.com
(760) 749-3200
(760) 749-3876 Fax

Kumeyaay Cultural Historic Committee
Ron Christman
56 Viejas Grade Road Diegueno/Kumeyaay
Alpine, CA 92001
(619) 445-0385

Ipoy Nation of Santa Ysabel
Virgil Perez, Spokesman
PO Box 130 Diegueno
Santa Ysabel, CA 92076
brandietaylor@yahoo.com
(760) 765-0845
(760) 765-0320 Fax

Campo Kumeyaay Nation
Monique LaChappa, Chairperson
38190 Church Road, Suite 1 Diegueno/Kumeyaay
Campo, CA 91905
mlachappa@campo-nsn.gov
(619) 478-9048
(619) 478-5818 Fax

RESPONSE TO COMMENTS

NATIVE AMERICAN HERITAGE COMMISSION (9/29/2011) continued

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This list is current only as of the date of this document.

Publication of this list does not relieve any person of the audatory responsibility as defined in Section 7000.6 of the Health and Safety Code, Section 2097.94 of the Public Resources Code and Section 6007.25 of the Public Resources Code.

This list is applicable for connecting local Native Americans with regard to cultural resources for the proposed CHS&I 109104; CESA Notice of Completion; proposed mitigation (Mitigation Negative Declaration for the Citywide Pipelines Project 2011) located in the City of San Diego; San Diego California.



Water Boards

State Water Resources Control Board

OCT 10 2011

Jeffrey Szymanski, Associate Planner
City of San Diego, Development Services Department
1222 First Avenue MS 501
San Diego, CA 92101

Dear Mr. Szymanski,

IS/MND FOR THE CITY OF SAN DIEGO (CITY); CITYWIDE PIPELINE PROJECTS 2011
(PROJECT); SAN DIEGO COUNTY; STATE CLEARINGHOUSE NO.2011091046

We understand the City may be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project. As a funding agency and a State agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information for the environmental document prepared for the Project.

10 Please provide us with the following documents applicable to the Proposed Project: (1) 2 copies of the draft and final IS/MND; (2) the resolution adopting/ certifying the IS/MND making California Environmental Quality Act (CEQA) findings; (3) all comments received during the review period and the City's responses to those comments; (4) the adopted Mitigation Monitoring and Reporting Program; and (5) the Notice of Determination filed with the Governor's Office of Planning and Research State Clearinghouses. In addition, we would appreciate notices of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board.

The State Water Board, Division of Financial Assistance, is responsible for administering CWSRF funds. The primary purpose for the CWSRF Program is to implement the Clean Water Act and various state laws by providing financial assistance for wastewater treatment facilities necessary to prevent water pollution, recycle water, correct nonpoint source and storm drainage pollution problems, and provide for sanitary enhancement and thereby protect and promote health, safety and welfare of the inhabitants of the state. The CWSRF Program provides low-interest funding equal to one-half the most recent State General Obligation Bond Rates with a 20-year term. Applications are accepted and processed continuously. Please refer to the State Water Board's CWSRF website at www.waterboards.ca.gov/water_issues/programs/grants_loans/funding/index.shtml.

The CWSRF Program is partially funded by the U.S. Environmental Protection Agency and requires additional "CEQA-Plus" environmental documentation and review. Four enclosures are included that further explain the environmental review process and some additional Federal requirements in the CWSRF Program. The State Water Board is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF funding commitment for the proposed Project.

Christine E. Hopkins, Executive Director | Technical Services, Regulatory Operations
12001 Camino del Rio North, Suite 1000, San Diego, California, CA 92108 | christine.hopkins@swrcb.ca.gov

D:\mms\j\w\w

RESPONSE TO COMMENTS

STATE WATER RESOURCES CONTROL BOARD (9/10/2011)

10. This comment does not address the adequacy of the CEQA document, therefore no response is necessary. The comment letter has been forwarded to the applicant City Department that is preparing the "CEQA-Plus" materials required for the CWSRF Program.

Mr. Jeffrey Szymanski

- 2 -

RESPONSE TO COMMENTS

It is important to note that prior to a CWSRF funding commitment, projects are subject to provisions of the Federal Endangered Species Act, and must obtain Section 7 clearance from the U.S. Fish and Wildlife Service (USFWS), and/or National Marine Fisheries Service (NMFS) for any potential effects to special status species. Please be advised that the State Water Board will consult with USFWS and/or NMFS regarding all federal special status species the Project has the potential to impact if the Project is to be funded under the CWSRF Program.

The City will need to identify whether the Project will involve any direct effects from construction activities or indirect effects, such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur on-site, in the surrounding areas, or in the service area, and to identify applicable conservation measures to reduce such effects.

In addition, CWSRF projects must comply with federal laws pertaining to cultural resources, specifically Section 106 of the National Historic Preservation Act. The State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board's Cultural Resources Officer (CRO) must consult directly with the California State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant. Please contact the CRO, Ms. Debbie Hill, at (818) 347-5650, to find out more about the requirements, and to initiate the Section 106 process if the City decides to pursue CWSRF financing. Note that the City will need to identify the Area of Potential Effects (APE), including construction and staging areas and the depth of any excavation. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The records search request should be made for an area larger than the APE. The appropriate area varies for different projects but should be drawn large enough to provide information on what types of sites may exist in the vicinity.

Other federal requirements pertinent to the Project under the CWSRF Program include the following:

- A. Compliance with the federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (c) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, or severe (if applicable); (d) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.
- B. Compliance with the Coastal Zone Management Act: Identify whether the Project is within a coastal zone and the status of any coordination with the California Coastal Commission.
- C. Protection of Wetlands: Identify any portion of the proposed Project area that may contain areas that should be evaluated for wetlands or U.S. waters delineation by the U.S. Army Corps of Engineers (USACE), or require a permit from the USACE, and identify the status of coordination with the USACE.
- D. Compliance with the Migratory Bird Treaty Act: List any birds protected under this Act that may be impacted by the Project and identify conservation measures to minimize impacts

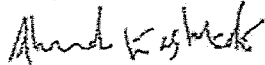
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RESPONSE TO COMMENTS

The State Water Board has no comments at this time. Thank you for the opportunity to review the City's IS/MND. If you have any questions or concerns, please feel free to contact me at (916) 341-5855 or akashkofi@waterboards.ca.gov, or Terry Singleton at (916) 341-5888 or TSingleton@waterboards.ca.gov.

STATE WATER RESOURCES CONTROL BOARD (9/10/2011)

Sincerely,



Ahmad Kashkoff
Environmental Scientist

cc: State Clearinghouse w/o enclosures
(Re: SCH# 2011091045)
P. O. Box 3044
Sacramento, CA 95812-3044

bcc: Lisa Lee, DFA
Cookie Him, DFA
Ahmad Kashkoff, DFA
Pete Mizera, DFA

Enclosures (4)

1. SRF & CEQA-Plus Requirements
2. Quick Reference Guide to CEQA Requirements for State Revolving Fund Loans
3. Instructions and Guidance for "Environmental Compliance Information"
4. Basic Criteria for Cultural Resources Reports

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Edmund G. Brown, Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Kee Alex
Director

RESPONSE TO COMMENTS

CALIFORNIA STATE CLEARING HOUSE AND PLANNING UNIT (10/14/2011)

October 14, 2011

Jeffrey Szymanski
City of San Diego
1221 First Avenue, MS-S01
San Diego, CA 92101

Subject: Citywide Pipeline Project 2011
SCUP#: 2011091043

Dear Jeffrey Szymanski:

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on October 13, 2011. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2011091043) when contacting this office.

Sincerely,

Kee Alex
Director, State Clearinghouse

Enclosures
cc: Resource Agency

11. The City acknowledges that the comment letter from The California Department of Fish and Game (CDFG) was received after the end of the state review period ended.
12. The City responses to the CDFG comment letter are included herein.

1600 MARKET STREET, P.O. BOX 3044, SACRAMENTO, CALIFORNIA 95832-3044
TEL (916) 445-0613 FAX (916) 445-0615 www.opwr.ca.gov



State of California - The Natural Resources Agency
 DEPARTMENT OF FISH AND GAME
 South Coast Region
 3883 Ruffin Road
 San Diego, CA 92123
 (858) 487-4201
 www.dfg.ca.gov

EDMUND G. BROWN, JR. Governor
 CHARLTON H. BONHAM, Director



late
 10/13/2011
 e

RECEIVED
 OCT 14 2011
 STATE CLEARING HOUSE

October 11, 2011

Mr. Jeffery Szymanski
 City of San Diego
 Development Services Center
 1222 First AVENUE, MS 501
 San Diego, CA 92101

Subject: Comments on the Draft Mitigated Negative Declaration for Citywide Pipeline Projects, City of San Diego, San Diego County, California (Project No. 255400; SCH #2011091045)

Dear Mr. Szymanski:

The Department of Fish and Game (Department) has reviewed the above-referenced draft Mitigated Negative Declaration (MND), dated September 14, 2011. The comments provided herein are based on information provided in the draft MND, our knowledge of sensitive and declining vegetation communities in the County of San Diego, and our participation in regional conservation planning efforts.

The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines §16386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines Section 15384 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code §2050 et seq.) and Fish and Game Code Section 1800 et seq. The Department also administers the Natural Community Conservation Planning Program (NCCP). The City of San Diego (City) participates in the NCCP program by implementing its approved Multiple Species Conservation Program (MSCP) Subarea Plan.

The proposed project covers five near-term pipeline projects (Harbor Drive Pipeline, Water Group 848, Sewer Group 737, Water Group 814, and Sewer/Water Group 732), as well as any subsequent future pipeline projects. The project description specifies that the construction footprint for a typical pipeline project, including staging areas and other areas (such as access) would be located within City Public Right-of-Way (PROW) and/or within public easements and may include planned pipeline construction with private easements from the PROW to the service connection. The types of projects evaluated in the analysis consists of sewer and water group jobs, trunk sewers, large diameter water pipeline projects, manholes and other necessary appurtenances. The project scope defines that all associated equipment would be staged in existing PROW adjacent to the proposed work area(s). The project analysis concludes that no impact would occur to Sensitive Biological Resources or Environmentally Sensitive Lands as defined by the Land Development Code and the project would not encroach into the City's Multi-Habitat Planning Area (MHPA).

Conserving California's Wildlife Since 1870

RESPONSE TO COMMENTS

CALIFORNIA DEPARTMENT OF FISH AND GAME (10/13/2011)

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We offer our recommendations and comments to assist the City in avoiding, minimizing, and adequately mitigating project related impacts to biological resources, and to ensure that the project is consistent with ongoing regional habitat planning efforts.

1. The initial study references that along with the environmental analysis that covers the five near-term pipeline projects, any subsequent future pipeline projects would be reviewed for consistency with the analysis covered in the Citywide Pipelines Project MND. Further, the initial study states "where it can be determined that the project is 'related' with the MND and no additional potential significant impacts would occur pursuant to State CEQA Guidelines §15162 (i.e., the involvement of new-identified environmental effects of a substantial increase in the severity of previously identified effects) or if the project would result in minor structural changes or additions, then an Addendum to this MND would be prepared pursuant to §15164. Where future projects are found not to be consistent with this MND, then a new Initial Study and project specific MND shall be prepared." From a substantive and procedural context of CEQA, the Department considers the application of all forthcoming analysis covering any subsequent future pipeline projects as being upon the project MND; consequently we consider the City's environmental determination problematic. Lacking supplemental guidance from the lead agency, the Department interprets this approach as essentially "tether" upon this MND as all similar types of future pipeline projects "will be processed under an addendum to the adopted document. If it is the City's intent to tie upon this MND and apply it to those future pipeline projects, we would focus attention to CEQA Guidelines, Section 15162(b) and Public Resources Code, Sections 21063-21064, which address tiering as being appropriate when the sequence of analysis is from an environmental impact report (EIR) prepared for a general plan, policy, or program to an EIR or negative declaration for another plan, policy or program of lesser scope, or to a site-specific EIR or negative declaration. Additionally, we would highlight Public Resources Code, Section 21166 which precludes any future projects with significant impact from being processed under the relevant CEQA sections cited above, the City's approach to essentially "tie" upon this MND has not been fully supported in the analysis. The presumption provided in the initial study is that at the time when the City can determine that any forthcoming project is "consistent" with the baseline analysis provided in the project MND, any subsequent CEQA analysis/processing would be limited to preparing an Addendum to this MND. In contrast, when considering CEQA Guidelines, Section 15162(a), we believe that it has been misapplied as currently explained in the processing guidelines provided in this MND (i.e., §15162 is being applied to cover future projects when clearly the intent of §15162 is limited to a single project). Therefore, we request that the City reevaluate the statutory mandates under the CEQA and the circumstances for when any subsequent future pipeline projects could be processed from an adopted environmental document.

2. The biological resources analysis determined that for those five near-term projects that are located within the public right-of-way no significant project-related impacts on biological resources would occur. Consistent with CEQA, as evidenced on a complete and accurate description of the "environmental setting" that may be affected by the proposed project. We feel there is limited information in subsequently deriving (1) over-all width of the ROW (e.g., are there areas of the ROW that extend outside existing paved roadways); (2) proximity to environmentally sensitive lands to the ROW; and (3) accurate environmental baseline conditions of all proposed staging areas (which should include a qualified biologist evaluating these existing site conditions). Absent a complete and accurate description of the existing physical conditions in and around all of the projects, we believe relying on the current environmental determination in this MND could result in an incomplete or inaccurate

RESPONSE TO COMMENTS

CALIFORNIA DEPARTMENT OF FISH AND GAME (10/13/2011) continued

The discussion within CEQA Guidelines section 15152(b) discusses timing documents in terms of EIRs; however, the section does not definitively state that timing documents require the preparation of an EIR, and often times the term EIR is used interchangeably to refer to MNDs and NDs. (See also Guidelines section 15152 (b): "Agencies are encouraged to tier the environmental analysis which they prepare for separate but related projects...") Please refer to CEQA Guidelines section 15064 (Determining the Significance of the Environmental Effects Caused by a Project) which clearly states when the preparation of an EIR would be required. In accordance with CEQA Guidelines section 15064(b)(1) a final EIR is prepared when there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment. Guidelines section 15064 (b)(2) also provides: "(3) If the lead agency determines there is no substantial evidence that the project may have a significant effect on the environment, the lead agency shall prepare a negative declaration (Pendant of E Street v. City of Hayward (1980) 106 Cal. App. 3d 988).

In accordance with CEQA Guidelines section 15063 the City conducted an Initial Study of the Citywide Pipeline project and it was determined that the project, with mitigation, would not result in significant unmitigated impacts and an MND was prepared.

In addition, the comment letter from CDFG states that Public Resources Code, section 21166 precludes future projects with significant impacts from tiering. As mentioned above, an Initial Study was conducted and significant impacts were not identified which could not be mitigated to below a level of significance.

The MND analyzes Citywide pipeline projects on a "pro granular" level (i.e., as a whole at a broad level of detail), but also analyzes the proposed projects on a site-specific basis where appropriate. As stated in the draft MND subsequent pipeline projects located within the developed public right of way will be reviewed and where it can be determined that the project is consistent with the MND pursuant to CEQA Guidelines section 15162, any necessary CEQA document will be prepared or if the project would result in minor structural changes or additions, then an Addendum to this MND would be prepared pursuant to CEQA Guidelines section 15164. Pursuant to CEQA Guidelines section 15162 the Lead Agency has the ability to analyze proposed projects with previously certified environmental documents and neither CEQA Guidelines sections 15162 or 15164 limit the application to an individual project. In fact, CEQA Guidelines section 15162 (b) states: "If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation."

The City has utilized this procedure numerous times in the past without challenge. We note that CDFG has used the programmatic MND procedure in the past as well. However, we welcome your additional input on this issue as we continue to evaluate the statutory mandates under CEQA and the circumstances for when any subsequent future pipeline projects could be processed from an approved environmental document as you requested we do in your October 11, 2011 comment letter.

CALIFORNIA DEPARTMENT OF FISH AND GAME (10/13/2011) continued

analysis of project-related environmental impacts by the City. Also, the Initial Study discusses that near-term projects may be located in close proximity to, or adjacent to the City's MHPA, but not within the MHPA. The CEQA is intended to foster informed public decision making, therefore we believe that it would have been appropriate to include corresponding figures in the Initial Study that depict the MHPA boundaries in relationship to all of the anticipated construction-related activities. There is the intent provided in the MND to avoid any direct, indirect and cumulatively significant impacts to environmentally sensitive lands, however whether there is sufficient information provided in the environmental analysis to demonstrate that condition remains in question. Additionally, in evaluating the MHPA Land Use Adjacency Guidelines that were provided in the MND, there are a number of referrals for development within or adjacent to the MHPA. If it is correct that the near-term projects would entirely avoid the MHPA then it appears appropriate for the mitigation language to specifically state that condition.

15. 3. The Initial Study identifies that construction for the near-term projects is anticipated to occur during the daytime hours. Should there be any potential for construction activities to occur during evening hours then the mitigation measures that are currently provided in the MND for addressing indirect effects to MHPA preserve lands should be revised to include conditions that specify that all auxiliary construction-related lighting shall be shielded in proximity to the MHPA.

The Department requests the opportunity to review any revisions to MND prior to finalization to ensure that the comments and recommendations, contained herein, are adequately addressed. We appreciate the opportunity to comment on the MND for this project and to assist the City in further minimizing and mitigating project impacts to biological resources. If you have questions or comments regarding this letter, please contact Paul Schlitt of the Department at (959) 837-5510.

Sincerely,



Edmund Fert
Regional Manager
South Coast Region

cc: State Clearinghouse, Sacramento
Patrick Gower, USFWS, Carlsbad
Paul Schlitt, San Diego

14. The MND and Initial Study Checklist have been updated to include a thorough description of the projects that are adjacent to the MHPA. In addition, a graphic has been added (see Group Job 949 - Site 2 which depicts the project location in relation to the MHPA. The Land Use Adjacency Guidelines (LUAG) provides additional assurances that development adjacent to the MHPA would not result in direct or indirect edge effects from construction related activities. No projects have been or will be implemented under this MND which are within the MHPA. The LUAGL measures would be implemented when a pipeline project is within 100 feet from the edge of the MHPA and would be monitored for compliance by a qualified biological consultant. The MHPA LUAGL measures in the MND have been modified to eliminate references to "within the MHPA." Please note however, that many existing paved public right-of-ways may cross over areas mapped within the MHPA but would not result in any direct impacts to the MHPA. Please note that Sewer Group 7E7, which is adjacent to the MHPA, has been removed from this project.
15. Please see section A. I. 5. of the Land Use MMRP in the MND which requires adequate shielding to protect sensitive habitat. In addition, section A. III. A. 3. of the Land Use MMRP in the MND requires that periodic night inspections be conducted to verify that all lighting adjacent to the MHPA be directed away from the Preserve.



San Diego County Archaeological Society, Inc.

Environmental Review Committee

5 October 2011

SAN DIEGO COUNTY ARCHAEOLOGICAL SOCIETY, INC (10/5/2011)

To: Mr. Jeffrey Szymanski
Development Services Department
City of San Diego
1222 First Avenue, Mail Station 501
San Diego, California 92101

Subject: Draft Mitigated Negative Declaration
Citywide Pipeline Project - 2011
Project No. 256100

Dear Mr. Szymanski:

I have reviewed the subject DMND on behalf of this committee of the San Diego County Archaeological Society.

Based on the information in the DMND and initial study, we have the following comments:

- 16. 1. It is not clear why Water Group 949 does not include archaeological monitoring mitigation measures for some or all of the portions where the line is installed in new trenches.
17. 2. The last sentence of cultural resources mitigation measure IV.5.d appears to be missing one or more words. The portion in question currently reads "...appropriate treatment measures for human remains and buried with Native American human remains..."

Thank you for the opportunity to review and comment upon this DMND.

Sincerely,
James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
FRc

P.O. Box 21108 • San Diego, CA 92128-1108 • (619) 538-0035

- 16. Water Group 949 would be located in three different areas within the City of San Diego: Skyline-Paradise Hills, University/Clairemont Mesa, and Greater Golden Hill/Barrio Logan. New trenching would only occur in the Clairemont Mesa area, and existing previously excavated trenches would be utilized in the Greater Golden Hill/Barrio Logan and Skyline-Paradise Hills areas of the City. The University/Clairemont Mesa area is not located on the City of San Diego's Historical Sensitivity Map and therefore archaeological monitoring would not be required for this project segment. As mentioned previously, the existing trenches would be utilized in the other areas where native soils have already been disturbed. Therefore, archaeological monitoring would not be required in these areas.
17. Comment noted. Staff has reviewed the section from the MMRP and determined that the language in subsection "d" came directly from the Public Resources Code and three words were somehow omitted when this section of the City MMRP was created. The missing words have been added to section IV.C.5.d of the archaeological MMRP and shown in underline format. The master MMRP has been updated and EAS staff have been notified of the revision for future environmental documents.

RINCON BAND OF LUISEÑO INDIANS
Culture Committee

P.O. Box 88 Valley Center 92282 • (909) 297-2621 (760)297-2624 fax



RESPONSE TO COMMENTS

September 26, 2011

RINCON BAND OF LUISEÑO INDIANS (9/28/2011)

To return it may concern

18. On behalf of the Rincon Band of Luiseno Indians, I have received your letter. We thank you for informing us of the projects you propose and for including us in your research for cultural resource identification on the property. However the area is not in the Luiseno Tribe's territory. We highly recommend that you seek the assistance of the tribes that are located in the area of potential effect.

19. Although the Rincon Band of Luiseno Indians does not have cultural significance in this area, we would like to recommend the following guidelines. The first recommendation is to contact the tribes in the territory to receive instructions on how to handle any findings appropriately according their custom and tradition. Second to have Native American site monitors on site to identify artifacts that may be found during any ground disturbance in order to have the artifacts handled with dignity and respect should human remains be discovered follow the California Resource Code 5097.88 and the procedures in this section.

Once again thank you for informing of your project and keeping Native Americans informed of these projects. We wish you success in your endeavor and hope the project is completed with the satisfaction of all parties involved.

Sincerely,

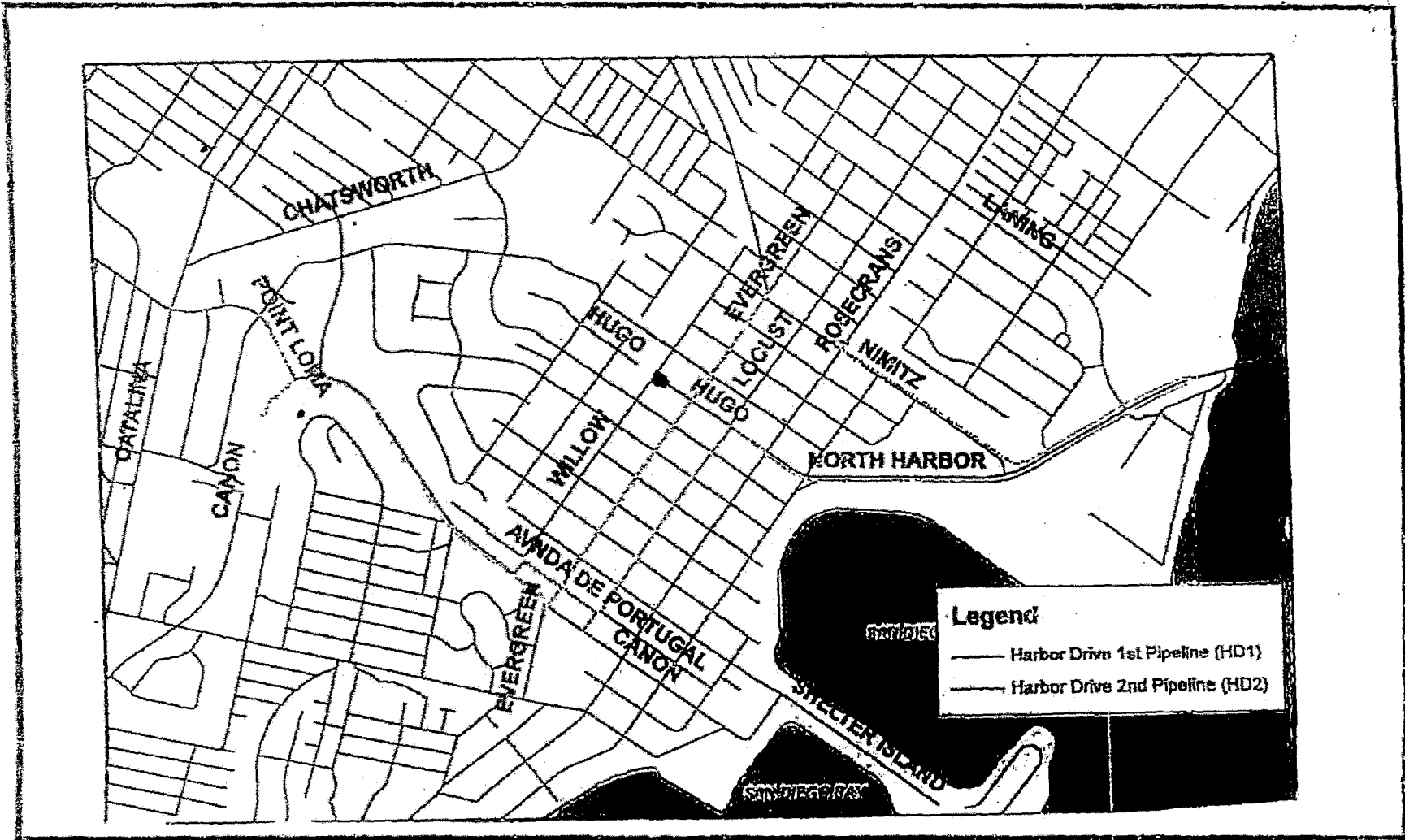
Handwritten signature of Baso Duro.

Baso Duro

Rincon Culture Committee Chair

18. Comment noted. Please see Response to Comment 5. The draft MND was sent to all individuals on the recommended list from the NAHC, with the exception of the Inter-Tribal Cultural Resource Council, this group will be included in the distribution of the final MND.
19. Please see section B of the General Requirements of the MND and Section A. 1. of the Historical Resources section of the MMRP which requires Native American monitors to be present on-site during all construction related activities.

Bo Mazzoni Tribal Council	Stephanie Spencer Vice Chairwoman	Charlie Kolb Council Member	Steve Stallings Council Member	Laurie Gonzalez Council Member
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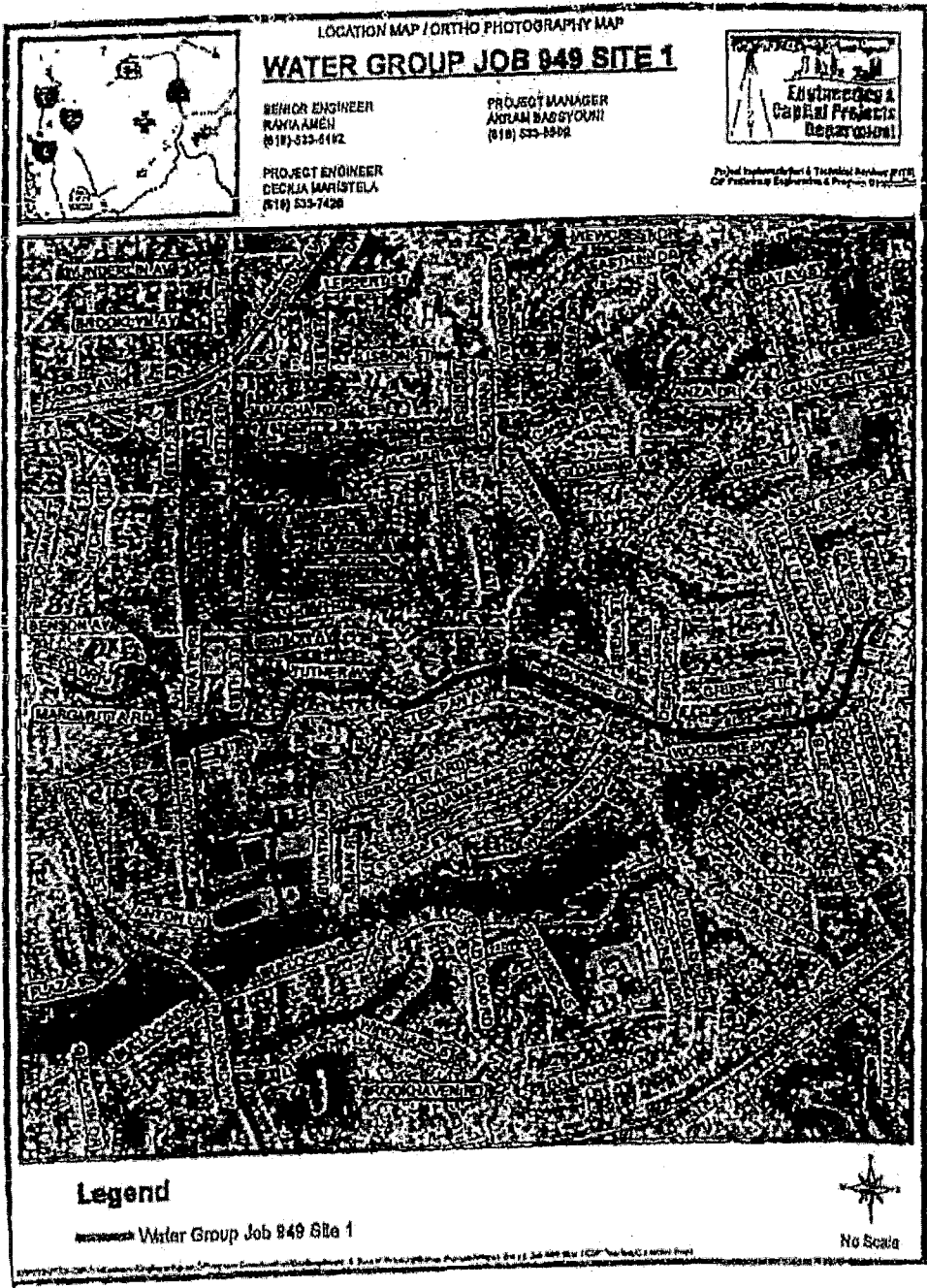


Citywide Pipeline Projects-Project No. 255100

Harbor Drive Pipeline / Project No. 206100

City of San Diego – Development Services Department

**FIGURE
No. 1**



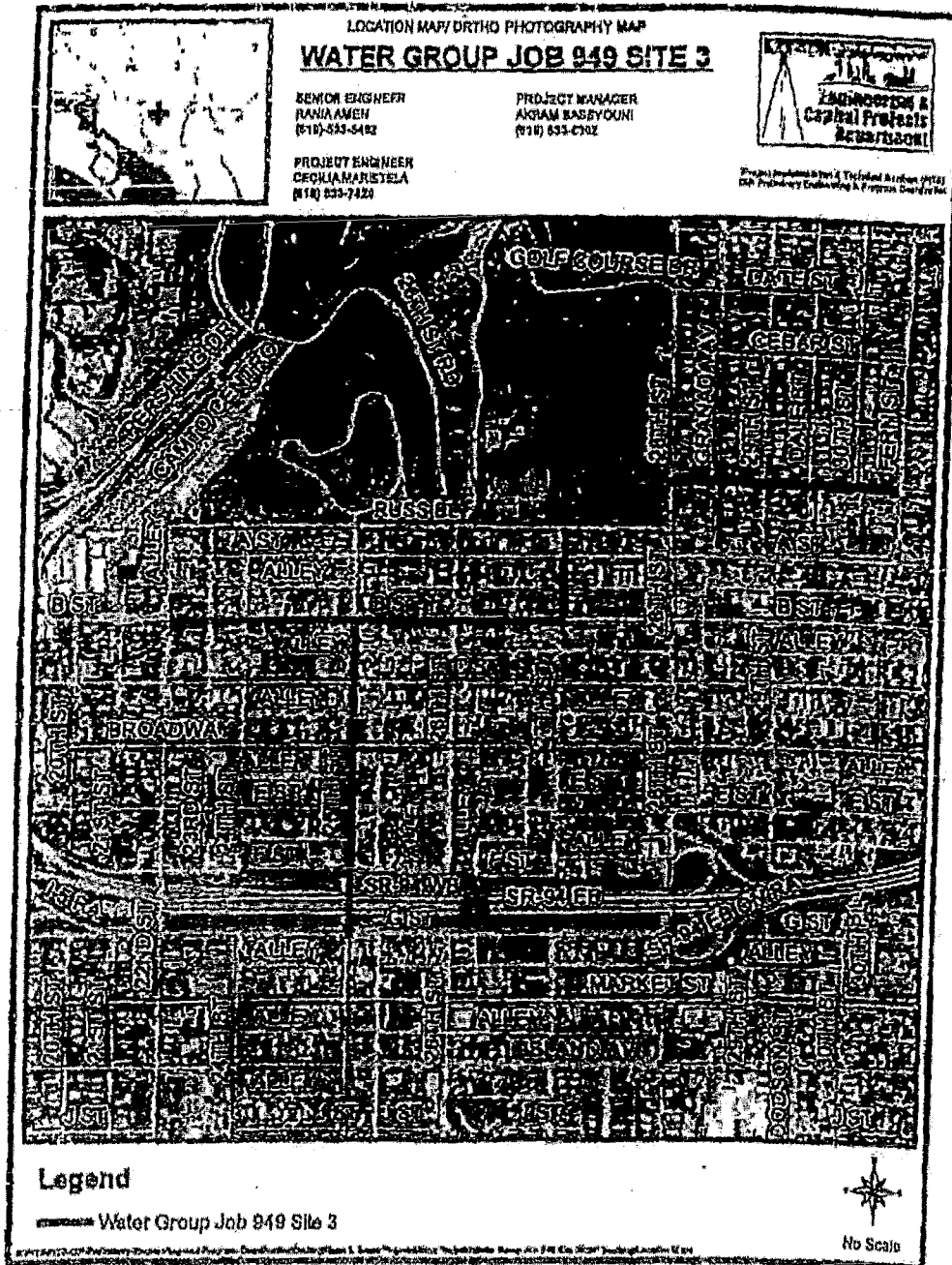
Citywide Pipe Line Project- Project No. 255100
Water Group 949 Site 1/Project No. 232719
 City of San Diego – Development Services Department

FIGURE
No. 2



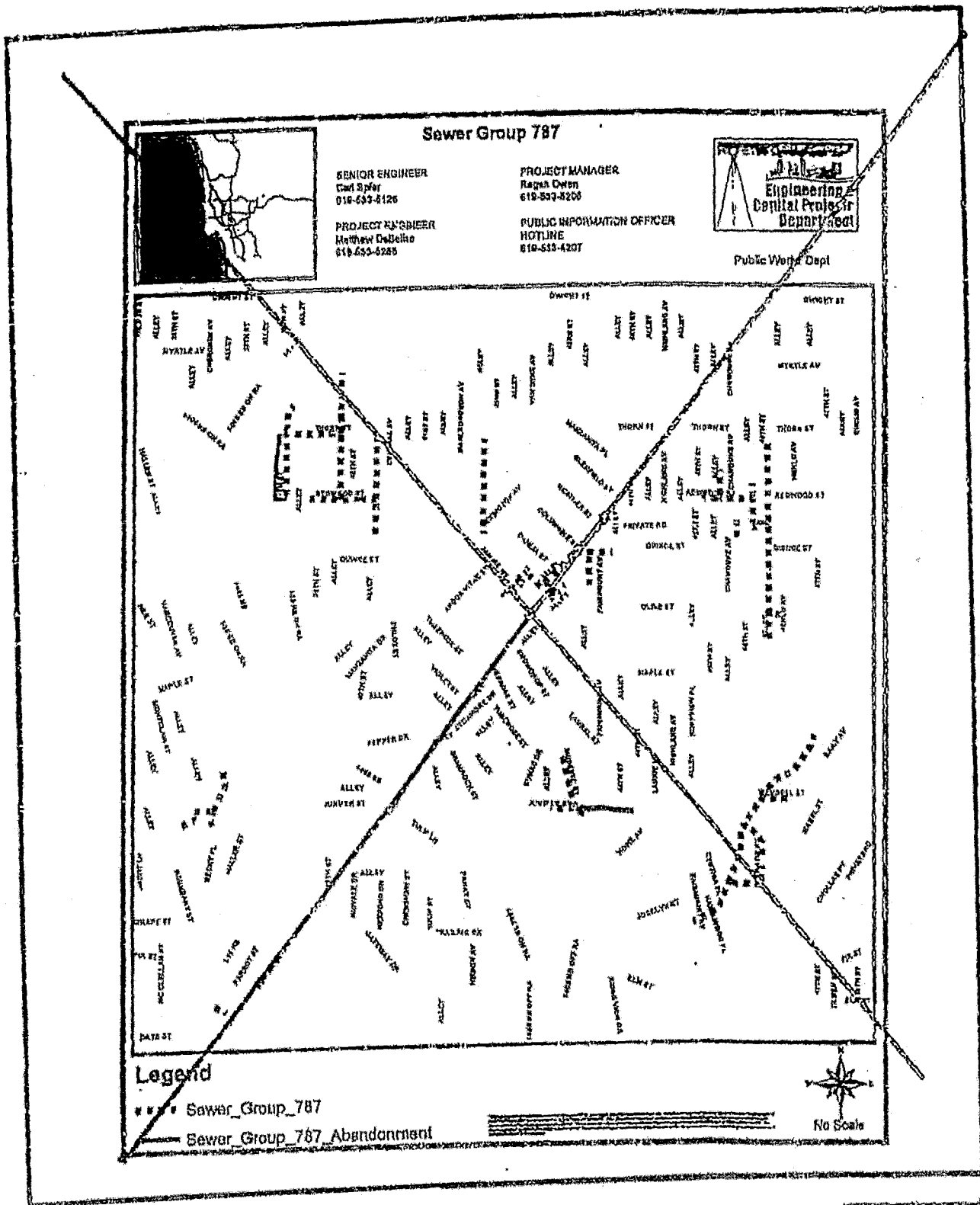
Citywide Pipeline Project-Project No. 255100
Water Group 949 Site 2/Project No. 232719
 City of San Diego – Development Services Department

FIGURE
No. 3

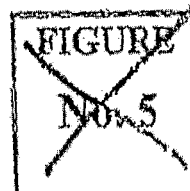


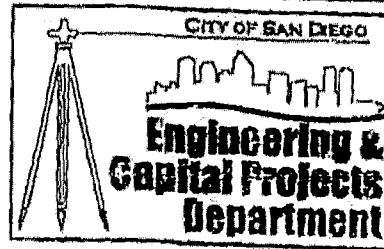
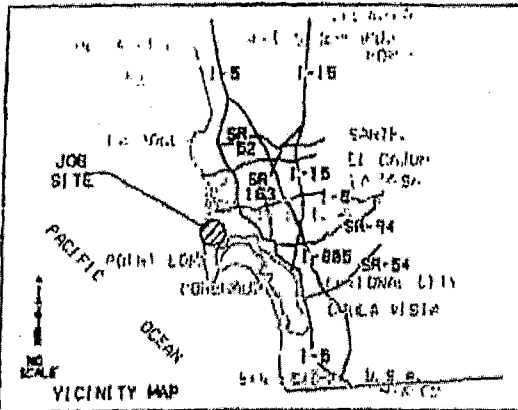
Citywide Pipeline Project-Project No. 255100
Water Group 949 Site 3/Project No. 232719
 City of San Diego – Development Services Department

FIGURE
No. 4



Citywide Pipeline Project-Project No. 255100
Sewer Group 787 /Project No. 231928
 City of San Diego – Development Services Department





PROJECT ENGINEER
DANIEL TITTLE
☎ 533-7468

SENIOR ENGINEER
CARL SPIER
☎ 533-5126

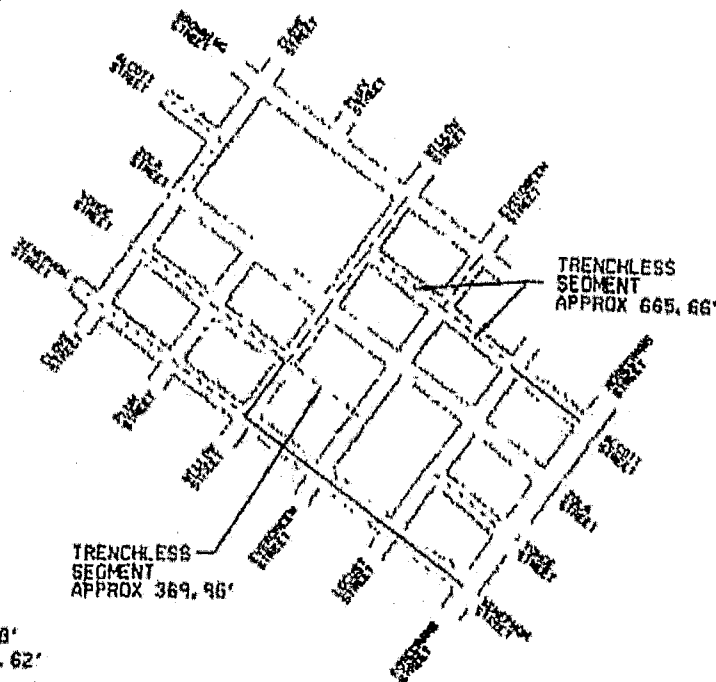
PROJECT MANAGER
HUNG HUYNH
☎ 235-1979

SEWER & WATER MAIN

REPLACEMENT

GROUP 732

SITE MAP



NOTE: SEWER MAINS
TYPICAL METHODS 4,459.38'
TRENCHLESS APPROX 1,035.62'

LEGEND:

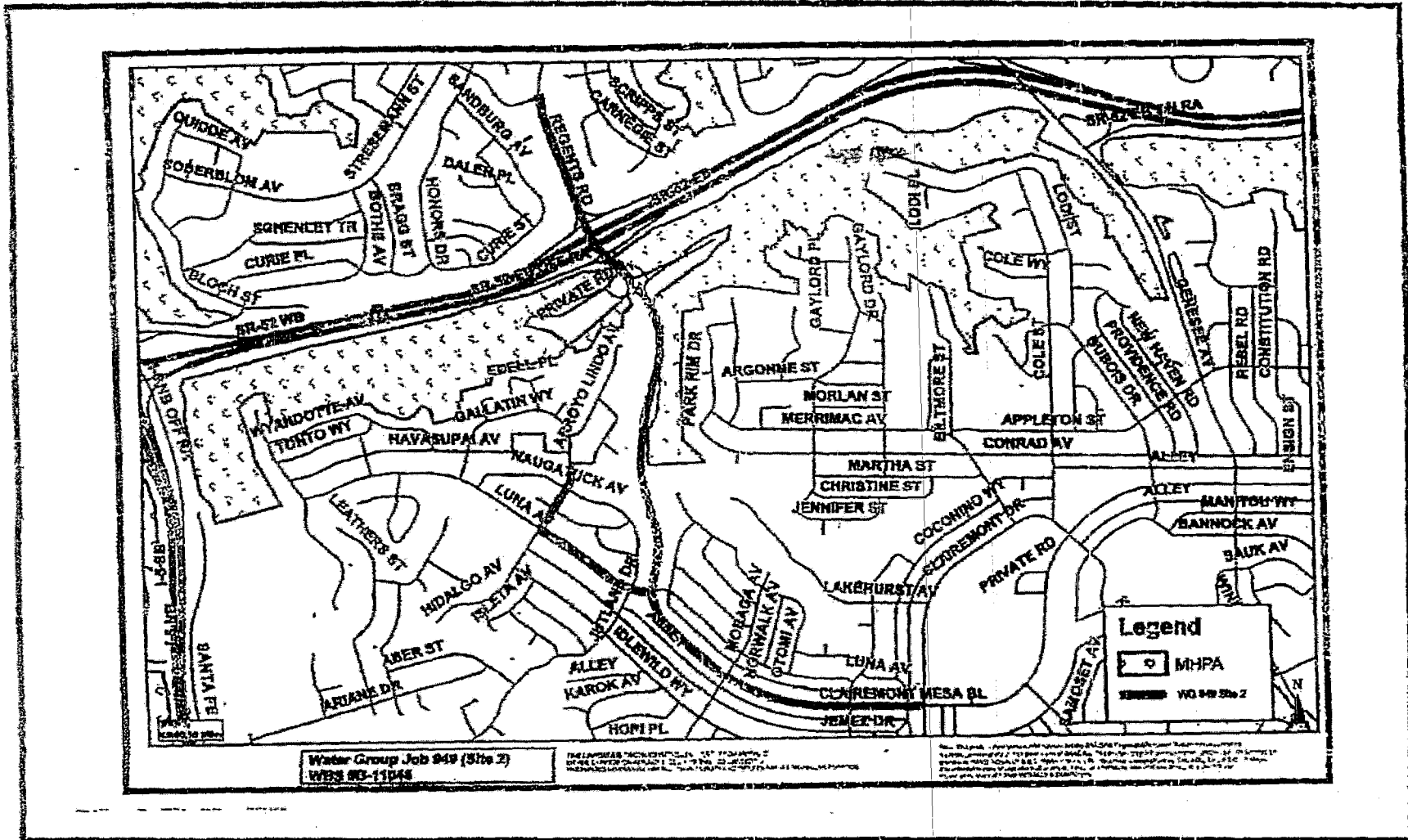
- WATER MAIN REPLACEMENT
- SEWER MAIN REPLACEMENT
- WATER & SEWER MAIN REPLACEMENT

BS-21-11 OEM



**Citywide Pipeline Projects-Project No.
255100**
Water and Sewer Group 732/Project No. 206610
City of San Diego – Development Services Department

**FIGURE
No. 7**



Citywide Pipeline Project-Project No. 255100

Water 949 Site 2/ Project No. 232719

City of San Diego – Development Services Department

FIGURE
No. 8

INITIAL STUDY CHECKLIST

1. Project Title/Project number: Citywide Pipeline Projects
2. Lead agency name and address: City of San Diego, Development Services Department, 1222 First Avenue, MS 501, San Diego, CA 92101
3. Contact person and phone number: Jeff Szymanski, Associate Planner, 619-446-5324
4. Project location: Near-term and future projects would be located within various public right-of-ways (PROW) within any community planning areas in the City of San Diego. All project sites and areas of potential affect would not support *Sensitive Biological Resources* as defined in the Land Development Code (LDC) §143.0110. Project locations may be within the State Coastal Zone and/or within the City of San Diego's Coastal Zone and/or within Designated Historic Districts. Project locations and the associated areas of potential affect may be adjacent to, but not encroach into the Multi-Habitat Planning Area (MHPA). Specific locations for near-term projects analyzed in this document are included below under Item 8 – Description of Project.
5. Project Applicant/Sponsor's name and address: City of San Diego, Engineering & Capital Projects Department, ~~City of San Diego Public Utilities Department - Water Department and City of San Diego Metropolitan Waste Water Division (MWW).~~
6. General Plan designation: City of San Diego Public Right-of-Way (PROW) land is not a designated land use in the General Plan. However, Right-of-Way is categorized as Road/Freeways/Transportation Facilities in the General Plan.
7. Zoning: Near-term and future projects would take place within various Public Right-of-ways and public easements within the City of San Diego. Adjacent zoning may include, but would not be limited to Open Space, Residential, Agricultural, Commercial, and Industrial.
8. Description of project (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation.): COUNCIL APPROVAL to allow for the replacement, rehabilitation, relocation, point repair, new trenching, trenchless construction, and abandonment of water and/or sewer pipeline alignments and associated improvements such as curb ramps, sewer lateral connections, water service connections, manholes, new pavement/slurry, the removal and/or replacement of street trees and the removal and/or replacement of street lights. This environmental document covers the analysis for ~~five~~ four (4) near-term pipeline projects (Harbor Drive Pipeline, Water Group 949, ~~Sewer Group 787~~, Water Group 914, and Sewer/Water Group 732), as well as any subsequent future pipeline projects. The construction footprint for a typical pipeline project, including staging areas and other areas (such as access) would be located within the City of San Diego Public Right-of-Way (PROW) and/or within public easements and may include planned pipeline construction within private easements from the PROW to the service connection. A signed agreement between the City and the property owner would be required for work conducted on private property. Project types that would be included in the analysis contained herein would consist of sewer and water group jobs, trunk sewers, large diameter water pipeline

projects, new and/or replacement manholes, new/or replacement fire hydrants, and other necessary appurtenances. All associated equipment would be staged within the existing PROW adjacent to the work areas. The near-term and future projects covered in the document would not impact *Sensitive Biological Resources* or *Environmentally Sensitive Lands (ESL)* as defined in the Land Development Code and would not encroach into the City's Multi-Habitat Planning Area (MHPA).

Construction for the near-term and any future projects is anticipated to occur during the daytime hours Monday through Friday, but may occur during the weekend, if necessary. The contractor would comply with all applicable requirements described in the latest edition of the *Standard Specifications for Public Works Construction ("GREENBOOK")* and the latest edition of the *City of San Diego Standard Specifications for Public Works Construction ("WHITEBOOK")*. The City's supplement addresses unique circumstances to the City of San Diego that are not addressed in the GREENBOOK and would therefore take precedence in the event of a conflict. The contractor would also comply with the California Department of Transportation *Manual of Traffic Controls for Construction and Maintenance Work Zones*. If the Average Daily Traffic (ADT) within a given project(s) vicinity is 10,000 ADT or greater, a traffic control plan would be prepared and implemented in accordance with the *City of San Diego Standard Drawings Manual of Traffic Control for Construction and Maintenance Work Zones*. For proposals subject to 10,000 ADT or less, traffic control may be managed through shop drawings during construction. Construction methods to be employed would consist of, but not be limited to:

Open Trenching: The open trench method of construction would be used for complete replacement and new alignment portions of the project. Trenches are typically four feet wide and are dug with excavations and similar large construction equipment.

Rehabilitation: Rehabilitation of alignment involves installing a new lining in old pipelines. The insertion is done through existing manhole access points and does not require removal of pavement or excavation of soils.

Abandonment: Pipeline abandonment activities would be similar to rehabilitation methods in that no surface/subsurface disturbance would occur. This process may involve slurry or grout material injected into the abandoned lines via manhole access. The top portion of the manhole is then typically removed and the remaining space backfilled and paved over.

Potholing: Potholing would be used to verify reconnection of laterals to main where lines would be raised or realigned (higher than existing depth, but still below ground) or to verify utility crossings. These "potholes" are made by using vacuum type equipment to open up small holes into the street of pavement.

Point Repairs: Point repairs include replacing a portion of a pipe segment by open trench excavation methods in which localized structural defects have been identified. Generally, point repairs are confined to an eight-foot section of pipe.

The following near term project(s) have been reviewed by the City of San Diego, Development Services Department (DSD) for compliance with the Land Development Code and have been determined to be exempt from a Site Development Permit (SDP) and/or a Coastal Development Permit (CDP). These projects would involve excavation in

areas having a high resource sensitivity and potential for encountering archaeological and paleontological resources during construction related activities. Therefore, mitigation would be required to reduce potential significant impacts to archaeological and paleontological resources to below a level of significance. With respect to Storm Water, all projects would be reviewed for compliance with the City's Storm Water Standards Manual. All projects that are not-exempt from the Standard Urban Storm Water Mitigation Plan (SUSMP) would incorporate appropriate Permanent Best Management Practices (BMPs) and construction BMPs into the project design(s) and during construction, as required. As such, all projects would comply with the requirement of the Municipal Storm Water Permit.

HARBOR DRIVE PIPELINE (PROJECT No. 206100)

The Harbor Drive Pipeline includes the replacement of 4.4 miles of 16-inch cast iron (CI) and asbestos cement (AC) pipe that comprises the Harbor Drive 1st and 2nd Pipelines (HD-1 and HD-2) at a depth no greater than five (5) feet. Facility age and cast iron main replacement are the primary drivers for these projects, but due to the history of AC breaks in the area, approximately 1.0 mile of AC replacement is also included. The project is anticipated to be awarded in Fiscal Year 2013.

HD-1 and HD-2 were built primarily in the 1940's and 1950's and were made out of cast iron or asbestos cement and serve the western most part of the University Heights 390 Zone and the northern section of the Point Loma East 260 Zone. The pipelines also serve as redundancy to each other. Several segments were replaced by various City of San Diego Public Utilities Department projects throughout the years and those segments are not a part of the current scope. Previously replaced segments were 16 inch PVC, except for the bridge crossing which used 24-inch CMLC. The pipeline is located entirely within the PROW, will not require any easements, and is not adjacent to the MHPA or located within any designated historical districts. The following streets would be affected by this project: West Laurel, Pacific Highway, North Harbor Drive (within the roadway, under the bridge and within landscape areas), Nimitz Boulevard, Rosecrans Street, Evergreen Street, Hugo Street, Locust Street, Canon Street, Avenida De Portugal, and Point Loma Avenue.

WATER GROUP 949 (PROJECT No. 232719)

Water Group 949 would consist of the replacement and installation of 5.27 miles of water mains within the Skyline- Paradise Hills, University, Clairemont Mesa, Southeastern San Diego (Greater Golden Hills) community planning areas. 16,931 Linear Feet (LF) of 16-inch cast iron water mains would be replace-in-place with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. The remaining 10,913 LF of new 16-inch PVC would be installed in new trenches. All work within Regents Road, Site 2 (Figure 8), adjacent to the MHPA would only occur within the developed footprint such as the paved right of way, and concrete sidewalk or slab areas. In addition, all work within 100 feet of the MHPA would observe mitigation such as but not limited to bird breeding season measures, avoidance of discharge to the MHPA, and avoidance of direct lighting towards the MHPA areas. As such, no impacts to MHPA and/or sensitive resources would occur. The project would also include replacement and reinstallation of valves, water services, fire hydrants, and other appurtenances and would also included the construction of curb ramps, and street resurfacing. Traffic control

measures and Best Management Practices (BMPs) would be implemented during construction. Any street tree removal, relocation, and/or trimming would be done under the supervision of the City Arborist. All staging of construction equipment will be located outside of any potentially sensitive areas. The following streets and nearby alleyways would be affected by this project: Tuther Way, Cielo Drive, Woodman Street, Skyline Drive, Regents Road, Hidalgo Avenue, Clairemont Mesa Boulevard, Luna Avenue, B Street, F Street, Ash Street, 25th Street, and 27th Street.

SEWER GROUP 787 (PROJECT NO. 231928)

Sewer Group 787 would consist of the replacement of 26,436 lineal feet (LF) of existing 16-inch cast iron sewer pipe with new 16-inch polyvinyl chloride (PVC) pipe within the existing trench. A total of 1,267 LF of new 16-inch PVC sewer alignment would be installed in new trenches. In addition, the project would abandon 1,696 LF of existing 16-inch cast iron pipe. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. The project would affect the following streets and nearby alleyways: 43rd Street, Monroe Avenue, Edgeware Road, Polk Avenue, Orange Avenue, Monro Avenue, 47th Street, Dwight Street, Myrtle Avenue, Manzanita Place, Heather Street, Dahlia Street, Poplar Street, Columbine Street, Pepper Drive, Juniper Street, Mari^g Id Street, Sumac Drive, 44th Street, Laurie Lane, and Roseview Place all within the City Heights and Kensington-Talmadge Community Planning Areas.

WATER GROUP 914 (PROJECT NO. 233447)

Water Group 914 would consist of the replacement and installation of approximately 21,729 lineal feet (LF) of existing 6-inch, 8-inch and 12-inch cast iron pipes and 6-inch asphalt concrete pipes with new 8-inch, 12-inch and 16-inch polyvinyl chloride (PVC) pipe. Also included would be the construction of two underground pressure regulator stations that measure 54 square-feet and 6.5 feet deep each. 17,472 LF would be located in existing trenches and 4,257 LF would be located in new trench lines. The proposed project would be installed by conventional excavation (open trench) in trenches from 3-5 feet deep. However two 300 LF parallel line sections (600 LF total) of the water alignment would be installed by trenchless methodology utilizing two (2) 40 square foot launch and receiver pits. The trenchless installation would occur at the intersection of Coronado Avenue and Ebers Street and is designed to avoid a recorded archaeological resource at this intersection. The trenchless methodology would employ directional underground boring that would install the pipe at a depth deeper than the recorded resource. In addition, a 4-inch AC water segment of approximately 520 LF located along Point Loma Avenue between Guizot Street and Santa Barbara Street will be abandoned in place. The project would affect the following streets and nearby alleyways: Point Loma Avenue, Santa Barbara Street, Bermuda Avenue, Pescadero Avenue, Cable Street, Orchard Avenue, Froude Street, Sunset Cliffs Boulevard, Savoy Circle, and Del Monte Avenue all within the Ocean Beach and Peninsula Community Planning Areas.

SEWER AND WATER GROUP 732 (PROJECT NO. 206610)

Sewer and Water Group Job 732 would consist of the installation of approximately 5,500 total linear feet (LF) of 8 inch Polyvinyl Chloride (PVC) sewer pipe, and approximately

3,000 total linear feet (LF) of 12 inch PVC water pipe. Approximately, 1,035 LF of water pipe would be rehabilitated using trenchless technology in the same trench, with the remainder of the installation accomplished through open trenching. Related work would include construction of new manholes, replacement and re-plumbing of sewer laterals, installation of curb ramps, pavement restoration, traffic control, and storm water best management practices. Construction of the project would affect portions of the following streets and adjacent alleys in the Peninsula Community Plan area: Xensphon Street, Yonge Street, Zola Street, Alcott Street, Browning Street, Plum Street, Willow Street, Evergreen Street, Locust Street, and Rosecrans Street.

SUBSEQUENT PIPELINE PROJECT REVIEW (LONG TERM)

Applications for the replacement, rehabilitation, relocation, point repair, open trenching and abandonment of water and/or sewer pipeline alignments within the City of San Diego PROW as indicated in the Subject block above and in the Project Description discussion of the Initial Study would be analyzed for potential environmental impacts to Historical Resources (Archaeology, Paleontology and the Built Environment) and Land Use (MSCP/MHPA), and reviewed for consistency with this Mitigated Negative Declaration (MND). Where it can be determined that the project is "consistent" with this MND and no additional potential significant impacts would occur pursuant to State CEQA Guideline § 15162 (i.e. the involvement of new significant environmental effects of a substantial increase in the severity of previously identified effects) or if the project would result in minor technical changes or additions, then an Addendum to this MND would be prepared pursuant to §15164. Where future projects are found not to be consistent with this MND, then a new Initial Study and project specific MND shall be prepared.

9. Surrounding land uses and setting. Briefly describe the project's surroundings: The scope of the MND is city-wide and future projects would be located within the Right-of-Way, which is categorized as Road/Freeways/Transportation Facilities in the General Plan. Surrounding land uses would vary depending on the location proposed.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service System |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings Significance |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

- The proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- The proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- The proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or (MITIGATED) **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or (MITIGATED) **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I) AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Near-term or future projects would involve the replacement, rehabilitation, relocation, point repair, new trenching, and abandonment of water and/or sewer alignments and associated improvements such as curb ramps, pedestrian ramps, lateral connections, manholes all located below the existing PROW. It is not anticipated that removal and/or replacement of street trees and the removal and/or replacement of street lights; therefore scenic vistas would not be impacted.				
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Near-term or future projects may involve work that could affect street trees, historic buildings or a scenic state highway; however, any work of this type would be reviewed by qualified historical staff to ensure that construction related activities not impact the integrity of the any scenic resources. Additionally, any associated street improvements, if located within a historic district, would be required to comply with the mitigation measures incorporated in Section V of this MND.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please see I.b.				
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The scope of development for near-term and/or future projects would predominantly be located below existing grade, with the possible exception of any associated street improvements (e.g. curb ramps, pedestrian ramps, street trees, etc.). The removal and/or replacement of street lights within any particular project alignment would not create a new source of substantial light or glare. Additionally, no associated street improvements would involve the use of highly reflective materials. Therefore, the project would not have the potential to create substantial light or glare impacts.				

II) AGRICULTURAL AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Converts Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Near-term and/or future pipeline alignments would be located within the developed PROW which would not be classified as farmland by the Farmland Mapping and Monitoring Program (FMMP). Any adjacent areas in agricultural production would not be affected by near-term and/or future pipeline projects. Therefore, the project in and of itself would not result in the conversion of farmland to non-agricultural uses.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Please see II.a

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The public right of way and land surrounding any near-term and/or future pipeline alignments is not zoned as forest land as all areas are within the urbanized boundaries of the City of San Diego. Therefore, the project would not conflict with existing zoning for forest land.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

The project is located within the developed public right of way and the land surrounding any near-term and/or future pipeline alignments is not designated forest land as all areas are within the urbanized boundaries of the City of San Diego. Therefore, the project would not convert forest land to a non-forest use.

B

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project would not involve a change in land use and would not impact farmland or forestland.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations - Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Near-term and/or future pipeline alignments would not involve any future actions that would generate air quality emissions as a result of the proposed use (e.g. vehicle miles traveled, etc). However, emission would occur during the construction phase of the project and could increase the amount of harmful pollutants entering the air basin. The emissions would be minimal and would only occur temporarily during construction. Additionally, the construction equipment typically involved in water/sewer projects is small-scale and generates relatively few emissions. When appropriate, dust suppression methods would be included as project components. As such, any near-term and/or future projects would not be inconsistent with the region's air quality plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Please see III.a

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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As described above, construction operations could temporarily increase the emissions of dust and other pollutants. However, construction emissions would be temporary and implementation of Best Management Practices would reduce potential impacts related to construction activities to

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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below a level of significance. Therefore, any near-term and/or future pipeline alignments would not result in a cumulatively considerable net increase of any criteria pollutant for which the project is non-attainment in the region under applicable federal or state ambient air quality standards.

- d) Expose sensitive receptors to substantial pollutant concentrations?

Construction operations could temporarily increase the emissions of harmful pollutants, which could affect sensitive receptors adjacent to the project. However, construction emissions would be temporary and it is anticipated that implementation of construction BMPs would reduce potential impacts related to construction activities to minimal levels. Therefore, any near-term and/or future pipeline projects would not expose sensitive receptors to substantial pollutant concentrations.

- e) Create objectionable odors affecting a substantial number of people?

Operation of construction equipment and vehicles could generate odors associated with fuel combustion. However, these odors would dissipate into the atmosphere upon release and would only remain temporarily in proximity to the construction equipment and vehicles. Therefore, any near-term and/or future pipeline projects would not create substantial amounts of objectionable odors affecting a substantial number of people.

IV. BIOLOGICAL RESOURCES – Would the project:

- a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Near-term and/or future pipeline projects would be limited to development proposals that do not impact Sensitive Biological Resources. Any near-term and/or future actions that would impact Sensitive Biological Resources would not be consistent with this MND and a new Initial Study and MND would be prepared in accordance with the provisions of CEQA.

- b) Have a substantial adverse effect on any riparian habitat or other community identified in local or

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				

See IV. b)

- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Any near-term and/or future pipeline projects would be located in the developed public right of way where wetlands would not be present, either within or adjacent to the project's boundaries. Therefore, any near-term and/or future pipeline projects do not have the potential to impact these resources. Any near-term and/or future actions that would impact wetland resources would not be consistent with this MND and a new Initial Study and MND would be prepared in accordance with the provisions of CEQA.

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Any near-term and/or future pipeline projects would not result in adverse impacts on wildlife movement in the project's areas. As previously mentioned above, these projects would be located in the developed public right of way which would not contain wildlife corridors.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Any near-term and/or future pipeline projects would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Any near-term and/or future pipeline projects may involve associated street improvements such as the replacement of street trees. However, trees that are covered under any kind of a preservation policy or ordinance would not be part of any future actions. Additionally, future project areas would lack any sensitive biological resources and would not require the removal of any unique or

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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sensitive trees. As such, the project would not result in conflict with local policies protecting biological resources.

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| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

Near-term and/or future pipeline projects may be located in close proximity to, or adjacent to the City's Multi-Habitat Planning Area (MHPA), but not within the MHPA. MHPA Land Use Adjacency mitigation has been incorporated into the Mitigation, Monitoring and Reporting Program (MMRP) to mitigate indirect impacts to the MHPA. Therefore, the project does not have the potential to impact any habitat conservation plans and would not result in indirect impacts to the MHPA.

V. CULTURAL RESOURCES – Would the project:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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The purpose and intent of the *Historical Resources Regulations of the Land Development Code (Chapter 14, Division 3, and Article 2)* is to protect, preserve and, where damaged, restore the historical resources of San Diego. The regulations apply to all proposed development within the City of San Diego when historical resources are present on the premises.

CEQA requires that before approving discretionary projects, the Lead Agency must identify and examine the significant adverse environmental effects, which may result from that project. A project that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (Sections 15064.5(b) and 21084.1). A substantial adverse change is defined as demolition, destruction, relocation, or alteration activities, which would impair historical significance (Sections 15064.5(b)(1)). Any historical resource listed in, or eligible to be listed in the California Register of Historical Resources, including archaeological resources, is considered to be historically or culturally significant.

Near-term and/or future pipeline projects may include future actions that would be analyzed for the potential to impact archaeological resources. For those proposals that include ground disturbing activities and are located within mapped areas of the City that indicate a potential for the discovery of archaeological resource, monitoring would be required. As such, when required, archaeological monitoring would reduce potential impacts to archaeological resources to below a level of significance.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Any near-term or future project which is located within a designated historical district would be subject to review by qualified historical staff to determine whether the project would have an adverse effect on the district requiring specific mitigation, as detailed in Section V., of the MND or if the project requires further review in accordance with the Historical Resources Regulations. A project which would adversely affect a designated historical district because it could not comply with the Secretary of the Interior Standards or implement the required MMRP would not be consistent with this MND and a new Initial Study and MND would be prepared in accordance with the provisions of CEQA.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Near-term and/or future pipeline projects would include work that requiring trenching in areas where there is a potential for archaeological resources to be encountered. As such, the requirement for archaeological monitoring has been included in the MMRP. Projects that would have a direct impact on a recorded or designated archaeological site, which requires Phase 2 Testing and mitigation measures (e.g. Archaeology Data Recovery Program) would not be consistent with this MND and a new Initial Study and MND would be prepared in accordance with the provisions of CEQA. Projects which could be found to be adequately covered under this MND and only require monitoring would not result in a significant adverse change in the significance of a resource pursuant to §15064.5 with implementation of the MMRP identified in Section V., of the MND.

- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Near-term and/or future pipeline projects may include work that is underlain by sensitive fossil bearing formations which could be impacted if trenching is anticipated at depths greater than 10 feet. Therefore, based on the sensitivity of the affected formation and the proposed excavation depths, the project could result in significant impacts to paleontological resources.

To reduce this impact to below a level of significance, excavation within previously undisturbed formations at a depth of 10 or more feet would be monitored by a qualified paleontologist or paleontological monitor. Any significant paleontological resources encountered would be recovered and curated. Paleontological monitoring would be required and would reduce potential impacts to below a level of significance.

- d) Disturb any human remains, including those interred outside of formal cemeteries?

A potential to encounter human remains during construction activity within the City's public right-of-way exists for any near-term or future pipeline alignment project; especially in areas where work would occur within high sensitivity areas for archaeological resources which can include Native American remains. Mitigation measures addressing the unanticipated discovery

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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of Native American human remains are included in Section V of the MMRP. Implementation of these measures would reduce potential unanticipated impacts to below a level of significance.

For projects that are not covered under this environmental document (e.g., meet the criteria for a Statutory or Categorical Exemption under CEQA), then standard language regarding the unanticipated discovery of human remains of unknown origin found in the *City of San Diego Standard Specifications for Public Works Construction ("WHITEBOOK")* would take precedence. Upon notification by the Contractor of the discovery of human remains of unknown origin, these requirements require that the Engineer shall immediately notify the San Diego County Coroner to start the investigation process, in accordance with the California Health and Safety Code §§7050.5 and 7051 and the California Public Resources Code.

VI. GEOLOGY AND SOILS – Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Friolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Near-term and/or future pipeline projects would utilize proper engineering design and standard construction practices in order to ensure that potential impacts in this category based on regional geologic hazards would remain less than significant. Therefore, risks from rupture of a known earthquake fault would be below a level of significance.

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|------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Near-term and/or future pipeline projects would not expose people or structures to strong seismic ground shaking. The design of the proposed project and any subsequent projects would utilize proper engineering design and standard construction practices to ensure that the potential for impacts from ground shaking would be below a level of significance.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| iii) Seismic-related ground failure, including | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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liquefaction?

The design of any near-term and/or future pipeline projects would utilize proper engineering design standard construction practices to ensure that the potential for impacts from seismic-related ground failure, including liquefaction would be below a level of significance.

iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Near-term and/or future pipeline projects would not include actions that would expose people or structures to the risk of loss, injury, or death involving landslides. Pipeline design for projects covered under this MND would utilize proper engineering design and standard construction practices to ensure that the potential for impacts would be below a level of significance.

b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Construction of the near-term and/or future pipeline projects covered under this MND would take place within the developed public right of way. Any disturbances to streets and alleys would be replaced in kind. Additionally, appropriate BMPs aimed at preventing soil erosion would be incorporated during construction and design of the project. As such, project implementation would not result in a substantial amount of soil erosion or loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Near-term and/or future pipeline projects are located entirely within the City's PROW (See project descriptions). It is possible, that any near-term and/or future projects may be located throughout the City within the Public Right-of-Way and may be located within various Geologic Hazard Categories. However, proper engineering design and utilization of standard construction practices would ensure that the potential for impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The design of any near-term and/or future pipeline projects would utilize proper engineering design and utilization of standard construction practices would ensure that the potential for impacts would be less than significant.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The design of any near-term and/or future pipeline projects covered under this MND would utilize proper engineering design and standard construction practices to ensure that the potential for impacts would be below a level of significance.

VII. GREENHOUSE GAS EMISSIONS - Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The City of San Diego is utilizing the California Air Pollution Control Officers Association (CAPCOA) report "CEQA and Climate Change" (CAPCOA 2009) to determine whether a GHG analysis would be required for submitted projects. The CAPCOA report references a 900 metric ton guideline as a conservative threshold for requiring further analysis and possible mitigation. This emission level is based on the amount of vehicle trips, the typical energy and water use associated with projects, and other factors.

CAPCOA identifies project types that are estimated to emit approximately 900 metric tons of GHG's annually. This 900 metric ton threshold is roughly equivalent to 35,000 square feet of office space, 11,000 square feet of retail, 50 single-family residential units, 70 multi-family residential units and 6,300 square feet of supermarkets.

Since any future pipeline projects covered in this CEQA document do not fit in the categories listed above, a GHG modeling analysis would be conducted for each project.

A GHG modeling analysis was conducted for each near-term project also covered in the MND. This modeling was conducted to determine the level of GHG emissions. The Roadway Construction Emissions Model is a spreadsheet program created by the Sacramento Metropolitan Air Quality Management District to analyze construction related GHGs and was utilized to quantify the project's GHG emissions. The model utilizes project information (e.g. total construction months, project type, construction equipment, grading quantities and the total disturbance area, etc.) to quantify GHG emissions from heavy-duty construction equipment, haul trucks, and worker commute trips associated with linear construction projects.

Harbor Drive project: Results of the Roadway Construction Emissions Model output demonstrated that during the 6 months of construction the project would generate approximately 250 metric tons of emissions per year. On an annualized basis, the output would be approximately 500 metric tons per year. The output for the project falls well below the 900 metric ton per year figure. Therefore, based

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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upon the analysis showed above the project would result in a less than significant CEQA Greenhouse gas impact and mitigation would not be required.

Sewer/Water Job 732: Results of the Roadway Construction Emissions Model output demonstrated that the project duration of 6 months, and assuming a May start date, this project would produce 162.5 metric tons of CO2 in the first year and 0 metric tons of CO2 the second year. The output for the project falls well below the 900 metric ton figure. Therefore, based upon the analysis showed above the project would result in a less than significant CEQA Greenhouse gas impact and mitigation would not be required.

~~**Sewer Group 787:** Results of the Roadway Construction Emissions Model output demonstrated that this project would produce a total of 555.9 metric tons of CO2 during the 19-month construction period. Assuming a September start, 117.0 metric tons would be generated in the second year, and 87.8 metric tons of CO2 would be generated in the third year. The project's estimated GHG emissions results are well below the 900 metric tons of CO2 and; therefore, impacts are less than CEQA significant and mitigation would not be required.~~

Water Group 914: Results of the Roadway Construction Emissions Model output demonstrated that this project's duration is 14 months and assuming a September start date the project would produce 141.5 metric tons of CO2 in the first year, and 353.7 metric tons of CO2 in the second year. The project's estimated GHG emissions results are well below the 900 metric tons of CO2 and; therefore, impacts are less than CEQA significant and mitigation would not be required.

Water Group 949: Results of the Roadway Construction Emissions Model output demonstrated that the project duration of 6 months, and assuming a May start date, the project would produce 162.5 metric tons of CO2 in the first year and 0 metric tons of CO2 the second year. The output for the project falls well below the 900 metric ton figure. Therefore, based upon the analysis showed above the project would result in a less than significant CEQA Greenhouse gas impact and mitigation would not be required.

For a determination of whether future projects would be consistent with this MND, the Roadway Construction Emissions Model can be utilized. If the output is less than 900 metric tons of GHG annually, then no further analysis is needed and the project would be consistent with the GHG analysis in this document. If, however, the output from the Roadway Construction Emission Model is greater than 900 metric tons annually, then a formal GHG Analysis would be conducted incorporating appropriate mitigation measures. If the analysis indicates project implementation would result in 900 metric tons or more annually, then the project would not be consistent with the GHG analysis in this MND as the project would be required to incorporate mitigation to reduce its GHG output by 30% compared to the California Air Resources Board (CARB) 2020 business-as-usual forecast and a new Initial Study and MND would be prepared pursuant to CEQA.

- b) Conflict with an applicable plan, policy, or regulation adopted for the

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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purpose of reducing the emissions of greenhouse gases?

Please see VII.a. It is anticipated that the any near-term and/or future pipeline projects would not conflict with any applicable plans, policies, or regulations related to greenhouse gases.

VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

- a) Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?

Construction of any near-term and/or future pipeline projects covered under this MND may require the use of hazardous materials (e.g., fuels, lubricants, solvents, etc.) which would require proper storage, handling, use and disposal; however, these conditions would not occur during routine construction within the PROW. Construction specifications would include requirements for the contractor regarding where routine handling or disposal of hazardous materials could occur and what measures to implement in the event of a spill from equipment. Compliance with contract specifications would ensure that potential hazards are minimized to below a level of significance.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Any near-term and/or future project alignments covered under this MND have the potential to traverse properties which could contain Leaking Underground Storage Tank (LUST) cleanup sites, permitted UST's, or contaminated sites located within a 1,000 feet from the project alignments; however, in the event that construction activities encounter underground contamination, the contractor would be required to implement § 803 of the City's "WHITEBOOK" for "Encountering or Releasing Hazardous Substances or Petroleum Products" of the City of San Diego Standard Specifications for Public Works Construction which is included in all construction documents and would ensure the proper handling and disposal of any contaminated soils in accordance with all applicable local, state and federal regulations. Compliance with these requirements would minimize the risk to the public and the environmental; therefore, impacts would remain less than significant.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Several of the near-term projects are located within a ¼ mile radius of an existing or proposed school

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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and would involve trenching activities that could result in the release of hazardous emissions if unanticipated contamination is encountered within the PROW. The same would be true for any future projects that may be proposed within ¼ mile of an existing or proposed school and would involve trenching activities that could result in the release of hazardous emissions if unanticipated contamination is encountered. In both cases, §803 of the City of San Diego's "WHITEBOOK" is included in all construction documents to ensure that appropriate protocols are followed pursuant to County DEH requirements should any hazardous conditions be encountered. As such, impacts regarding the handling or discovery of hazardous materials, substances or waste within close proximity of a school would be below a level of significance with implementation of the measures required pursuant to the contract specifications and County DEH oversight.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- | | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Although none of the near-term project alignments covered in the document are identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, future projects could be located within close proximity to hazardous materials sites or within 1,000 feet from leaking USTs. However, as previously outlined in VIII a-c above, specific measures have been or will be incorporated into the contract specifications to address any contaminated soils encountered during construction related activities in accordance with local, state, and federal regulations. Therefore, with implementation of measures contained in the contract specifications, potential hazards would be reduced to below a level of significance.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two mile of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Several near-term projects covered in this MND (Harbor Drive Pipeline, Water Group 914, and Sewer/Water Group 732) are located within or in close proximity to the Airport Influence Area (AIA) of the San Diego International Airport's Airport Land Use Compatibility Plan (ALUCP). This geographically demarcated area that surrounds Lindbergh Field ensures that factors such as noise, land use, safety and airspace protection are considered anytime a land use decision is made. Since these near-term projects and any future projects are linear underground projects, construction of these types of projects would not introduce any new features that would result in a safety hazard for people residing in or working in the area or create a flight hazard.

- f) For a project within the vicinity of a private airstrip, would the project
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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result in a safety hazard for people residing or working in the project area?

None of the near-term or future project alignments would be located within the vicinity of a private airstrip; no provide airstrips are located with the jurisdictional boundaries of the City of San Diego; therefore, no impact would result under this category.

- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction of any near-term or future projects would temporarily affect traffic circulation within the project Area of Potential Effect (APE) and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction which would allow emergency plans to be employed. Therefore, the project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Construction of any near-term or future projects would be located within the City's Public Right-of-Way and would not be located within or adjacent wildlands that could pose a threat of wildland fires. Additionally, sewer and water infrastructure projects would not introduce any new features that would increase the risk of fire.

IX. HYDROLOGY AND WATER QUALITY - Would the project:

- a) Violate any water quality standards or waste discharge requirements?

Potential impacts to existing water quality standards associated with the any near-term and/or future projects would include minimal short-term construction-related erosion/sedimentation, but would not include any long term operational storm water impacts. Any near-term and/or future projects would be required to comply with the City's Storm Water Standards Manual. Depending on the area of disturbance, projects would have to comply with either a Water Pollution Control Plan (WPCP) or Storm Water Pollution Prevention Plan (SWPPP). These plans would prevent or effectively minimize short-term water quality impacts during construction activities. Therefore, the proposed project would not violate any existing water quality standards or discharge requirements.

- b) Substantially deplete groundwater supplies or interfere substantially

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Any near-term and/or future projects do not propose the use of groundwater. Furthermore, these projects would not introduce a substantially large amount of new impervious surfaces over ground that could interfere with groundwater recharge. Therefore, construction of these projects would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?

Any near-term and/or future projects would be located below the surface of the developed public right of way within paved streets. Upon completion of the installation of the utility lines the streets would be returned to their preexisting conditions. Therefore these projects would not substantially alter any existing drainage patterns.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Please see IX.c.

- e) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Conformance to BMPs outlined in an approved WPCP and compliance with the City Stormwater Standards would prevent or effectively minimize short-term construction runoff impacts from any near-term and/or future pipeline projects covered under the MND. Additionally, these projects would not result in a substantial increase in impervious surface, and therefore, would not contribute runoff water that would exceed the capacity of existing storm water systems.

- f) Otherwise substantially degrade water quality?

Conformance to BMPs outlined in an approved WPCP and compliance with the City Stormwater Standards would prevent or effectively minimize short-term construction runoff impacts from any near-term and/or future pipeline projects covered under the MND. See IX-a.

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The near-term and/or future pipeline projects would not include the construction of any housing.

- h) Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?

The near-term and/or future pipeline projects would not impede the direction of flows or substantially impact a 100-year flood hazard area.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The near-term and/or future pipeline projects would not include any new features that would increase the risk associated with flooding beyond those of any existing conditions.

- j) Inundation by seiche, tsunami, or mudflow?

The near-term and/or future pipeline projects would not include any new features that would increase the risk associated with seiche, tsunami, or mudflow beyond those of any existing conditions.

X. LAND USE AND PLANNING – Would the project:

- a) Physically divide an established community?

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Implementation of the near-term and/or future pipeline projects would involve replacing and installing utility infrastructure and would not introduce new features that could divide an established community.

- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Implementation of the near-term and/or future pipeline projects would involve replacing and installing utility infrastructure and would be consistent with all applicable land use plans, policies, or regulations of an agency with jurisdiction over the project and would not conflict with any land use plans.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Implementation of the near-term and/or future pipeline projects would involve replacing and installing utility infrastructure located entirely within the developed public right of way. Although some projects could be located within proximity to the City's MHPA which is covered by the MSCP Subarea Plan, no conflicts are anticipated because implementation of the MHPA Land Use Adjacency Guidelines would be required for any project located within 100 feet from the MHPA. Measures to reduce potential indirect impacts to the City's MHPA have been included in the MMRP contained within Section V. of the MND.

XI. MINERAL RESOURCES – Would the project?

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Areas surrounding the near-term project alignments are not being used for the recovery of mineral resources. Similarly, these areas are also not designated for the recovery of mineral resources on the City of San Diego General Plan Land Use Map. Additionally, any future projects submitted for review in accordance with this MND would be evaluated based on their proximity to areas where mineral resources could be affected. At this time however, it is not anticipated that any future pipeline project, which would be located entirely within the PROW would result in the loss of

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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availability of a known mineral resource of value to the region and the state.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Areas surrounding the near-term project alignments have not been delineated as being used for the recovery of mineral resources or designated for the recovery of mineral resources on the City of San Diego General Plan Land Use Map. Additionally, any future projects submitted for review in accordance with this MND would be evaluated based on their proximity to areas where mineral resources could be affected. At this time however, it is not anticipated that any future pipeline project, which would be located entirely within the PROW would result in the loss of availability of a locally important mineral resource recovery site.

XII. NOISE – Would the project result in:

- a) Exposure of persons to, or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Any near-term or future pipeline projects covered under this MND would not in and of itself result in the generation of operational noise levels in excess of existing standards. However, some construction related noise would result, but would be temporary and transitory in nature and strictly regulated under San Diego Municipal Code Section 59.5.0404, "Noise Abatement and Control" which places limits on the hours of construction operations and standard decibels which cannot be exceeded. Therefore, people would not be exposed to noise levels in excess of those covered by existing noise regulations.

- b) Exposure of persons to, or generation of, excessive ground borne vibration or ground borne noise levels?

Any near-term or future pipeline projects covered under this MND would result in negligible ground disturbing vibrations during construction based on the type of equipment being used and the construction methodology being employed for each project type. Noise occurring during construction activities would be temporary and transitory in nature and would be strictly regulated under San Diego Municipal Code Section 59.5.0404, "Noise Abatement and Control" which places limits on the hours of construction operations and standard decibels which cannot be exceeded. Therefore, people would not be exposed to excessive ground disturbing vibration levels after completion of each project.

- c) A substantial permanent increase in ambient noise levels in the project

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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vicinity above levels existing without the project?

Any near-term or future pipeline projects covered under this MND all occur within the developed PROW would not permanently increase the ambient noise levels beyond those which exist without the project. Please see XII.a & b.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing without the project?

A portion of one near-term project would be located along Harbor Drive where the existing noise environment is already high due to its proximity to Lindbergh Field and from high traffic patterns surrounding the airport and nearby businesses. Other near-term and/or future projects covered under this MND may occur City-wide and result in temporary construction related noise impacts; however, the increase in noise due to construction activities would be temporary in nature and strictly regulated in accordance with the Municipal Code. These temporary and periodic construction related noise increased would not be considered substantial and therefore, the increase in ambient noise levels would be less than significant. Please see XII.a.

- e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the area to excessive noise levels?

Several near-term projects covered in this MND (Harbor Drive Pipeline, Water Group 914, and Sewer/Water Group 732) are located within 2 miles of a public airport; specifically to the Airport Influence Area (AIA) of the San Diego International Airport's Airport Land Use Compatibility Plan (ALUCP). This geographically demarcated area that surrounds Lindbergh Field ensures that factors such as noise, land use, safety and airspace protection are considered anytime a land use decision is made. Although these near-term projects and any future projects are linear underground projects, construction would not in and of itself expose people residing in the area or construction workers to excessive noise levels beyond those that may currently exist. For projects within proximity to Lindbergh Field and heavily traveled roadways, the ambient noise level is already loud. Strict compliance with OSHA standards for worker safety would ensure that exposure to excessive noise levels would not occur for all other near-term and/or future pipeline projects.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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None of the near-term projects are located within proximity to a private airstrip and it's not anticipated that any future projects would be either; mainly because no private airstrips are located in the urbanized areas within the City's jurisdictional boundaries. Therefore no impacts in this category would occur.

XIII. POPULATION AND HOUSING – Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The near-term and/or future pipeline projects would replace, rehabilitate and install new utility infrastructure. These upgrades are intended to improve currently outdated sewer and water systems in order to keep up with current demand. These projects would not extend any existing roadways into undeveloped areas or introduce any new roadways that could induce population growth and therefore, no impact would occur.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

The near-term and/or future pipeline projects would replace, rehabilitate and install new utility infrastructure. These upgrades are intended to improve currently outdated sewer and water systems in order to keep up with current demand. These projects would not displace any housing.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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See XIII b).

XIV. PUBLIC SERVICES

- a) Would the project result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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performance objectives for any of the public services:

- | | | | | |
|--------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| i) Fire Protection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

Any near-term or future pipeline project would not physically alter any fire protection facilities. Replacement and installation of utility infrastructure would not require any new or altered fire protection services. Future projects may require a Traffic Control Plan to ensure major disruptions to traffic flow do not occur. Disruptions to response times are not anticipated.

- | | | | | |
|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| ii) Police Protection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

Any near-term or future pipeline project would not physically alter any fire protection facilities. Replacement and installation of utility infrastructure would not require any new or altered police protection services. Future projects may require a Traffic Control Plan to ensure major disruptions to traffic flow do not occur. Disruptions to response times are not anticipated.

- | | | | | |
|--------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| iii) Schools | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

Any near-term or future pipeline project would not physically alter any schools. Additionally, these projects would not include construction of future housing or induce growth that could increase demand for schools in the area.

- | | | | | |
|----------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| v) Parks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----------|--------------------------|--------------------------|--------------------------|-------------------------------------|

Any near-term or future pipeline project would not physically alter any parks. Therefore, these projects would not create demand for new parks or other recreational facilities.

- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| vi) Other public facilities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|-----------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

Any near-term or future pipeline project would not result in the increased demand for electricity, gas, or other public facilities. These projects would improve the sewer and water utility system to keep up with current and projected demand.

XV. RECREATION –

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Implementation of the near-term and/or future pipeline projects would replace and improve utility infrastructure. The improved infrastructure would not allow for increased access to existing recreation areas. These projects would not directly generate additional trips to existing recreation areas or induce future growth that would result in additional trips to these facilities. Therefore, these

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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projects would not increase the use of existing recreational areas such that substantial physical deterioration of the facility would occur or be accelerated.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Implementation of the near-term and/or future pipeline projects would replace and improve utility infrastructure and would not include the construction of recreational facilities or require the construction or expansion of recreational facilities.

XVI. TRANSPORTATION/TRAFFIC -- Would the project?

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Construction of the near-term and/or future pipeline projects would temporarily affect traffic circulation within the project's Area of Potential Effect (APE). However, an approved Traffic Control Plan would be implemented during construction so that traffic circulation would not be substantially impacted. Therefore, these projects would not result in an increase of traffic which is substantial in relation to existing traffic capacities.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Construction of the near-term and/or future pipeline projects would temporarily affect traffic circulation within the project's APE and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction so that traffic would not exceed cumulative or

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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individual levels of service.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The near-term and any future projects covered under this MND would not include any tall structures or new features that could affect air traffic patterns or introduce new safety hazards related to air traffic.

- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The near-term and any future projects covered under this MND would not include any tall structures or design features that would increase hazards in the area. All projects would be designed to meet City standards and therefore would meet existing levels of service.

- e) Result in inadequate emergency access?

Construction of the near-term or any future project would temporarily affect traffic circulation within the project's APE. However, an approved Traffic Control Plan would be implemented during construction so that there would be adequate emergency access.

- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Construction of the near-term or any future project would temporarily impact circulation during construction activities as it relates to traffic, pedestrians, public transit and bicycles. However, the preparation of a Traffic Control Plan would ensure that any disruption to these services would not be significant.

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Construction of the near-term or any future projects covered under this MND would facilitate the treatment of wastewater and would not exceed the requirements of the Regional Water Quality Control Board.

- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction of the near-term or any future projects covered under this MND would result in improvements to water and sewer pipeline infrastructure. Use of this MND is limited to projects that would not result in a significant unmitigated impact to the environment.

- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction of the near-term or any future projects covered under this MND would not result in an increase in impervious surfaces as the scope is completely within the City Right-of-Way. Therefore, these projects would not require the construction of new storm water drainage facilities or expansion of existing facilities.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction of the near-term or any future projects covered under this MND would not increase the demand for water. These projects would improve the existing water pipelines system throughout the City.

- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

See XVII c)

- f) Be served by a landfill with sufficient

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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permitted capacity to accommodate the project's solid waste disposal needs?

Construction of the near-term or any future projects covered under this MND would not result in the demolition of structures. Construction of these projects would likely generate minimal waste. This waste would be disposed of in accordance with all applicable local and state regulations pertaining to solid waste including permitting capacity of the landfill serving the project area. Demolition or construction materials which can be recycled shall comply with the City's Construction and Demolition Debris Ordinance. Operation of the project would not generate waste and, therefore, would not affect the permitted capacity of the landfill serving the project area.

- g) Comply with federal, state, and local statutes and regulation related to solid waste?

See XVII f). Any solid waste generated during construction related activities would be recycled or disposed of in accordance with all applicable local state and feral regulations.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Any near-term and/or future pipeline projects covered under this MND would be located within the developed public right of way and would not impact any *Sensitive Biological Resources*. Projects that would be located adjacent to the MHPA would be required to incorporate MHPA Land Use Adjacency measures to reduce any potential indirect impacts. As such, indirect impacts would be mitigated to below a level of significance. With respect to historical resources, mitigation for archaeology, paleontology and the built environment have been incorporated into the MND. Each project would be analyzed and a determination made regarding which mitigation measures would be applied in the subsequent environmental document and would be required to comply with the mitigation measures further detailed in Section V of this MND. As a result, project implementation would not result in a significant impact to these resources.

- b) Does the project have impacts that are

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable futures projects)?

When viewed in connection with the effects of the near-term projects and any future pipeline projects on a Citywide basis, construction trenching has the potential to impact archaeological and paleontological resources which could incrementally contribute to a cumulative loss of non-renewable resources. However, with implementation of the mitigation measures found in Section V of the MND, this incremental impact would be reduced to below a level of significance.

Although any near-term and/or future projects could be located within a designated historical district, no direct or cumulative impact is anticipated because each project would be subject to review in accordance with the City's Historical Resources Guidelines, and for consistency with the Secretary of the Interior Standards and this environmental document. Measures to reduce potential indirect impacts for projects located within a historic district would be incorporated into each subsequent environmental document when applicable to the conditions and environmental setting of the alignment. Therefore, no cumulative impact would result under these project types.

Because the near-term and/or future projects would not be located in areas where biological resources could be encountered and would not result in a cumulative loss of resources, Measures to reduce potential indirect impacts for projects located adjacent to the City's MHPA would be incorporated into each subsequent environmental document when applicable to the conditions and environmental setting of the alignment. Implementation of the MHPA Land Use Adjacency Guidelines is consistent with the MSCP Subarea Plan & FEIR which addressed the cumulative loss of sensitive biological resources and edge effects on the MHPA from future development. Therefore, no cumulative impact would result under these project types.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

As stated previously, potentially significant impacts have been identified for Paleontological Resources, Archaeological Resources, Historical Resources (Historic Districts) and MHPA Land Use Adjacency. However, mitigation has been included in Section V of this MND to reduce impacts to below a level of significance. As such, project implementation would not result in substantial adverse impact to human beings.

INITIAL STUDY CHECKLIST

REFERENCES

I. AESTHETICS / NEIGHBORHOOD CHARACTER

- City of San Diego General Plan.
- Community Plan.
- Local Coastal Plan.

II. AGRICULTURAL RESOURCES & FOREST RESOURCES

- City of San Diego General Plan.
- U.S. Department of Agriculture, Soil Survey - San Diego Area, California, Part I and II, 1973.
- California Agricultural Land Evaluation and Site Assessment Model (1997)
- Site Specific Report:

III. AIR QUALITY

- California Clean Air Act Guidelines (Indirect Source Control Programs) 1990.
- Regional Air Quality Strategies (RAQS) - APCD.
- Site Specific Report:

IV. BIOLOGY

- City of San Diego, Multiple Species Conservation Program (MSCP), Subarea Plan, 1997
- City of San Diego, MSCP, "Vegetation Communities with Sensitive Species and Vernal Pools" Maps, 1996.
- City of San Diego, MSCP, "Multiple Habitat Planning Area" maps, 1997.
- Community Plan - Resource Element.
- California Department of Fish and Game, California Natural Diversity Database, "State and Federally-listed Endangered, Threatened, and Rare Plants of California," January 2001.
- California Department of Fish & Game, California Natural Diversity Database, "State and Federally-listed Endangered and Threatened Animals of California," January 2001.
- City of San Diego Land Development Code Biology Guidelines.
- Site Specific Report:

V. CULTURAL RESOURCES (INCLUDES HISTORICAL RESOURCES)

X City of San Diego Historical Resources Guidelines.

X City of San Diego Archaeology Library.

X Historical Resources Board List.

___ Community Historical Survey;

___ Site Specific Report:

VI. GEOLOGY/SOILS

X City of San Diego Seismic Safety Study.

___ U.S. Department of Agriculture Soil Survey - San Diego Area, California, Part I and II,
December 1973 and Part III, 1975.

___ Site Specific Report:

VII. GREENHOUSE GAS EMISSIONS

X Site Specific Report: 'Roadway Construction Emissions Models' conducted for each near-term project (2010 & 2011).

VIII. HAZARDS AND HAZARDOUS MATERIALS

X San Diego County Hazardous Materials Environmental Assessment Listing

___ San Diego County Hazardous Materials Management Division

___ FAA Determination

___ State Assessment and Mitigation, Unauthorized Release Listing, Public Use Authorized.

___ Airport Land Use Compatibility Plan.

___ Site Specific Report:

IX. HYDROLOGY/WATER QUALITY

X Flood Insurance Rate Map (FIRM).

___ Federal Emergency Management Agency (FEMA), National Flood Insurance Program -
Flood Boundary and Floodway Map.

___ Clean Water Act Section 303(b) list, http://www.swrcb.ca.gov/tmdl/303d_lists.html.

___ Site Specific Report:

X. LAND USE AND PLANNING

- City of San Diego General Plan.
- Community Plan.
- Airport Land Use Compatibility Plan: Lindberg Field
- City of San Diego Zoning Maps
- FAA Determination

XI. MINERAL RESOURCES

- California Department of Conservation - Division of Mines and Geology, Mineral Land Classification.
- Division of Mines and Geology, Special Report 153 - Significant Resources Maps.
- California Geological Survey - SMARA Mineral Land Classification Maps.
- Site Specific Report:

XII. NOISE

- Community Plan
- San Diego International Airport Master Plan CNEL Maps.
- MCAS Miramar ACLUP
- Brown Field Airport Master Plan CNEL Maps.
- Montgomery Field CNEL Maps.
- San Diego Association of Governments - San Diego Regional Average Weekday Traffic Volumes.
- San Diego Metropolitan Area Average Weekday Traffic Volume Maps, SANDAG.
- City of San Diego General Plan.
- Site Specific Report:

XIII. PALEONTOLOGICAL RESOURCES

- City of San Diego Paleontological Guidelines.
- Deméré, Thomas A., and Stephen L. Walsh, "Paleontological Resources City of San Diego," Department of Paleontology San Diego Natural History Museum, 1996.
- Kennedy, Michael P., and Gary L. Peterson, "Geology of the San Diego Metropolitan Area, California. Del Mar, La Jolla, Point Loma, La Mesa, Poway, and SW 1/4 Escondido 7 1/2

Minute Quadrangles," California Division of Mines and Geology Bulletin 200, Sacramento, 1975.

Kennedy, Michael P., and Siang S. Tan, "Geology of National City, Imperial Beach and Otay Mesa Quadrangles, Southern San Diego Metropolitan Area, California," Map Sheet 29, 1977.

Site Specific Report:

XIV. POPULATION / HOUSING

City of San Diego General Plan.

Community Plan.

Series 11 Population Forecasts, SANDAG.

Other:

XV. PUBLIC SERVICES

City of San Diego General Plan.

Community Plan.

XVI. RECREATIONAL RESOURCES

City of San Diego General Plan.

Community Plan.

Department of Park and Recreation

City of San Diego - San Diego Regional Bicycling Map

Additional Resources:

XVII. TRANSPORTATION / CIRCULATION

City of San Diego General Plan.

Community Plan.

San Diego Metropolitan Area Average Weekday Traffic Volume Maps, SANDAG.

San Diego Region Weekday Traffic Volumes, SANDAG.

Site Specific Report:

XVIII. UTILITIES

City of San Diego General Plan.

Community Plan.

___ Site Specific Report:

XIX. WATER CONSERVATION

___ City of San Diego General Plan.

___ Community Plan.

___ Sunset Magazine, New Western Garden Book. Rev. ed. Menlo Park, CA: Sunset Magazine.

___ Site Specific Report:

SEWER AND AC WATER GROUP 837
ADDENDUM TO MITIGATED NEGATIVE DECLARATION NO. 255100
(Project No. 494519)
AND
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

ADOPTED ON September 1, 2016

WHEREAS, on June 9, 2016, The City of San Diego Public Works Department submitted an application to the Development Services Department of a Public Project Assessment (PPA) for the Sewer And AC Water Group 837 (Project), for approval of minor technical changes or additions to the Citywide Pipeline Projects scope that was analyzed by adopted Mitigated Negative Declaration No. 255100; and

WHEREAS, the matter was considered without a public hearing by the Deputy Director of the Development Services Department as designated by the City Manager of the City of San Diego on September 1, 2016; and

WHEREAS, on September 1, 2016, the Deputy Director of the Development Services considered the issues discussed in Addendum to Mitigated Negative Declaration No. 255100 (Declaration), a copy of which is on file in the Development Services Department, in accordance with the California Environmental Quality Act of 1970 (CEQA) (Public Resources Code Section 21000 et seq.), as amended, and the State CEQA Guidelines thereto (California Code of Regulations, Title 14, Chapter 3, Section 15000 et seq.); and

WHEREAS, State CEQA Guidelines section 15164(a) allows a lead agency to prepare an Addendum to a final Mitigated Negative Declaration if such Addendum meets the requirements of CEQA; NOW, THEREFORE,

BE IT RESOLVED, by the Deputy Director of the Development Services Department of the City of San Diego as follows:

1. That the information contained in the final Mitigated Negative Declaration No. 255100 along with the Addendum thereto, including any comments received during the public review process, has been reviewed and considered by this Deputy Director of the Development Services Department prior to making a decision on the Project.
2. That there are no substantial changes proposed to the Project and no substantial changes with respect to the circumstances under which the Project is to be undertaken that would require major revisions in the Mitigated Negative Declaration for the Project.
3. That no new information of substantial importance has become available showing that the Project would have any significant effects not discussed previously in Mitigated Negative Declaration or that any significant effects previously examined will be substantially more severe than shown in the Mitigated Negative Declaration.

4. That no new information of substantial importance has become available showing that mitigation measures or alternatives previously found not to be feasible are in fact feasible which would substantially reduce any significant effects, but that the Project proponents decline to adopt, or that there are any considerably different mitigation measures or alternatives not previously considered which would substantially reduce any significant effects, but that the Project proponents decline to adopt.
 5. That pursuant to State CEQA Guidelines Section 15164, only minor technical changes or additions are necessary, and therefore, the Deputy Director of the Development Services Department adopts Addendum to Mitigated Negative Declaration No. 255100 with respect to the Project, a copy of which is on file in the office of the Development Services Department.
 6. That pursuant to CEQA Section 21081.6, the Deputy Director of the Development Services Department adopts the Mitigation Monitoring and Reporting Program, or alterations to implement the changes to the project as required by this Deputy Director of the Development Services Department in order to mitigate or avoid significant effects on the environment, which is attached hereto as Exhibit A.
-
7. That DEVELOPMENT SERVICES STAFF is directed to file a Notice of Determination with the Clerk of the Board of Supervisors for the County of San Diego regarding the Project.

APPROVED: Kerry Santoro, Deputy Director, Development Services Department

By: 

Date: 9/1/16

ATTACHMENT: EXHIBIT A – MITIGATION MONITORING AND REPORTING PROGRAM

EXHIBIT A

MITIGATION MONITORING AND REPORTING PROGRAM SEWER AND AC WATER GROUP 837 PROJECT NO. 494519

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Entitlements Division, 1222 First Avenue, Fifth Floor, San Diego, CA, 92101.

PALEONTOLOGICAL RESOURCES

I. Prior to Permit Issuance or Bid Opening/Bid Award

A. Entitlements Plan Check

1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Assistant Deputy Director (ADD) Environmental designee shall verify that the requirements for Paleontological Monitoring have been noted on the appropriate construction documents.

B. Letters of Qualification have been submitted to ADD

1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the paleontological monitoring program, as defined in the City of San Diego Paleontology Guidelines.
2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the paleontological monitoring of the project.
3. Prior to the start of work, the applicant shall obtain approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

A. Verification of Records Search

1. The PI shall provide verification to MMC that a site specific records search has been completed. Verification includes, but is not limited to a copy of a confirmation letter from San Diego Natural History Museum, other institution or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.

- a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.
 - b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
 - c. MMC shall notify the PI that the PME has been approved.
4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
5. Approval of PME and Construction Schedule
After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

III. During Construction

- A. Monitor Shall be Present During Grading/Excavation/Trenching
 1. The monitor shall be present full-time during grading/excavation/trenching activities including, but not limited to mainline, laterals, jacking and receiving pits, services and all other appurtenances associated with underground utilities as identified on the PME that could result in impacts to formations with high and/or moderate resource sensitivity. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the PME.**
 2. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as trenching activities that do not encounter formational soils as previously assumed, and/or when unique/unusual fossils are encountered, which may reduce or increase the potential for resources to be present.

3. The monitor shall document field activity via the Consultant Site Visit Record (CSVSR). The CSVSR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
1. In the event of a discovery, the Paleontological Monitor shall direct the contractor to temporarily divert trenching activities in the area of discovery and immediately notify the RE or BI, as appropriate.
 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
- C. Determination of Significance
1. The PI shall evaluate the significance of the resource.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
 - b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.
 - (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
 - d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
 - (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
 - (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources - Pipeline Trenching Projects
- The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.

1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
 - c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 2. The following procedures shall be followed.
 - a. No Discoveries
In the event that no discoveries were encountered during night and/or weekend work, The PI shall record the information on the CSVR and submit to MMC via the RE via fax by 8AM on the next business day.
 - b. Discoveries
All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction.
 - c. Potentially Significant Discoveries
If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III - During Construction shall be followed.
 - d. The PI shall immediately contact the RE and MMC, or by 8AM on the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

V. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring

Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring,

- a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with the San Diego Natural History Museum
The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
 4. MMC shall provide written verification to the PI of the approved report.
 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
 2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.
 4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
 2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

APPENDIX B
FIRE HYDRANT METER PROGRAM

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 1 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

1. **PURPOSE**

1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

2. **AUTHORITY**

2.1 All authorities and references shall be current versions and revisions.

2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15

2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986

2.4 California Code of Regulations, Titles 17 and 22

2.5 California State Penal Code, Section 498B.0

2.6 State of California Water Code, Section 110, 500-6, and 520-23

2.7 Water Department Director

Reference

2.8 State of California Guidance Manual for Cross Connection Programs

2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention

2.10 American Water Works Association Standards for Water Meters

2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

3. **DEFINITIONS**

3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 2 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.

3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

4. POLICY

4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.

4.2 Fire hydrant meters will have a 2 ½" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.

4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:

a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.

b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:

1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 3 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.
3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).
4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).
5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).
6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.
7. All private fire hydrant meters shall have backflow devices attached when installed.
8. The customer must maintain and repair their own private meters and private backflows.
9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.
10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 4 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any re-installation.
12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.
13. The outlet shall have a 2 ½ "National Standards Tested (NST) fire hydrant male coupling.
14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).

4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.

4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.

4.6 **Conditions and Processes for Issuance of a Fire Hydrant Meter**

Process for Issuance

- a. Fire hydrant meters shall only be used for the following purposes:
 1. Temporary irrigation purposes not to exceed one year.

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SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 5 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

2. Construction and maintenance related activities (see Tab 2).
 - b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.
 - c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.
 - d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.
 - e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.
 - f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.
 - g. After the fees have been paid and an account has been created, the

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
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meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

4.7 Relocation of Existing Fire Hydrant Meters

- a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as "Hotline"), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter's relocation.
- b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.
- c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

4.8 Disconnection of Fire Hydrant Meter

- a. After ten (10) months a "Notice of Discontinuation of Service" (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.
- b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated

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for removal of the meter.

- c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.
- d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.
- e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

5. EXCEPTIONS

- 5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

6. MOBILE METER

- 6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:
 - a) **Vehicle Mounted Meters:** Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
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inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

b) **Floating Meters:** Floating Meters are meters that are not mounted to a vehicle. **(Note: All floating meters shall have an approved backflow assembly attached.)** The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:

- 1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.
- 2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

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7. FEE AND DEPOSIT SCHEDULES

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. These deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. UNAUTHORIZED USE OF WATER FROM A HYDRANT

8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.

8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.

8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.

8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

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8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

**Larry Gardner
Water Department Director**

- Tabs: 1. Fire Hydrant Meter Application
2. Construction & Maintenance Related Activities With No Return To Sewer
3. Notice of Discontinuation of Service

APPENDIX

Administering Division: Customer Support Division

Subject Index: Construction Meters
Fire Hydrant
Fire Hydrant Meter Program
Meters, Floating or Vehicle Mounted
Mobile Meter
Program, Fire Hydrant Meter

Distribution: DI Manual Holders



Application for Fire Hydrant Meter (EXHIBIT A)

(For Office Use Only)

NS REQ	FAC#
DATE	BY

METER SHOP (619) 527-7449

Meter Information

Application Date	Requested Install Date:
------------------	-------------------------

Fire Hydrant Location: (Attach Detailed Map//Thomas Bros. Map Location or Construction drawing.) Zip:	T.B.	G.B. (CITY USE)
Specific Use of Water:		
Any Return to Sewer or Storm Drain, if so, explain:		
Estimated Duration of Meter Use:		Check Box if Reclaimed Water

Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ()
*Business license#		*Contractor license#	
A Copy of the Contractor's license OR Business License is required at the time of meter issuance.			
Name and Title of Billing Agent: <small>(PERSON IN ACCOUNTS PAYABLE)</small>			Phone: ()
Site Contact Name and Title:			Phone: ()
Responsible Party Name:			Title:
Cal ID#			Phone: ()
Signature:		Date:	
Guarantees Payment of all Charges Resulting from the use of this Meter. Insures that employees of this Organization understand the proper use of Fire Hydrant Meter			

Fire Hydrant Meter Removal Request	Requested Removal Date:
Provide Current Meter Location if Different from Above:	
Signature:	Title: Date:
Phone: ()	Pager: ()

<input type="checkbox"/> City Meter	<input type="checkbox"/> Private Meter
Contract Acct #:	Deposit Amount: \$ 936.00 Fees Amount: \$ 62.00
Meter Serial #	Meter Size: 05 Meter Make and Style: 6-7
Backflow #	Backflow Size: Backflow Make and Style:
Name:	Signature: Date:

WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER

Auto Detailing
Backfilling
Combination Cleaners (Vactors)
Compaction
Concrete Cutters
Construction Trailers
Cross Connection Testing
Dust Control
Flushing Water Mains
Hydro Blasting
Hydro Seeing
Irrigation (for establishing irrigation only; not continuing irrigation)
Mixing Concrete
Mobile Car Washing
Special Events
Street Sweeping
Water Tanks
Water Trucks
Window Washing

Note:

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party
Company Name and Address
Account Number: _____

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter # _____, located at (*Meter Location Address*) ends in 60 days and will be removed on or after (*Date Authorization Expires*). Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego
Water Department
Attention: Meter Services
2797 Caminito Chollas
San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619) _____ - _____.

Sincerely,

Water Department

APPENDIX C

MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

Materials Typically Accepted by Certificate of Compliance

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

APPENDIX D

SAMPLE CITY INVOICE

City of San Diego, Field Engineering Div., 9485 Aero Drive, SD CA 92123		Contractor's Name:	
Project Name:		Contractor's Address:	
Work Order No or Job Order No.		Contractor's Phone #:	
City Purchase Order No.		Invoice No.	
Resident Engineer (RE):		Contractor's fax #:	
RE Phone#:	Fax#:	Contact Name:	Billing Period: (to

Item #	Item Description	Contract Authorization				Previous Totals To Date		This Estimate		Totals to Date	
		Unit	Price	Qty	Extension	%/QTY	Amount	% / QTY	Amount	% / QTY	Amount
1					\$ -		\$ -		\$ -	0.00%	\$ -
2					\$ -		\$ -		\$ -	0.00%	\$ -
3					\$ -		\$ -		\$ -	0.00%	\$ -
4					\$ -		\$ -		\$ -	0.00%	\$ -
5					\$ -		\$ -		\$ -	0.00%	\$ -
6					\$ -		\$ -		\$ -	0.00%	\$ -
7					\$ -		\$ -		\$ -	0.00%	\$ -
8					\$ -		\$ -		\$ -	0.00%	\$ -
9					\$ -		\$ -		\$ -	0.00%	\$ -
10					\$ -		\$ -		\$ -	0.00%	\$ -
11					\$ -		\$ -		\$ -	0.00%	\$ -
12					\$ -		\$ -		\$ -	0.00%	\$ -
13					\$ -		\$ -		\$ -	0.00%	\$ -
14					\$ -		\$ -		\$ -	0.00%	\$ -
15					\$ -		\$ -		\$ -	0.00%	\$ -
16					\$ -		\$ -		\$ -	0.00%	\$ -
17	Field Orders				\$ -		\$ -		\$ -	0.00%	\$ -
18	CHANGE ORDER No.				\$ -		\$ -		\$ -	0.00%	\$ -
Total Authorized Amount (including approved Change Order)					\$ -		\$ -		\$ -	Total Billed	\$ -

SUMMARY

A. Original Contract Amount	\$ -
B. Approved Change Order #00 Thru #00	\$ -
C. Total Authorized Amount (A+B)	\$ -
D. Total Billed to Date	\$ -
E. Less Total Retention (5% of D)	\$ -
F. Less Total Previous Payments	\$ -
G. Payment Due Less Retention	\$0.00
H. Remaining Authorized Amount	\$0.00

I certify that the materials
have been received by me in
the quality and quantity specified

Resident Engineer

Construction Engineer

Retention and/or Escrow Payment Schedule

Total Retention Required as of this billing (Item E)	\$0.00
Previous Retention Withheld in PO or in Escrow	\$0.00
Add'l Amt to Withhold in PO/Transfer in Escrow:	\$0.00
Amt to Release to Contractor from PO/Escrow:	

Contractor Signature and Date: _____

APPENDIX E
LOCATION MAP

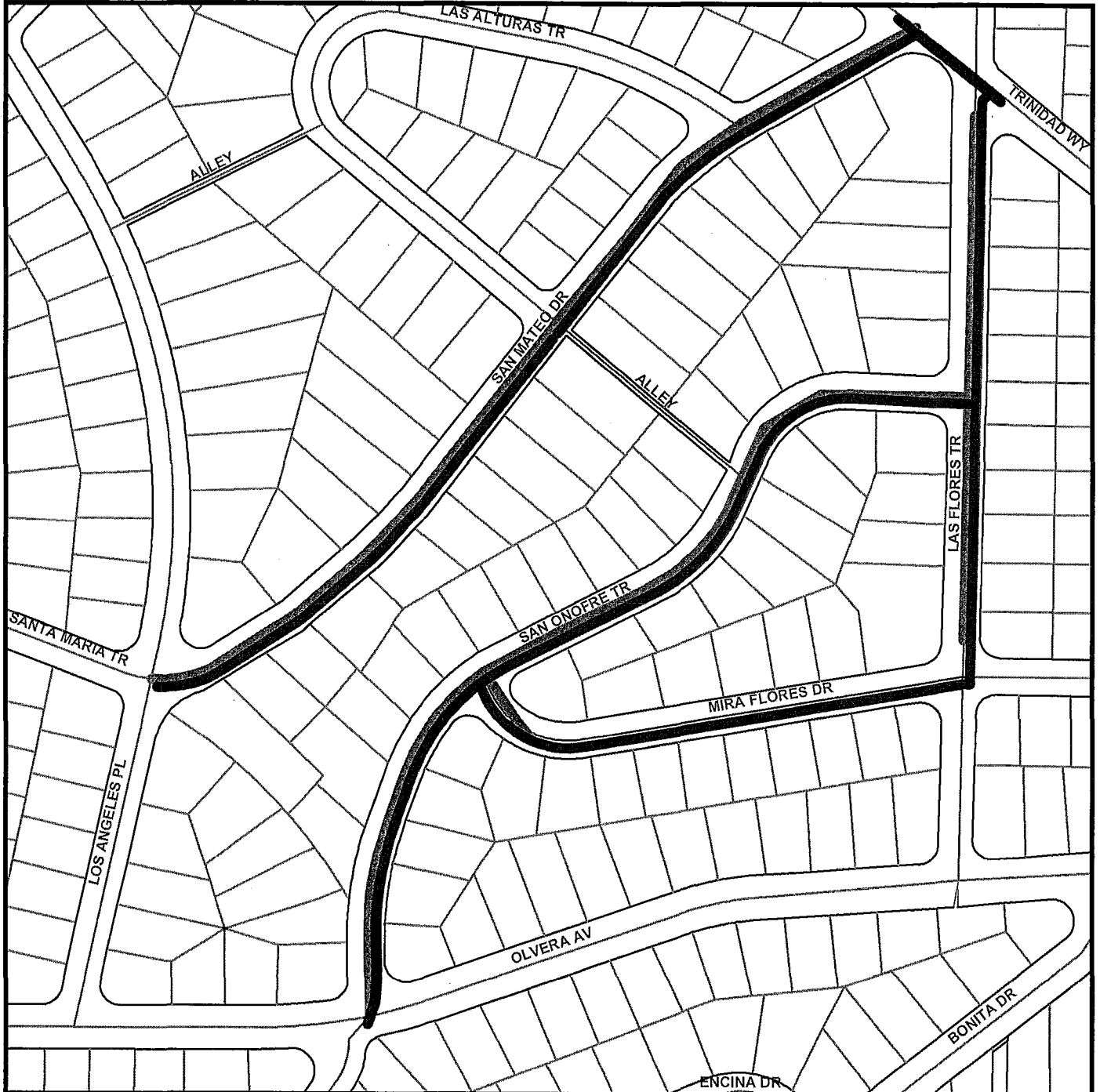
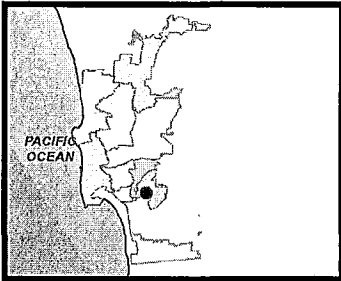
SEWER & AC WATER GROUP 837

SENIOR ENGINEER
CARL SPIER, PE
619-533-5126

PROJECT MANAGER
MAHMOUD ORIQAT, PE
619-533-5232

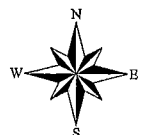
PROJECT ENGINEER
YOUNG DAN
619-533-3749

FOR QUESTIONS ABOUT THIS PROJECT
Call: (619) 533-4207
Email: engineering@sandiego.gov



Legend

-  SEWER
-  WATER



COMMUNITY NAME: ENCANTO NEIGHBOHOOD: SOUTHEASTERN

COUNCIL DISTRICT: 4
Sewer and AC Water Group 837

Appendix E - Location Map (Rev. Dec. 2016)

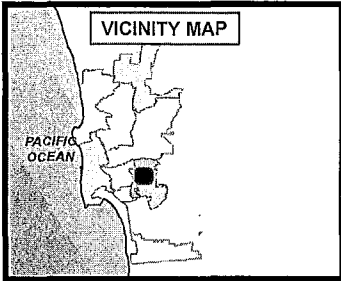


SAP ID: B-13214 (S) /
B-15071 (W)
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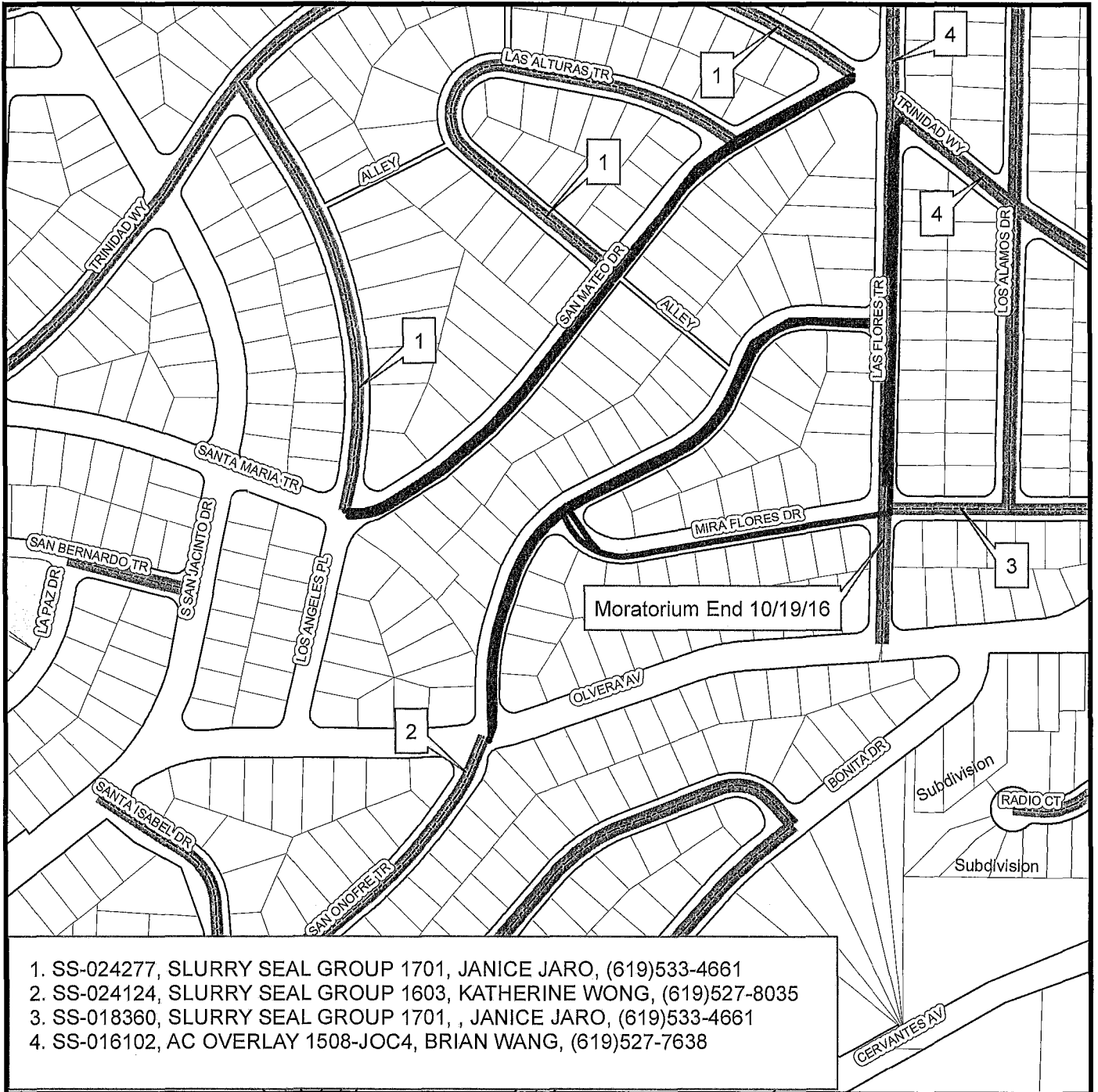
APPENDIX F
ADJACENT PROJECTS

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The City of
SAN DIEGO Public Works
SEWER & AC WATER GROUP 837
Adjacent Project

RIGHT-OF-WAY DIVISION - SECTION I



Legend

SEWER & AC WATER GROUP 837



No Scale

Community Name: Encanto Neighborhood: Southeastern Council District: 4

SAP ID# B13214 (S) B15071 (W)

Date: November 7, 2016

Sewer and AC Water Group 837

Appendix F - Adjacent Projects (Rev. Dec. 2016)

APPENDIX G
HYDROSTATIC DISCHARGE FORM

Hydrostatic Discharge Requirements Certification (Discharge Events \geq 325,850 gpd)

All discharge activities related to this project comply with the Regional Water Quality Control Board (RWQCB) Order No. R9-2010-0003, General Permit for Discharges of Hydrostatic Test Water and Potable Water to Surface Water and Storm Drains as referenced by (http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2010/R9-2010-0003.pdf), and as follows:

Discharged water has been dechlorinated to below **0.1 (mg/l)** level; and effluent has been maintained between **6 and 9 (pH)** based on:

Event #	Discharge Date	Item Tested	Duration	Amount (gpd)	Description of the Proposed Discharge	Method and Test Result	Is Discharge Within Limits?		Comment/Action Taken
							YES	NO	
		Chlorine							
		pH							
		Chlorine							
		pH							
		Chlorine							
		pH							
		Chlorine							
		pH							

Qualified Personnel Conducting Tests (Print Name):

SAP No.(s):

***Signed:**

Project Name:

* By signing, I hereby certify and affirm under penalty of perjury that all of the statements and conditions for hydrostatic discharge events are correct.

Have any thresholds been exceeded? Per Order No. R9-2010-0003, would this be a reportable discharge and must be reported **within 24 hours** of the event? [Reportable discharge would include violation of maximum gallons per day, any upset which exceeds any effluent limit]

APPENDIX H
PRELIMINARY GEOTECHNICAL INVESTIGATION REPORT



Preliminary Geotechnical Investigation Report

**City of San Diego
Sewer and AC Water Group 837 - Task 15GT06
Valencia Park Neighborhood
San Diego, California**

**Prepared for:
City of San Diego
Public Works Department
525 B Street, Suite 750 (MS 908A)
San Diego, CA 92101**

November 22, 2016

Project No.: 160769.2

November 22, 2016
Project No. 160769.2

Ms. Reyhaneh Martin
Project Manager
City of San Diego
Public Works Department
525 B Street, Suite 750 (MS 908A)
San Diego, CA 92101



Subject: Preliminary Geotechnical Investigation
City of San Diego
Sewer and AC Water Group 837 - Task 15GT06
Valencia Park Neighborhood
San Diego, California

OFFICE
562.426.3355

FAX
562.426.6424

WEB
twininginc.com


Dear Ms. Martin,

In accordance with your request and authorization, we are presenting the results of our geotechnical engineering evaluation for the above-referenced project in the Valencia Park neighborhood of the City of San Diego, California. The purpose of this investigation was to evaluate the subsurface conditions at the proposed sewer and water pipeline locations and to provide geotechnical engineering recommendations for the Sewer and AC Water Group 837 project.


Please note that the recommendations presented within the report are based on assumptions stated herein. Should conditions encountered during installation and construction differs from those assumed in our analyses, or should the proposed project change, our recommendations may need to be modified accordingly.

We appreciate the opportunity to be of service on this project. Should you have any questions regarding this report, or if we can be of further service, please do not hesitate to contact the undersigned.

Respectfully submitted,
TWINING, INC.


Andres Bernal, G.E. 2715
Senior Geotechnical Engineer




Monte Murbach, CEG 1856
Consulting Engineering Geologist

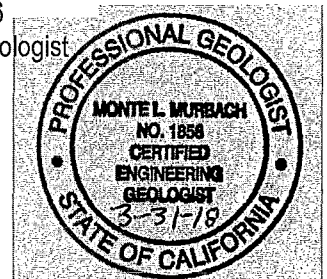


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- Figure 3 – Regional Geologic Map
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Appendices

- Appendix A – Field Exploration
- Appendix B – Laboratory Testing

1. INTRODUCTION

This report presents the results of our preliminary geotechnical investigation performed for the Sewer and AC Water Group 837 project within the Valencia Park neighborhood of the City of San Diego, California. The approximate locations of the proposed pipelines are shown in Figure 1, Project Location Map. The purpose of this study was to evaluate the subsurface conditions at the project site and provide geotechnical engineering recommendations for the design and construction of the proposed sewer and water lines.

2. PROJECT DESCRIPTION

According to the information presented in the construction plans prepared by the City of San Diego (Sheets 38804-01-D to 22-D), the project includes installation of 8-inch diameter C235/C305 PVC water pipeline with an approximate length of 4,260 feet and sewer pipeline installation of 8-inch diameter SDR 26 PVC with an approximate length of 3,000 feet. New pipeline sections as well as replacement of existing sections are part of the project. Conventional open-cut trench installation is proposed for the water lines and trenchless installation methods are proposed for the sewer lines.

Water pipelines will be installed at an approximate depth of 4 feet below existing street grade elevation. Sewer pipeline installation depths range from 7 feet to 24 feet below existing street grade corresponding to invert elevations of 182 feet to 278 feet above mean sea level (msl). A summary of the borings performed and proposed sewer line installation depths is presented in Table 1.

Table 1
Sewer Pipeline Installation Depths

Boring No.	Sewer Pipeline Segment	Surface Elevation Range (ft, msl)		Invert Elevation Range (ft, msl)		Maximum Pipe Depth (ft)
B-1	San Mateo Dr. NE of Santa Maria Tr.	198	256	182	235	22
B-2	San Mateo Dr. SE of Las Alturas Tr.	256	263	235	248	19
B-3	San Mateo Dr. SW of Trinidad way.	263	276	249	261	16
B-4	San Onofre Tr. N of Olvera Street	209	232	207	213	24
B-5	Mira Flores Dr. SE of San Onofre Tr.	231	244	211	231	15
B-6	San Onofre Tr. N of Olvera Street.	231	263	212	250	21
B-7	Las Flores Tr. E of San Onofre Tr.	264	274	250	258	22

3. SITE DESCRIPTION

Sewer and AC Water Group project 837 is located within the Valencia Park neighborhood in the City of San Diego. The area is characterized by moderately undulating topography. In general, the project vicinity corresponds to a residential area with single-family homes and multi-family dwellings and paved streets and sidewalks.

4. SCOPE OF SERVICES

Our scope of services for this project consisted of the following:

- Review of readily available background data, including project plans provided by the City of San Diego, in-house geotechnical data, geotechnical literature, and, geologic and topographic maps relevant to the project.
- Discussion with City of San Diego representatives and selection of seven boring locations for the subsurface investigation.
- Preparation of traffic control plans and obtaining an encroachment permit from the City of San Diego.
- Obtaining boring permits from the San Diego County Department of Environmental Health (DEH).
- Performance of a site reconnaissance to observe the general surface conditions at the project site and markout the boring locations.
- Notification of Underground Service Alert (USA) a minimum of 48 hours prior to excavation.
- Performance of a subsurface evaluation consisting of drilling and sampling seven exploratory borings.
- Laboratory testing on selected bulk and relatively undisturbed samples to evaluate the geotechnical engineering properties of the on-site soils.
- Review and analysis of data collected from our site reconnaissance, subsurface explorations, and laboratory testing. Specifically, our analyses included the following:
 - Evaluation of general subsurface conditions and description of types, distribution, and engineering characteristics of subsurface materials;
 - Evaluation of current and historical groundwater conditions at the site and potential impact on design and construction;
 - Evaluation of project feasibility and suitability of on-site soils for fill materials;
 - Development of general recommendations for earthwork, including requirements for placement of compacted fill; and,
 - Recommendations for temporary excavations, shoring design and trenchless installation.
- Preparation of this report summarizing the results of our findings and presenting our conclusions and geotechnical recommendations for the design and construction of the proposed improvements.

5. FIELD EXPLORATION AND LABORATORY TESTING

5.1. Field Exploration

Field explorations were performed on October 11th and October 12th, 2016. The subsurface conditions were evaluated by drilling seven borings to approximate depths ranging from 15½ feet to 31½ feet below existing ground surface (bgs). The borings were drilled using a CME-75 truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers. The approximate locations of the exploratory borings are shown on Figure 2, Boring Location Map. The logs of borings are presented in Appendix A, Field Exploration.

Relatively undisturbed samples were obtained using a modified California split spoon sampler. Standard Penetration Tests (SPTs) were performed to obtain disturbed soil samples using a split barrel sampler. The samplers were driven using a 140-pound, automatic-drop hammer falling approximately 30 inches.

The blow counts were recorded and the materials encountered in the borings were logged by our field personnel. The number of blows required to drive the sampler 12 inches was recorded and are presented on the boring logs in Appendix A. After completion, the borings were backfilled in accordance with San Diego County Department of Environmental Health (SDCDEH) requirements and the street borings were capped with rapid-set concrete.

5.2. Laboratory Testing

Laboratory tests were performed on selected samples obtained from the borings in order to aid in the soil classification and to evaluate the engineering properties of the soils. The laboratory tests included: in-situ moisture and dry density, Atterberg limits, sieve analyses, direct shear and corrosivity evaluation. In-situ moisture content and density data are presented on the boring logs in Appendix A. A description of the laboratory tests performed as well as the test results are shown in Appendix B.

6. GEOLOGY AND SUBSURFACE CONDITIONS

6.1. Regional Geologic Setting

The site is located in the Peninsular Ranges Geomorphic Province (PRGP) of California. The Peninsular Range Province is characterized by northwest trending mountain ranges separated by a series of sub-parallel fault zones associated with the San Andreas Fault System. Within the PRGP, the mountain ranges generally consist of Cretaceous igneous rocks of the Peninsular Ranges Batholith and Jurassic metasediments and metavolcanics, and the topographically lower areas in the coastal region typically consist of marine and terrestrial sedimentary rocks (Kennedy and Peterson, 1975). In the coastal region of San Diego County, Quaternary and late Tertiary age folding and tilting has occurred in areas adjacent to the active Rose Canyon fault zone and a few randomly oriented and scattered small scale faults exist throughout the region (Kennedy and Peterson, 1975; Treiman, 1993; Tan and Kennedy, 2008). The site is located within the PRGP coastal region.

6.2. Site Geology and Subsurface Conditions

The project site is underlain by Early Pleistocene to Early Pliocene-aged formational materials consisting of silty to clayey sandstone and siltstone. These materials have been mapped by Kennedy and Tan (2008) as the San Diego Formation. At the exploratory locations, the formational materials are mantled by artificial fill soils likely associated with residential street and utility construction. The regional geology is presented in Figure 3. The geologic units observed are described below from youngest to oldest.

6.2.1. Artificial Fill (Unmapped)

Artificial fill was encountered in the upper portions of the borings. At the boring locations the fill soils were composed of light to dark brown, silty to clayey sand, with gravel and cobbles. The thickness of fill encountered is approximately 3 feet. A portion of the fill is considered suitable for reuse as backfill for the waterline trenches.

6.2.2. San Diego Formation (Map Symbol Tsdss)

The San Diego formation encountered at the site is described by Kennedy (1975) and Kennedy and Tan (2008) as marine sandstone. Some of the sandstone is interfingered with transitional marine and nonmarine gravel to cobble conglomerate.

Sediments of the San Diego formation were encountered in all our borings. These materials were generally composed of light brown to yellow to orange brown, silty and clayey, fine- to medium-grained sandstone. Gravels and cobbles were encountered locally within the sandstone. The San

Diego Formation appeared to be medium dense to very dense and weakly to moderately cemented. Refusal on cobbles occurred in boring B-4 at a depth of 15½ feet bgs.

6.3. Groundwater

Groundwater was not encountered in our exploratory borings and is not anticipated at the proposed sewer installation depths. However, subsurface water elevations may change over time as a consequence of seasonal and meteorological fluctuations or by human activity at this and nearby sites. Seepage may occur at lithologic changes within fill soils and at the interface between fill and formational materials.

6.4. Geologic Hazards

Geologic hazards at the site are essentially related to those caused by earthquakes. The major cause of damage from earthquakes is fault rupture and strong shaking from seismic waves. Potential geologic hazards that could affect the project site are discussed below.

6.4.1. Faulting

The southern California region has long been recognized as being seismically active. Seismic activity results from a number of active faults that cross the region, all of which are related to the San Andreas transform system which covers a broad zone of right lateral faults that extend from Cape Mendocino to Baja California. Faults in Southern California are classified according to their activity as active, potentially active, and inactive faults. Active faults are those faults that have had surface displacement within Holocene time (approximately the last 11,000 years). Faults are considered potentially active if they show evidence of surface displacement since the beginning of Quaternary time (about 1.6 million years ago), but not since Holocene time. Inactive faults are those which have not had surface movement since the beginning of Quaternary time.

The site is not within a currently established State of California Alquist-Priolo Earthquake Fault Zone for fault rupture hazard (formerly Special Studies Zones for fault rupture hazard). Based on a review of geologic literature, no active or potentially active faults are known to occur beneath the project site. Accordingly, it appears that there is little probability of surface rupture due to faulting beneath the site. There are, however, several faults located in sufficiently close proximity that movement associated with them could cause significant ground motion at the site as shown in Figure 4, Fault Location Map.

Regional active faults that occur near the Valencia Park area include the Rose Canyon fault zone, the offshore Coronado Bank and San Diego Trough fault zones to the west, the Elsinore and San Jacinto fault zones to the east, and the San Miguel-Vallecitos and Agua Blanca fault zones to the south in Mexico. Locally, the Rose Canyon fault zone trends north-northwest through downtown San Diego and the San Diego Bay. The closest known active faults to the site are the Rose Canyon fault zone located approximately 5 miles to the west, the Coronado Bank fault zone located 15 miles to the west and the Newport-Inglewood fault zone located 37 miles northwest. Fault zones that are considered potentially active include the La Nacion fault zone which has fault splays mapped about 0.2 miles to the east and west of the project site.

6.4.2. Earthquake Ground Motion

The project area may be subject to strong ground shaking in the event of an earthquake; however this hazard is common to Southern California and the effects on the proposed project can be mitigated if the improvements are designed and constructed in accordance with current engineering practice and building codes.

6.4.3. Liquefaction

The potential for seismically induced liquefaction is greatest where shallow ground water and poorly consolidated, well sorted, fine grained sands and silts are present. Liquefaction potential decreases with increasing density, grain size, and clay and gravel content, but increases as the ground acceleration and duration of seismic shaking increases.

Fill soils with about 3 feet in thickness cover the project site. These materials are composed of loose to medium dense, silty sand and clayey sand with some gravel and cobbles. Beneath the fill, formational materials consisting of weakly to moderately cemented sandstone occur. Groundwater was not encountered within the depths drilled. Accordingly, the potential for liquefaction in the event of a strong to moderate earthquake on a nearby fault is considered negligible.

6.4.4. Seismic Settlement

Seismic settlement occurs when dry to saturated, loose to medium dense granular soils densify during ground shaking. Due to lithologic variations, such settlement can occur differentially across a site. Differential settlement may also be induced by ground failures, such as liquefaction, flow slides, and surface ruptures. The potential for seismic settlement in fill materials is considered low to moderate. The potential for seismic settlement in formational materials is very low.

6.4.5. Landslides and Slope Stability

No evidence indicating the presence of deep seated landslides was observed on or in the immediate vicinity of the site. The sedimentary units exposed within the vicinity of the project area appeared to exhibit nearly horizontal bedding (Kennedy and Tan, 2008). The potential for deep seated slope stability problems at the site is considered low. There is, however, the potential for shallow sloughing and slumping of slope materials exposed in drainage channels.

6.4.6. Seismic Safety Study

The City of San Diego Seismic Safety Study designates the project area as "Zone 53: Level or sloping terrain, unfavorable geologic structure. Low to moderate risk." as shown in Figure 5, Seismic Safety Map.

6.5. Seismic Design Parameters

The project area is located at approximate coordinates: latitude N32.6989° to N32.7025° and longitude W117.0749° to W117.0786°. The materials beneath the site consist of loose to medium dense fill extending to an approximate depth of 3 feet, underlain by medium dense to very dense formational materials.

Based on the results of our field investigation, the applicable Site Class is D, consisting of a stiff soil profile with average SPT N values between 15 and 50 blows per foot. Table 2 presents seismic design parameters for the site in accordance with 2013 CBC and mapped spectral acceleration parameters (United States Geological Survey, 2016).

Table 2
2013 California Building Code Design Parameters

Design Parameter	Value
Site Class	D
Mapped Spectral Acceleration Parameter at Period of 0.2-Second, S_s	0.979G
Mapped Spectral Acceleration Parameter at Period 1-Second, S_1	0.373g
Site Coefficient, F_a	1.008
Site Coefficient, F_v	1.655
Adjusted MCE_R^1 Spectral Response Acceleration Parameter at Short Period, S_{MS}	1.085g
1-Second Period Adjusted MCE_R^1 Spectral Response Acceleration Parameter, S_{M1}	0.617g
Short Period Design Spectral Response Acceleration Parameter, S_{DS}	0.724g
1-Second Period Design Spectral Response Acceleration Parameter, S_{D1}	0.411g
Peak Ground Acceleration, PGA_M^2	0.444g
Seismic Design Category	D
Notes: ¹ Risk-Targeted Maximum Considered Earthquake ² Peak Ground Acceleration adjusted for site effects	

7. CONCLUSIONS

Based on the results of our subsurface evaluation, laboratory testing, and data analysis, construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations of this report are incorporated in the design and construction of the project. Geotechnical considerations include the following:

- The site is underlain by 3 feet of poorly consolidated fill soils overlying sandstone and siltstone with local gravel and cobbles. Refusal on cobbles was encountered in boring B-4 at a depth of 15½ feet bgs.
- The majority of the fill is suitable for re-use as compacted fill, however, oversize materials and clayey soils may not be reused.
- On-site materials are considered generally excavatable with conventional heavy-duty earth moving construction equipment. Difficult excavation is anticipated within strongly cemented formational materials and cobble zones. The installation systems and drilling equipment used should be designed for the anticipated subsurface conditions.
- Groundwater was not encountered within the boring locations. Transitory localized seepage may occur at the geologic contacts due to rainfall, irrigation practices, and other factors.
- Based on review of readily available geologic literature, active or potentially active faults do not cross the subject site. Accordingly, the possibility of surface rupture at the site due to faulting is considered low.
- The potential for seismically induced seismic settlement is moderate to low in the fill soils and very low in formational materials.
- Based on Caltrans (2012) corrosion criteria, the project site would be classified as a corrosive site.

8. RECOMMENDATIONS

8.1. General

Based on the results of our field exploration, laboratory testing, and engineering analyses, it is our opinion that the proposed construction is feasible from a geotechnical standpoint, provided that the recommendations in this report are incorporated into the design plans and are implemented during construction. The following sections present our conclusions and recommendations pertaining to the geotechnical engineering design for this project.

8.2. Site Preparation

All exposed temporary excavation bottoms should be observed and accepted by the geotechnical engineer or engineering geologist prior to construction of the sewer and water lines and prior to any fill placement. Unstable excavation bottoms may require additional removal to expose competent, non-yielding earth materials.

Vegetation, debris, organics and oversized materials greater than 6 inches in maximum dimension should be separated from on-site soil and legally disposed of off-site prior to placement of any compacted fill. Excavation bottoms should be observed and accepted by the geotechnical engineer or engineering geologist prior to installation of sewer and water lines and trench backfill placement. Unstable excavation bottoms may require additional removal to expose competent, non-yielding earth materials. Alternatively, gravel and geotextile fabrics may be used to stabilize the bottom of excavations when saturated or unstable materials are exposed within the excavation depth.

8.3. Compacted Fill

On-site earth materials can be replaced as engineered backfill for project excavations if they conform to City of San Diego requirements. Engineered fill should be placed in 8-inch-thick loose lifts and compacted to at least 90 percent of the maximum dry density, as evaluated using ASTM D1557. We recommend that the upper 1 foot of the subgrade materials below pavement sections be compacted to at least 95 percent of the maximum dry density as evaluated using ASTM D1557. The moisture content of the fill soils should be maintained within 2% of optimum moisture content (ASTM D 1557) for granular materials and 2% to 4% above optimum for clayey soils.

If imported fill materials are needed on the site, they should have a very low expansion potential (expansion index not greater than 20) and be classified as non-corrosive. Proposed import materials should be evaluated and approved by the geotechnical engineer prior to use at the site.

8.4. Excavation Characteristics

Excavations in fill and weakly cemented formational materials should generally be feasible using heavy-duty earth moving equipment in good working condition. Difficult excavation is anticipated within strongly cemented sandstone and cobble zones and may require the use of heavy ripping or rock breaking equipment.

8.5. Temporary Excavations

The upper portion of on-site materials have low cohesion or are weakly cemented. Temporary uncharged excavation sides may be sloped back at an inclination of 1½:1 (horizontal to vertical). Personnel from Twining, Inc. should observe the excavations so that any necessary modifications based on the encountered soil conditions can be recommended.

Barricades should be placed around temporary excavations so that vehicles and storage loads do not encroach within 10 feet of the top of excavated slopes. A greater setback may be necessary when considering heavy vehicles, such as concrete trucks and cranes. Twining, Inc. should be advised of such heavy vehicle loadings so that specific setback requirements can be established. If temporary construction slopes are to be maintained during the rainy season, we recommend that berms be graded along the top of slopes in order to prevent runoff water from entering the excavation and eroding slope faces.

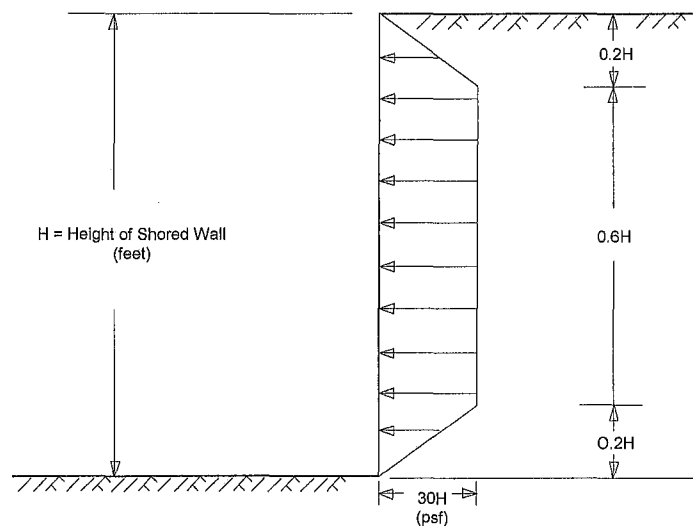
All excavations should be performed in accordance with CalOSHA requirements. Vertical excavations will require temporary shoring/shielding. Design recommendations for temporary shoring are presented in the following section.

8.6. Temporary Shoring

Temporary excavations to maximum depths of 24 feet are anticipated. Shoring will be necessary for vertical excavations that are greater than 4 feet in depth, where there is the potential for caving soils or for support of adjacent buried utilities. Shoring should be maintained throughout the installation. When supporting adjacent improvements, sheeting and/or shoring should be installed to prevent loss of support and/or significant settlement.

For design of cantilevered shoring with heights of 15 feet or less a triangular distribution of lateral earth pressure may be used. If the soils behind the shoring are level and groundwater is below the bottom of the excavation, an equivalent fluid pressure of 42 pounds per cubic foot may be assumed for design. Where movement is not acceptable, we recommend that the shoring be designed for an "at rest" pressure of 62 pounds per cubic foot. Some surface settlement should be anticipated during shoring installation especially within the loose to medium dense fill soils.

For excavations greater than 15 feet, tied-back or braced shoring is recommended. Tied-back or braced shoring should be designed to resist a trapezoidal distribution of lateral earth pressure. The recommended pressure distribution, for the case where the grade is level behind the shoring and groundwater levels are below the bottom of the excavation, is illustrated in the following diagram with the maximum pressure equal to $30H$ pounds per square foot. H is the height of the shored wall in feet. The loads will need to be modified if adverse bedding is present.



Surcharge from live loads including traffic and dead loads including adjacent structures that are located within a 1:1 (horizontal to vertical) plane drawn upward from the base of the shored excavation should be added to the lateral earth pressures. The lateral contribution of uniform surcharge loads located immediately behind the temporary shoring may be calculated by multiplying the vertical surcharge pressure by 0.35. Lateral load contributions of surcharge loads behind the shored wall may be provided once the load configurations and layouts are known. As a minimum, 250 pounds per square foot vertical uniform surcharge is recommended to account for nominal construction and/or traffic loads.

8.7. Permissible Depth of Cover for PVC Pipe

Twining performed an analysis of permissible depth of cover for PVC pipe in accordance with City of San Diego Standard Drawing SDS-101. Based on our analysis, we prepared the following table showing the various pipeline segments and applicable design methods for the project.

Table 3
Pipe Design Method per City of San Diego Standard Drawing SDS-101

Street Name	Station Limits	Design Method (see note below)
San Mateo Dr.	3+20.00 to 4+30.50	(B)
San Mateo Dr.	4+30.50 to 5+62.00	Special
San Mateo Dr.	5+62.00 to 6+31.70	(B)
San Mateo Dr.	8+53.24 to 11+72.50	(B)
San Mateo Dr.	11+72.50 to 13+99.40	(A)
San Mateo Dr.	13+99.40 to 14+68.75	(B)
San Onofre Tr.	3+01.89 to 4+88.78	Special
San Onofre Tr.	4+88.78 to 7+68.50	(B)
San Onofre Tr.	7+68.50 to 8+23.68	(A)
San Onofre Tr.	8+23.68 to 9+72.44	(B)
San Onofre Tr.	9+72.44 to 10+25.40	(A)
San Onofre Tr.	10+25.40 to 10+82.35	(B)
San Onofre Tr.	10+82.35 to 11+81.44	Special
San Onofre Tr.	11+81.44 to 12+71.50	(B)
San Onofre Tr.	12+71.50 to 14+41.97	(A)
Mira Flores Dr.	1+00.00 to 1+41.07	(B)
Mira Flores Dr.	1+41.07 to 2+06.84	(A)
Las Flores Tr.	1+00.00 to 1+62.08	(A)
Las Flores Tr.	1+62.08 to 3+45.80	(B)
Las Flores Tr.	3+45.80 to 3+82.80	(A)
Las Flores Tr.	3+82.80 to 4+49.68	(B)
Las Flores Tr.	4+49.68 to 5+37.52	Special
Las Flores Tr.	5+37.52 to 5+93.38	(B)
Las Flores Tr.	5+93.38 to 6+46.89	(A)
Las Flores Tr.	6+46.89 to 6+92.55	(B)

Note: Method (A) SDR - 35 or pipe stiffness of 46 psi per ASTM D2412
Method (B) SDR - 35 for standard penetration test (SPT) greater than 13 blows per foot as shown in this report, otherwise use SDR-26

8.8. Trenchless installation

According to our discussions with City representatives, we understand that the existing 8-inch diameter PVC sewer pipes will be replaced with 8-inch PVC SDR 26 using micro-tunneling or horizontal directional drilling trenchless methods. The selection of the installation method will depend on the length of the reach, the surface and subsurface conditions, and the alignment tolerances for the pipes to be installed. Our recommendations are based on our understanding of the proposed project, the results of the site reconnaissance, field explorations and laboratory testing completed for this investigation.

8.8.1. Microtunneling

This method uses a remote controlled microtunnel boring machine that provides continuous support to the tunnel face. Sections of pipe are jacked behind the tunneling machine which is used as casing during pipeline installation. Soil cuttings are removed through the casing pipe to the sending pit using augers or conveyors. While microtunneling provides control of alignment, large set-up areas are required. The greatest concern using microtunneling is the presence of obstructions such as cobbles and debris. Typically a 36-inch microtunnel boring machine is limited to a maximum material size of 9 to 12 inches, depending on the machine.

The weakly cemented and medium dense soils encountered at the site are anticipated to exhibit firm to moderately fast raveling behavior in accordance with the Tunnelman's Ground Classification. Firm to slow raveling is anticipated in the strongly to moderately cemented sandstone. Sandstone and conglomerate layers are associated with the San Diego Formation. High blow counts and refusal were noted in exploratory boring B-4. Due to the size of the sampling equipment and the drilling methods, it was not possible to determine the maximum size of the materials (gravel, cobbles or debris) encountered. Additional subsurface exploration may be performed at this location to characterize the materials maximum size within the pipeline alignment. Tunneling equipment should be designed for the anticipated site conditions.

8.8.2. Horizontal Directional Drilling

Horizontal directional drilling (HDD) methods involve steerable tunneling systems for installation of small- and large-diameter pipelines. In most cases, it is a two stage process. The first stage consists of drilling a small diameter pilot hole along the desired centerline of the proposed line. The second stage consists of enlarging the pilot hole to the desired diameter and pulling the utility line through the enlarged hole. This method allows to track the location of the drill bit and steer it during the drilling process. The result is greater degree of precision in placing utilities. Based on our subsurface exploration, the site is underlain by medium dense to dense silty sandstone to sandy siltstone with occasional coble and gravel, therefore HDD installation using HDPE pipe may be considered as an alternative to the proposed PVC pipe.

8.8.3. Trenchless Installation Recommendations

We recommend that trenchless pipe installation for this project be performed by contractors with experience in similar projects using installation methods and equipment compatible with local soil conditions. The risk of impacting adjacent structures, utilities, ground heave, vibrations, settlement and refusal of the excavation tools should be considered. Surface settlements are anticipated to be greater where pipe installations occur at shallower depths. Monitoring of surface settlement should be provided during installation. Even though significant settlement is not anticipated, mitigation measures may be required if surface settlement exceeds ½-inch. The estimated load on 8-inch pipelines installed at depths ranging from 7 to 24 feet is 200 pounds per linear feet based on Marston's formula. Loads for different pipe sizes and depths would need to be evaluated.

8.9. Open Cut Installation

We understand that water pipelines will be installed at an approximate depth of 4 feet below existing street grade using the open cut method. Trenching and excavation should be performed in accordance with CalOSHA guidelines. Recommendations for temporary excavations were presented in Sections 8.5 and 8.6 of this report.

8.9.1. Installation Recommendations

We recommend that pipe installation for this project be performed by contractors with experience in similar projects and local soil conditions. Due to existing improvements in the areas surrounding the proposed alignments and subsurface conditions, difficulties during installation may occur. The excavation and pipeline installation methods and equipment used should be compatible with the project requirements and anticipated subsurface conditions. The effects of excavation of formational materials on adjacent structures and utilities due to vibrations and settlement should be considered.

8.9.2. Pipeline Loads

The loads imposed by backfill soils on the buried pipelines may be determined using the Marston-Spangler equation:

$$W_c = C_d w B_c B_d$$

where, W_c = load, in pounds per foot
 C_d = Marston load coefficient, defined as:

$$C_d = \frac{1 - e^{-2K\mu \frac{H}{B_d}}}{2K\mu'}$$

w = density of backfill materials, in pounds per cubic foot
 B_d = width of the trench at top of pipe, in feet
 B_c = outside width of flexible pipe, in feet

The Marston-Spangler load factors recommended for this project are presented in Table 4. The resulting loads are applicable for project design provided that pipe installation, trench dimensions, placement and compaction of trench backfill materials are performed in accordance with City of San Diego standard plans and specifications and Section 306 of the Standard Specifications for Public Works Construction (SSPWC - Greenbook).

**Table 4
 Marston-Spangler Load Factors**

Unit Weight of Backfill	Coefficient of Friction (μ')	Rankine's Ratio (K)	Maximum $K\mu'$
125 pcf	0.35	0.33	0.175

8.9.3. Monitoring

Buildings, structures, sidewalks, pavements and other improvements that are adjacent to the proposed sewer alignment should be surveyed and photographed prior to excavation. Pre- and post-construction video-documentation should be conducted in adjacent storm and sanitary sewer systems. The initial relative positions and elevations of adjacent improvements should be recorded.

An appropriate number of survey points should be provided by a licensed surveyor so that the Project Engineer may formulate a professional opinion regarding movement. Survey points should be monitored once each week until the installation and backfilling is completed. Additional surveying may be required by the Project Engineer. Visual observations of the excavation and adjacent areas should be made on a daily basis by Twining during installation of the pipeline.

8.9.4. Trench Bottoms

At locations where the trench bottom is yielding or otherwise unstable, pipe support may be improved by placing 12 inches of ¾-inch crushed rock as defined in SSPWC Section 200-1.2. Remedial earthwork at the trench bottom should be performed where oversize materials (rocks or clods greater than 3 inches) are present. Removal of oversize materials to a depth of 6 inches below the bottom of the pipeline and replacement with fill compacted to at least 90% relative compaction is recommended. Alternatively, ¾-inch crushed rock may be used.

8.9.5. Trench Backfill

Pipe trench backfill should conform to the recommendations presented in this report, City of San Diego standard plans and specifications, and SSPWC Section 306.

8.10. Lateral Pressures for Thrust Blocks

Thrust restraint for buried pipelines may be achieved by transferring the thrust force to the soil outside the pipe through a thrust block. Thrust blocks should be backfilled with granular backfill material, compacted as outlined in this report. Thrust blocks may be designed using lateral passive earth pressure according to the equation presented below:

$$P_p = 150 (D^2 - d^2) \text{ lb/ft}$$

where, P_p is the passive soil resistance per foot of width
 d is the depth to the top of the thrust block
 D is the depth to the bottom of the thrust block.

8.11. Pavement Reconstruction

Trench excavations in existing streets or paved areas will involve replacement of pavement sections at the completion of work. In general, pavement repair should conform to the material thicknesses and compaction requirements of the adjacent pavement section. Subgrade and aggregate base materials should be compacted to 95 percent relative compaction as evaluated using ASTM D1557. Asphalt concrete (AC) should be compacted to 95 percent relative compaction as evaluated using ASTM D1561 (Hveem density). Pavement reconstruction should conform to City of San Diego requirements.

8.12. Corrosivity

Laboratory testing was performed on representative soils samples to evaluate soil pH, electrical resistivity, water-soluble chloride content, and water-soluble sulfate content. The pH values of the tested samples ranged from 6.7 to 8.0. Electrical resistivity values ranged from 1,700 to 3,300 ohm-centimeters. Chloride content ranged from 74 to 643 parts per million (ppm). Sulfate content ranged from 78 to 144 ppm. Additional details and laboratory test results are presented in Appendix B.

Based on Caltrans (2012) corrosion criteria, a site is considered corrosive if one or more of the following conditions exist at the site: chloride concentrations of 500 ppm or greater, sulfate concentration of 2,000 ppm or greater, or pH of 5.5 or less. Based on the laboratory test results and Caltrans Corrosion

Guidelines, the site is considered corrosive. It is anticipated that the proposed PVC pipes for the project will not be affected by corrosion. We recommend that a corrosion engineer be consulted for corrosion protection recommendations for the project.

8.13. Buried Metal

A factor for evaluating corrosivity to buried metal is electrical resistivity. The electrical resistivity of a soil is a measure of resistance to electrical current. Corrosion of buried metal is directly proportional to the flow of electrical current from the metal into the soil. As resistivity of the soil decreases, the corrosivity generally increases. The samples tested resulted in electrical resistivity values ranging from 1,700 to 3,300 ohm-centimeters.

Correlations between resistivity and corrosion potential (NACE, 1984) indicate that the soils have a moderate to very severe corrosive potential to buried metals. As such, corrosion protection for metal in contact with site soils should be considered. Corrosion protection may include the use of epoxy or asphalt coatings.

8.14. Concrete Placement

Concrete in contact with soil or water that contains high concentrations of soluble sulfates can be subject to chemical deterioration. Laboratory testing indicated maximum sulfate content of 144 ppm in the samples tested. According to American Concrete Institute (ACI) 318, the potential for sulfate attack is negligible for water-soluble sulfate contents in soil less than 0.10 percent by weight (i.e., less than 1,000 ppm). Therefore, the site earth materials may be considered to have negligible potential for sulfate attack. Due to the potential for variability of soils, we recommend using Type II/V cement for concrete structures in contact with soil, and a water-cement ratio of no more than 0.45.

9. DESIGN REVIEW AND CONSTRUCTION MONITORING

Geotechnical review of plans and specifications is of paramount importance in engineering practice. The poor performance of many structures has been attributed to inadequate geotechnical review of construction documents. Additionally, observation and testing of the earthwork procedures will be important to the performance of the proposed development. The following sections present our recommendations relative to the review of construction documents and the monitoring of construction activities.

9.1. Plans and Specifications

Project plans and specifications should be reviewed by Twining, Inc. prior to bidding and construction, as the geotechnical recommendations may need to be reevaluated in the light of the actual design configuration and loads. This review is necessary to evaluate whether the recommendations contained in this report and future reports have been properly incorporated into the project plans and specifications. Based on the work already performed, this office is best qualified to provide such review.

9.2. Construction Monitoring

Site preparation, removal of unsuitable soils, assessment of imported fill materials, fill placement, and other site grading operations should be observed and tested, as appropriate. The substrata exposed during construction may differ from that encountered in the exploratory excavations. Continuous observation by a representative of Twining, Inc. during construction allows for evaluation of the soil conditions as they are encountered, and allows the opportunity to recommend appropriate revisions where necessary.

10. LIMITATIONS

The recommendations and opinions expressed in this report are based on Twining, Inc.'s review of readily available background documents, on information obtained from field explorations, and on laboratory testing. In the event that any of our recommendations conflict with recommendations provided by other design professionals, we should be contacted to aid in resolving the discrepancy.

Due to the limited nature of our field explorations, conditions not observed and described in this report may be present on the site. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation and laboratory testing can be performed upon request. It should be understood that conditions different from those anticipated in this report may be encountered during grading operations (for example, the extent of removal of unsuitable soil) and that additional effort may be required to mitigate them.

Site conditions, including but not limited to groundwater elevation, can change with time as a result of natural processes or the activities of man at the subject site or at nearby sites. Changes to the applicable laws, regulations, codes, and standards of practice may occur as a result of government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Twining, Inc. has no control.

Twining, Inc.'s recommendations for this site are, to a high degree, dependent upon appropriate quality control of subgrade preparation, fill placement, and construction. Accordingly, the recommendations are made contingent upon the opportunity for Twining, Inc. to observe grading operations for the proposed construction. If parties other than Twining, Inc. are engaged to provide such services, such parties must be notified that they will be required to assume complete responsibility as the geotechnical engineer and engineering geologist of record for the geotechnical phase of the project by concurring with the recommendations in this report and/or by providing alternative recommendations.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Twining, Inc. should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report has been prepared for the exclusive use by the City of San Diego and its agents for specific application to the proposed project. Land use, site conditions, or other factors may change over time, and additional work may be required with the passage of time. Based on the intended use of this report and the nature of the project, Twining, Inc. may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Twining, Inc. from all liability resulting from the use of this report by any unauthorized party.

Twining, Inc. has endeavored to perform its evaluation using the degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical professionals with experience in this area under similar circumstances. No other warranty, either expressed or implied, is made as to the conclusions and recommendations contained in this report.

11. SELECTED REFERENCES

- American Concrete Pipe Association (ACPA), 2003, Concrete Pipe Design Manual, Chapter 4 – Loads and Supporting Strengths, dated September, 2003.
- ASCE Manuals and Reports on Engineering Practice No. 60, Gravity Sanitary Sewer Design and Construction, Second Edition
- ASTM International, 2010, ASTM Volume 04.08, Soil and Rock (I): D 420 – D 5876: dated March, 1830 pp.
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- California Buildings Standards Commission, 2013, 2013 California Building Code, California Code of Regulations, Title 24, Part 2.
- California Geological Survey, 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A, 98 pp.
- California Geological Survey, 2010, 2010 Fault Activity Map of California.
- City of San Diego, 2008, Seismic Safety Study, Sheet 18.
- Plastic Pipe Institution, Handbook of PE Pipe Chapter 16
- International Pipe Bursting Association, January 2012, Guidelines for Pipe Bursting
- Kennedy, M.P., 1975, Geology of the San Diego Metropolitan Area, California, California Division of Mines and Geology, Bulletin 200.
- Kennedy, M.P., and Tan, S.S., 2008, Geologic Map of the San Diego 30' x 60' Quadrangle, California Geological Survey: Scale 1:100,000.
- Norris, R. M. and Webb, R. W., 1990, Geology of California, Second Edition: John Wiley & Sons, Inc.
- Public Works Standards, Inc., 2012, The "Greenbook" Standard Specifications for Public Works Construction.
- Tan, S. S., 1995, Landslide Hazards in the Southern Part of the San Diego Metropolitan Area, San Diego County, California. Landslide Hazard Identification Map No. 33.
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<http://earthquake.usgs.gov/designmaps/us/application.php>.
- Moser, A. P., 2001, Buried Pipe Design, 2nd edition, McGraw-Hill.

FIGURES



**PROJECT
LOCATION**



SCALE 1" = 3000'

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

SOURCE: GOOGLE MAPS, 2016.




PROJECT LOCATION MAP


SEWER AND AC WATER GROUP 837
CITY OF SAN DIEGO PUBLIC WORKS
SAN DIEGO, CALIFORNIA

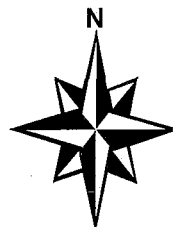
REPORT DATE: NOVEMBER 2016	PROJECT NO.: 160769.2	FIGURE 1
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Legend

-  Sewer & AC Water GJ 837 - Sewer
-  Sewer & AC Water GJ 837 - Water

 APPROXIMATE BORING LOCATION
B-1 TD = TOTAL DEPTH IN FEET
 TD=26.5'



SCALE 1" = 300'

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

SOURCE: GOOGLE MAPS, 2013.



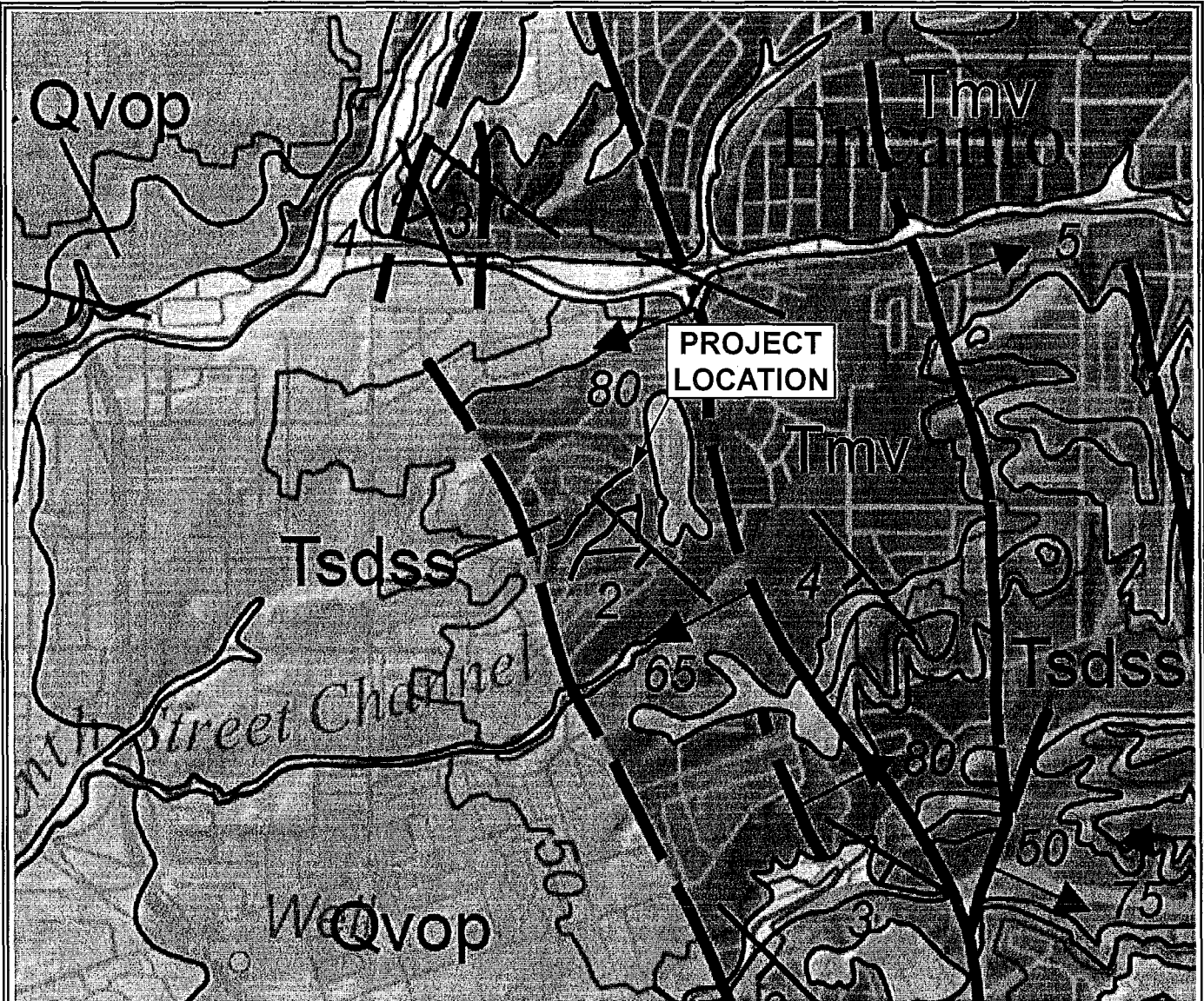
BORING LOCATION MAP

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

REPORT DATE:
 NOVEMBER 2016

PROJECT NO.:
 160769.2

FIGURE 2



LEGEND



VERY OLD PARALIC DEPOSITS



SAN DIEGO FORMATION

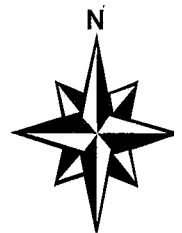


MISSION VALLEY FORMATION



CONTACT-CONTACT BETWEEN GEOLOGIC UNITS;
DOTTED WHERE CONCEALED.

FAULT- SOLID WHERE ACCURATELY LOCATED,
DASHED WHERE CONCEALED. U= UPTHROWN
BLOCK, D= DOWNTHROWN BLOCK. ARROW
AND NUMBER INDICATED DIRECTION AND
ANGLE OF DIP TO FAULT PLANE



SCALE 1" = 1600'

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: GEOLOGIC MAP OF SAN DIEGO, CALIFORNIA GEOLOGIC SURVEY (2008)



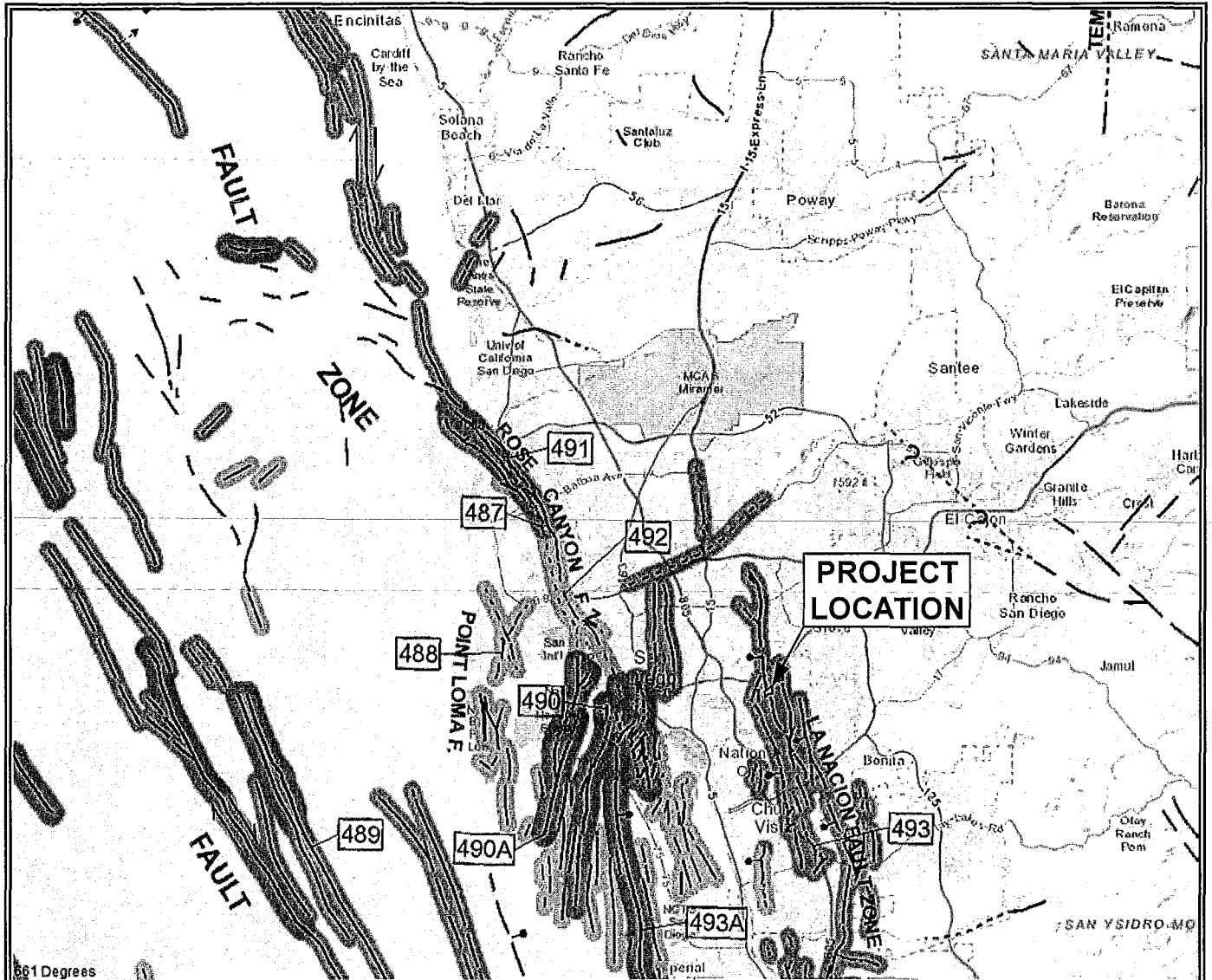
REGIONAL GEOLOGIC MAP

SEWER AND AC WATER GROUP 837
CITY OF SAN DIEGO PUBLIC WORKS
SAN DIEGO, CALIFORNIA






REPORT DATE:
NOVEMBER 2016

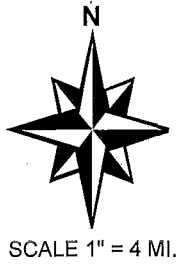
PROJECT NO.:
160769.2

FIGURE 3



LEGEND

-  FAULT ALONG WHICH HISTORIC DISPLACEMENT HAS OCCURRED
-  HOLOCENE FAULT DISPLACEMENT
-  LATE QUATERNARY FAULT DISPLACEMENT
-  QUATERNARY FAULT DISPLACEMENT
-  PRE-QUATERNARY FAULT DISPLACEMENT



NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: CGS, 2010, FAULT ACTIVITY MAP OF CALIFORNIA (2010)



FAULT LOCATION MAP		
SEWER AND AC WATER GROUP 837 CITY OF SAN DIEGO PUBLIC WORKS SAN DIEGO, CALIFORNIA		
REPORT DATE: NOVEMBER 2016	PROJECT NO.: 160769.2	FIGURE 4

APPENDIX A FIELD EXPLORATION

Appendix A Field Exploration

General

The subsurface exploration program for the proposed project included drilling and logging 7, 8-inch diameter borings. The borings were advanced using a CME-75 truck-mounted hollow-stem-auger drill rig. The borings reached depths of approximately 15½ feet to 31½ feet below existing grades.

Drilling and Sampling

The Boring Logs are presented in Figures A-2 through A-8. An explanation of these logs is presented in Figure A-1. The Boring Logs describe the earth materials encountered, samples obtained, and show the field and laboratory tests performed. The log also shows the boring number, drilling date, and the name of the logger and drilling subcontractor. The borings were logged by a Twining, Inc. engineer using the Unified Soil Classification System. The boundaries between soil types shown on the logs are approximate and the transition between different soil layers may be gradual. Drive and bulk samples of representative earth materials were obtained from the borings.

A California modified sampler was used to obtain drive samples of the soils encountered. This sampler consists of a 3-inch outside diameter (O.D.), 2.4-inch inside diameter (I.D.) split barrel shaft that is driven into the soil a total of 18 inches using a 140-pound, automatic-drop hammer falling approximately 30 inches. The number of blows required to drive the sampler the final 12 inches is presented on the boring logs. The soil was retained in brass rings for laboratory testing. Additional soil from each drive remaining in the cutting shoe was usually discarded after visually classifying the soil.

Disturbed samples were obtained using a Standard Penetration Sampler (SPT). This sampler consists of a 2-inch O.D., 1.4-inch I.D. split barrel shaft that is driven into the soil a total of 18 inches using a 140-pound, automatic-drop hammer falling approximately 30 inches. The number of blows required to drive the sampler the final 12 inches is presented on the boring logs. Soil samples obtained by the SPT were retained in plastic bags.

Bulk samples of the soil cuttings were collected in plastic bags for testing in our laboratory.

UNIFIED SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS <small>MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE</small>	GRAVEL AND GRAVELLY SOILS <small>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE</small>	CLEAN GRAVELS <small>(LITTLE OR NO FINES)</small>		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	SAND AND SANDY SOILS <small>MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE</small>	CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SM	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
		SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
		SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
FINE GRAINED SOILS <small>MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE</small>	SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS	
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		CH	INORGANIC CLAYS OF HIGH PLASTICITY	
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

COARSE-GRAINED SOILS

FINE-GRAINED SOILS

Relative Density	SPT (blows/ft)	Relative Density (%)	Consistency	SPT (blows/ft)
Very Loose	<4	0 - 15	Very Soft	<2
Loose	4 - 10	15 - 35	Soft	2 - 4
Medium Dense	10 - 30	35 - 65	Medium Stiff	4 - 8
Dense	30 - 50	65 - 85	Stiff	8 - 15
Very Dense	>50	85 - 100	Very Stiff	15 - 30
			Hard	>30

NOTE: SPT blow counts based on 140 lb. hammer falling 30 inches

LABORATORY TESTING ABBREVIATIONS

ATT	Atterberg Limits
C	Consolidation
CORR	Corrosivity Series
DS	Direct Shear
EI	Expansion Index
GS	Grain Size Distribution
K	Permeability
MAX	Moisture/Density (Modified Proctor)
O	Organic Content
RV	Resistance Value
SE	Sand Equivalent
SG	Specific Gravity
TX	Triaxial Compression
UC	Unconfined Compression

Sample Symbol	Sample Type	Description
	SPT	1.4 in. I.D., 2.0 in. O.D. driven sampler
	California Modified	2.4 in. I.D., 3.0 in. O.D. driven sampler
	Bulk	Retrieved from soil cuttings
	Thin-Walled Tube	Pitcher or Shelby Tube



EXPLANATION FOR LOG OF BORINGS

SEWER AND AC WATER GROUP 837
CITY OF SAN DIEGO PUBLIC WORKS
SAN DIEGO, CALIFORNIA

PROJECT NO.
160769.2

REPORT DATE
November 2016

FIGURE A-1

STANDARD LOG EXPLANATION 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT 11/18/16

DATE DRILLED 10/11/2016 LOGGED BY SM **BORING NO.** B-1
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 217 +(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
										ASPHALT CONCRETE: 3 inches CONCRETE: 7 inches FILL: Silty SAND with cobble, light brown, damp, loose to medium dense, fine- to medium-grained, cobble up to 4 inches in size SAN DIEGO FORMATION: Silty SANDSTONE, light reddish-brown, damp, very dense, weakly cemented
212	5			48						
207	10			95/8"	5.4	115.1	CORR			Sandy SILTSTONE, light yellowish brown, damp, very dense -- light gray, moist
202	15			35						Silty SANDSTONE, light reddish-brown, moist, dense, fine-grained, with iron oxide staining
197	20			54	8.4	104.5	DS			Silty SANDSTONE, light olive-gray, moist, dense, fine-grained, weakly cemented
192	25			44			GS			Sandy SILTSTONE, light yellowish-brown, moist, dense, moderately cemented, micaceous
										Total Depth = 26.5 feet Groundwater not encountered during drilling. Backfilled on 10/11/2016 in accordance with SDCDEH requirements.
187	30									
182	35									

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE A - 2
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DATE DRILLED 10/11/2016 LOGGED BY SM BORING NO. B-2
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 261 ±(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
							GS		SM	<u>FILL:</u> Silty SAND, dark brown, dry, loose to medium dense, gravel up to 2 inches in size
256	5			38	6.7	108.8				<u>SAN DIEGO FORMATION:</u> Silty SANDSTONE, yellowish-brown, damp, medium dense, fine-grained, moderately cemented
251	10			15			ATT			Clayey SANDSTONE, reddish-brown, damp, moderately cemented, some gravel
246	15			85/10"			CORR			Silty SANDSTONE, light brown, damp, very dense, moderately cemented
241	20			54			GS			-- light olive-brown, fine-grained, weakly cemented
236	25			78/9"	6.1	113.1	DS			-- light yellowish-brown, micaceous
										Total Depth = 26.3 feet Groundwater not encountered during drilling. Backfilled on 10/11/2016 in accordance with SDCDEH requirements.
231	30									
226	35									

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO.
160769.2

REPORT DATE
November 2016

FIGURE A - 3

DATE DRILLED 10/11/2016 LOGGED BY SM **BORING NO.** B-3
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 273 +(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
							CORR		SM	<u>FILL:</u> Silty SAND with gravel and cobble, dark brown, dry, loose to medium dense, cobble up to 4 inches in size
268	5			37			GS			<u>SAN DIEGO FORMATION:</u> Silty SANDSTONE, light brown, damp, dense, fine- to medium-grained, moderately cemented
263	10			23	9.5	114.7	DS			-- fine-grained, moist
258	15			16						-- medium brown to tan, weakly cemented
253	20			68	9.4	111.4				-- light yellowish-brown, dense, fine-grained, micaceous
248	25									Total Depth = 21.5 feet Groundwater not encountered during drilling. Backfilled on 10/11/2016 in accordance with SDCDEH requirements.
243	30									
238	35									

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE A - 4
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DATE DRILLED 10/12/2016 LOGGED BY SM **BORING NO.** B-4
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 233 ±(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
							GS		SC	ASPHALT CONCRETE: 3 inches CONCRETE: 7 inches AGGREGATE BASE: 4 inches FILL: Clayey SAND with gravel, light brown, damp, loose to medium dense, fine- to medium-grained SAN DIEGO FORMATION: Clayey SANDSTONE with gravel, light brown, moist, medium dense, fine- to medium-grained, moderately cemented, iron oxide staining, micaceous
228	5			45	15.4	111.4	ATT			
223	10			29			GS			-- Silty SANDSTONE, light brown, medium dense, moderately cemented, few gravel
218	15			50/5"	10.6					-- light grayish-brown, very dense, some coarse-grained sand and rounded gravel -- difficult drilling, refusal on cobbles Total Depth = 15.4 feet Groundwater not encountered during drilling. Backfilled on 10/12/2016 in accordance with SDCDEH requirements.
213	20									
208	25									
203	30									
198	35									

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO.
160769.2

REPORT DATE
November 2016

FIGURE A - 5

DATE DRILLED 10/12/2016 LOGGED BY SM **BORING NO.** B-5
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 250 ±(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
							GS		SM	FILL: Silty SAND with gravel, light brown, moist, loose to medium dense, some gravel
245	5			20			ATT			SAN DIEGO FORMATION: Silty SANDSTONE with gravel, light brown, moist, medium dense, trace clay, weakly cemented
240	10			70	14.1	109.7				Silty SANDSTONE with gravel, light yellowish-brown, moist, dense, medium- to coarse-grained, moderately cemented, micaceous
235	15			63/11"			GS			Silty SANDSTONE, light brown, moist, very dense, fine- to medium-grained, weakly cemented, few gravel
230	20			68			CORR			-- dense, fine-grained, moderately cemented
225	25			36						-- iron oxide staining, dense
220	30			78	7.3	112.2	DS			SANDSTONE, light brown, moist, dense, medium- to coarse-grained, iron oxide staining, weakly cemented
215	35									Total Depth = 31.5 feet Groundwater not encountered during drilling. Backfilled on 10/12/2016 in accordance with SDCDEH requirements.

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE A - 6
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DATE DRILLED 10/11/2016 LOGGED BY SM **BORING NO.** B-6
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 249 ±(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven						
								SM	<u>FILL:</u> Silty SAND, light brown, damp, loose to medium dense, fine-grained
244	5			26					SAN DIEGO FORMATION: Silty SANDSTONE, light yellowish-brown, damp, medium dense, coarse-grained, moderately cemented
239	10			39	10.4	111.6			-- dark brown, medium- to coarse-grained
234	15			18					-- light reddish-brown with light gray lenses, weakly cemented
229	20			50	7.0	115.5			-- light yellowish-brown, dense, coarse-grained, micaceous
224	25			42					-- light olive-brown, medium-grained
									Total Depth = 26.5 feet Groundwater not encountered during drilling. Backfilled on 10/11/2016 in accordance with SDCDEH requirements.
219	30								
214	35								

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO.
160769.2

REPORT DATE
November 2016

FIGURE A - 7

DATE DRILLED 10/11/2016 LOGGED BY SM **BORING NO.** B-7
 DRIVE WEIGHT 140 lbs. DROP 30 inches DEPTH TO GROUNDWATER (ft.) NE
 DRILLING METHOD 8" Hollow Stem DRILLER Baja Exploration SURFACE ELEVATION (ft.) 273 +(MSL)

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION	DESCRIPTION
		Bulk	Driven							
									SM	<u>FILL:</u> Silty SAND with gravel, dark brown, damp, loose to medium dense, some coarse gravel
268	5			38	11.4	115.0	GS, CORR			<u>SAN DIEGO FORMATION:</u> Silty SANDSTONE, brownish orange, moist, medium dense, fine-grained, weakly cemented
263	10			38						-- yellowish-brown, dense, coarse-grained, moderately cemented
258	15			54			GS			-- fine-grained
253	20			21			ATT			-- light yellowish-brown, medium dense, weakly cemented
248	25			51	15.8	110.0	DS			-- olive-brown, moist, dense, fine-grained
243	30									Total Depth = 26.5 feet Groundwater not encountered during drilling. Backfilled on 10/11/2016 in accordance with SDCDEH requirements.
238	35									

BORING LOG 160769.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/22/16



LOG OF BORING

SEWER AND AC WATER GROUP 837
 CITY OF SAN DIEGO PUBLIC WORKS
 SAN DIEGO, CALIFORNIA

PROJECT NO.
160769.2

REPORT DATE
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FIGURE A - 8

APPENDIX B

LABORATORY TESTING

Appendix B Laboratory Testing

Laboratory Moisture Content and Density Tests

The moisture content and dry density of selected driven samples obtained from the exploratory borings was evaluated in general accordance with the latest version of ASTM D2937. The test results are presented on the logs of the exploratory borings in Appendix A and also summarized in Table B-1.

**Table B-1
Laboratory Moisture Content and Dry Density**

Boring No.	Depth (feet)	Moisture Content (%)	Dry Unit Weight (pcf)
B-1	10	5.4	115.1
B-1	20	8.4	104.5
B-2	5	6.7	108.8
B-2	25	6.1	113.1
B-3	10	9.5	114.7
B-3	20	9.4	111.4
B-4	5	15.4	111.4
B-4	15	10.6	-----
B-5	10	14.1	109.7
B-5	30	7.3	112.2
B-6	10	10.4	111.6
B-6	20	7.0	115.5
B-7	5	11.4	115.0
B-7	25	15.8	110.0

Atterberg Limits

Atterberg limits tests were performed on selected soil samples to evaluate plasticity characteristics and to aid in the classification of the soil. The tests were performed in general accordance with ASTM D4318. The results are presented in Figure B-1.

Sieve Analyses

The grain-size distribution of selected soil samples was evaluated in general accordance with ASTM C136/C117. Test results are presented on Figures B-2 through B-15.

Direct Shear Tests

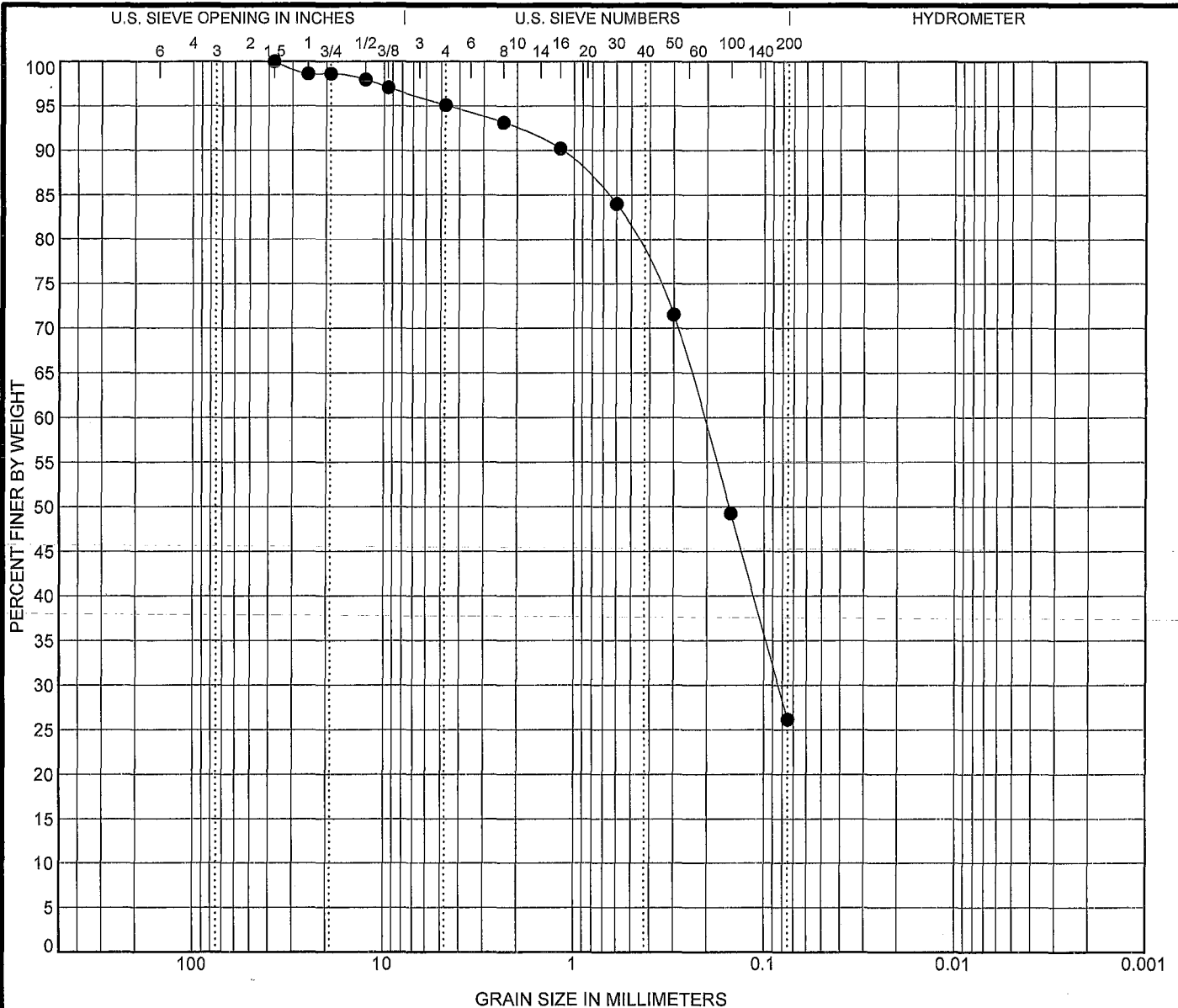
Direct shear tests were performed on selected relatively undisturbed soil samples in general accordance with ASTM D3080 to evaluate the shear strength characteristics of the materials. The samples were inundated during shearing to represent adverse field conditions. Test results are presented on Figure B-16 through B-21.

Corrosivity

Soil pH and resistivity tests were performed on a representative soil samples in accordance with California Test Method 643. Chloride content of the selected samples was evaluated in accordance with California Test Method 422. Sulfate content of the selected samples was evaluated in accordance with California Test Method 417. The tests were performed by AP Engineering and Testing. Test results are presented on Table B-2.

**Table B-2
Corrosivity Test Results**

Boring No.	Depth (feet)	pH	Water Soluble Sulfate (ppm)	Water Soluble Chloride (ppm)	Minimum Resistivity (ohm-cm)
B-1	10-15	8.0	86	104	2900
B-2	15	7.9	136	121	2300
B-3	0-5	6.8	111	74	2200
B-5	20	7.8	78	151	3300
B-7	0-5	6.7	144	643	1700



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-1 at 0-5 ft	Silty SAND							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
37.5	0.21	0.153	0.084		4.9	68.9	26.2	

GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



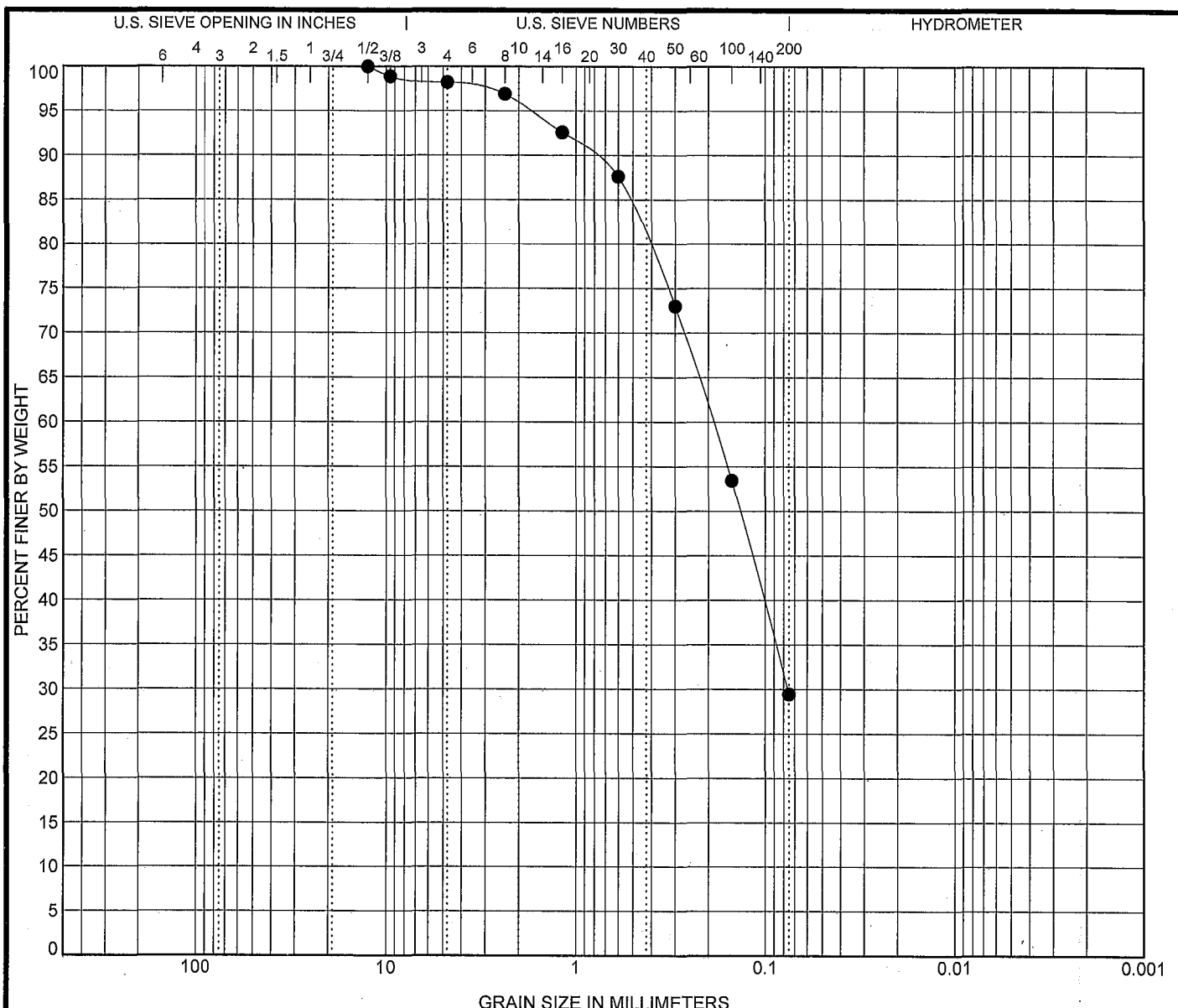
GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
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FIGURE B-2



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location		U.S.C.S. Classification						Cc	Cu
● B-1 at 25 ft		Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay	
12.5	0.189	0.136	0.076		1.8	68.8	29.5		

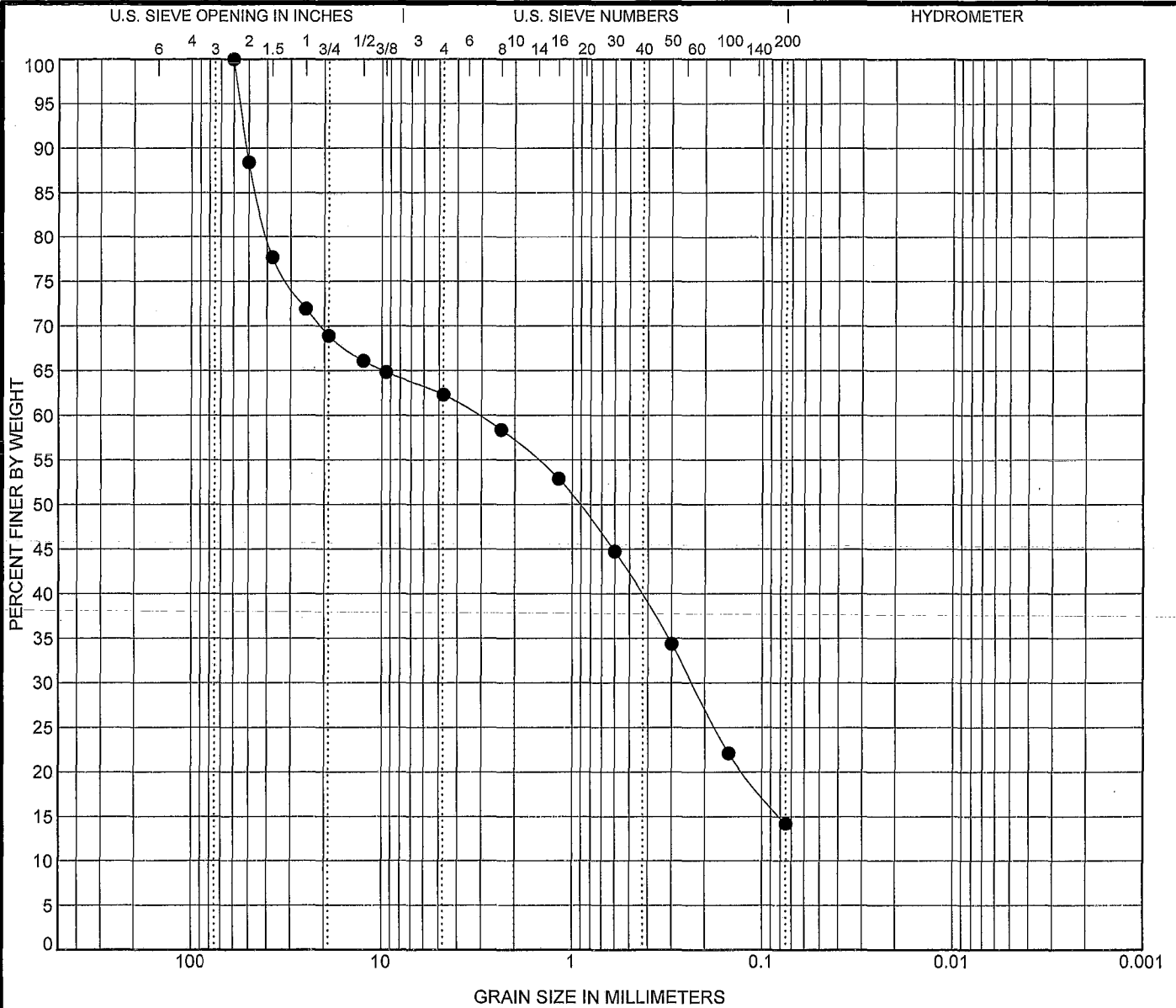


GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B- 3
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GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location		U.S.C.S. Classification					Cc	Cu
● B-3 at 0-5 ft		Silty SAND with gravel						
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
60	3.147	0.927	0.234		37.7	48.1	14.2	

GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



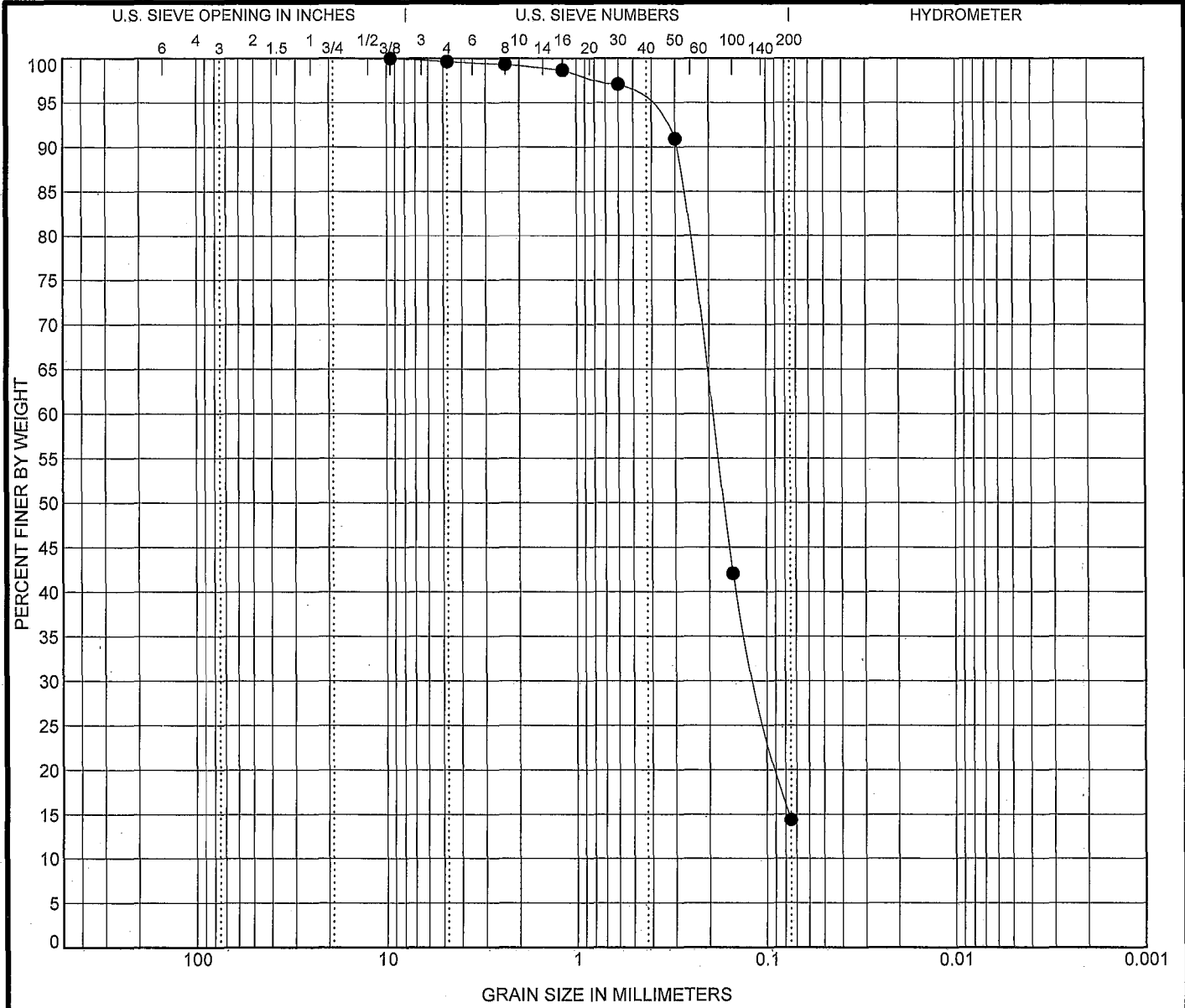
GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

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FIGURE B- 6



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-3 at 5 ft	Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
9.5	0.193	0.168	0.111		0.4	85.2	14.4	

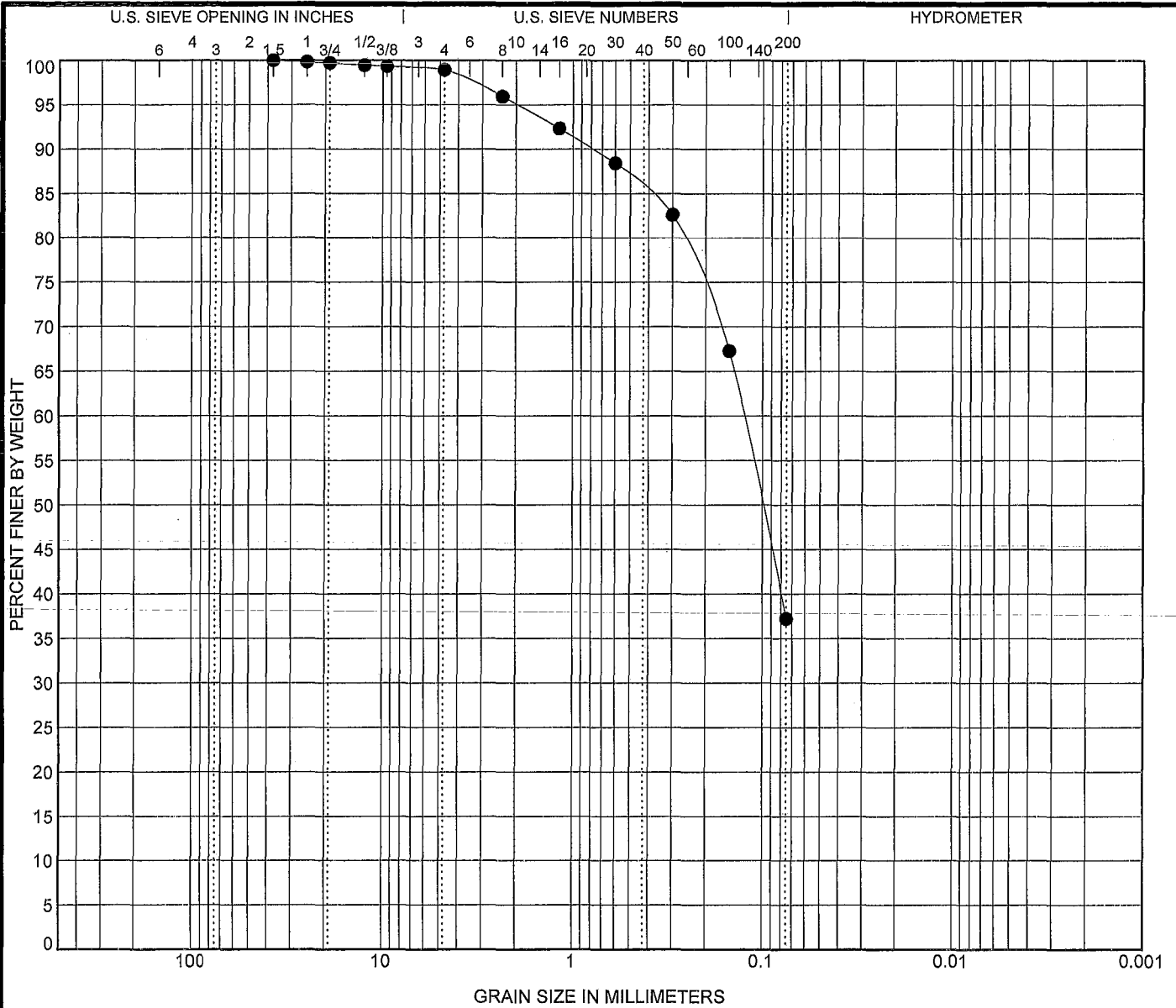


GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B-7
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GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-4 at 0-5 ft	Silty SAND							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
37.5	0.127	0.101			1.1	61.7	37.2	



GRAIN SIZE DISTRIBUTION

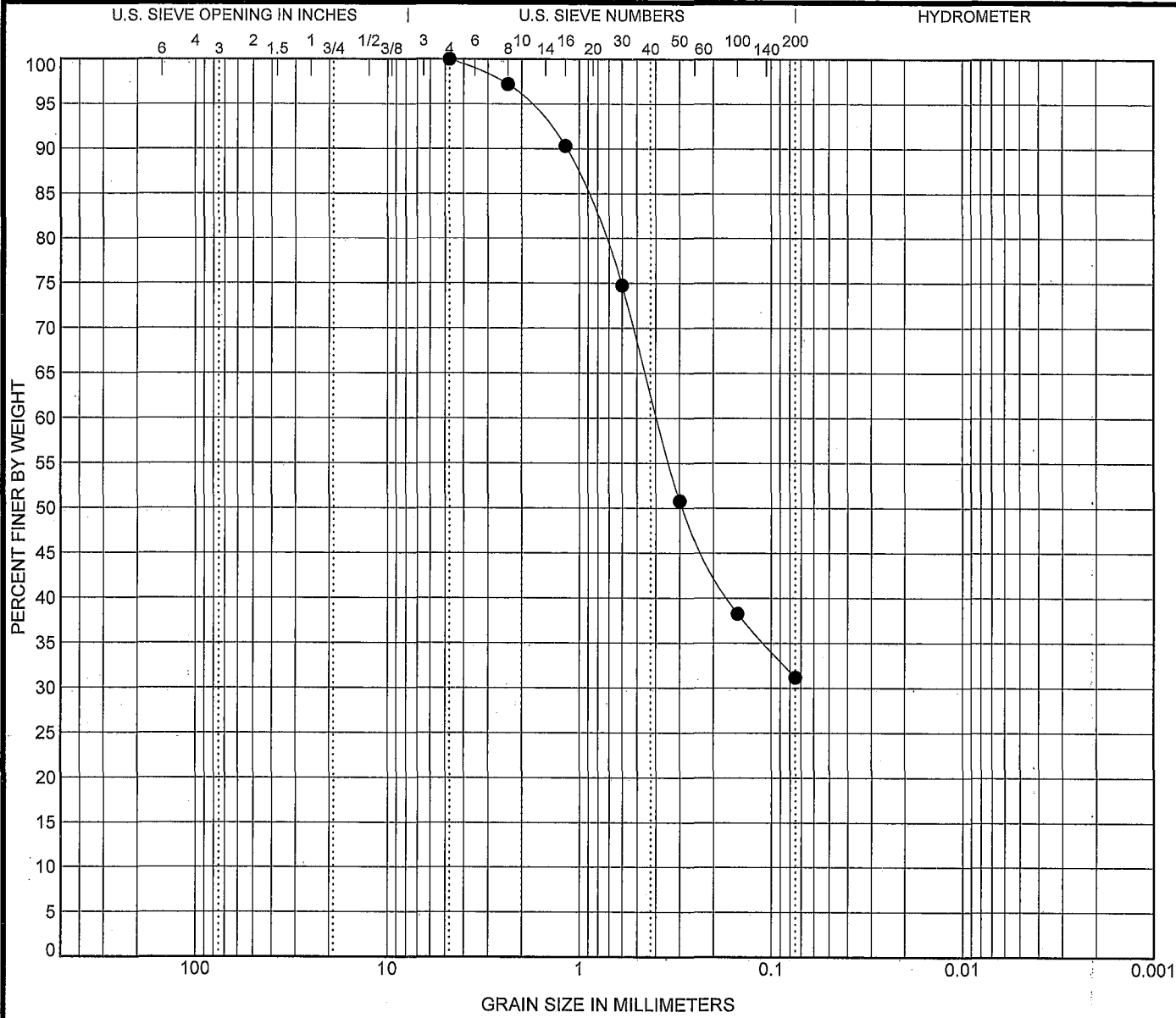
Sewer and AC Water Group 837
San Diego, California

PROJECT NO.
160769.2

REPORT DATE
November 2016

FIGURE B-8

GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-4 at 10 ft	Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
4.75	0.391	0.287			0.0	68.8	31.2	

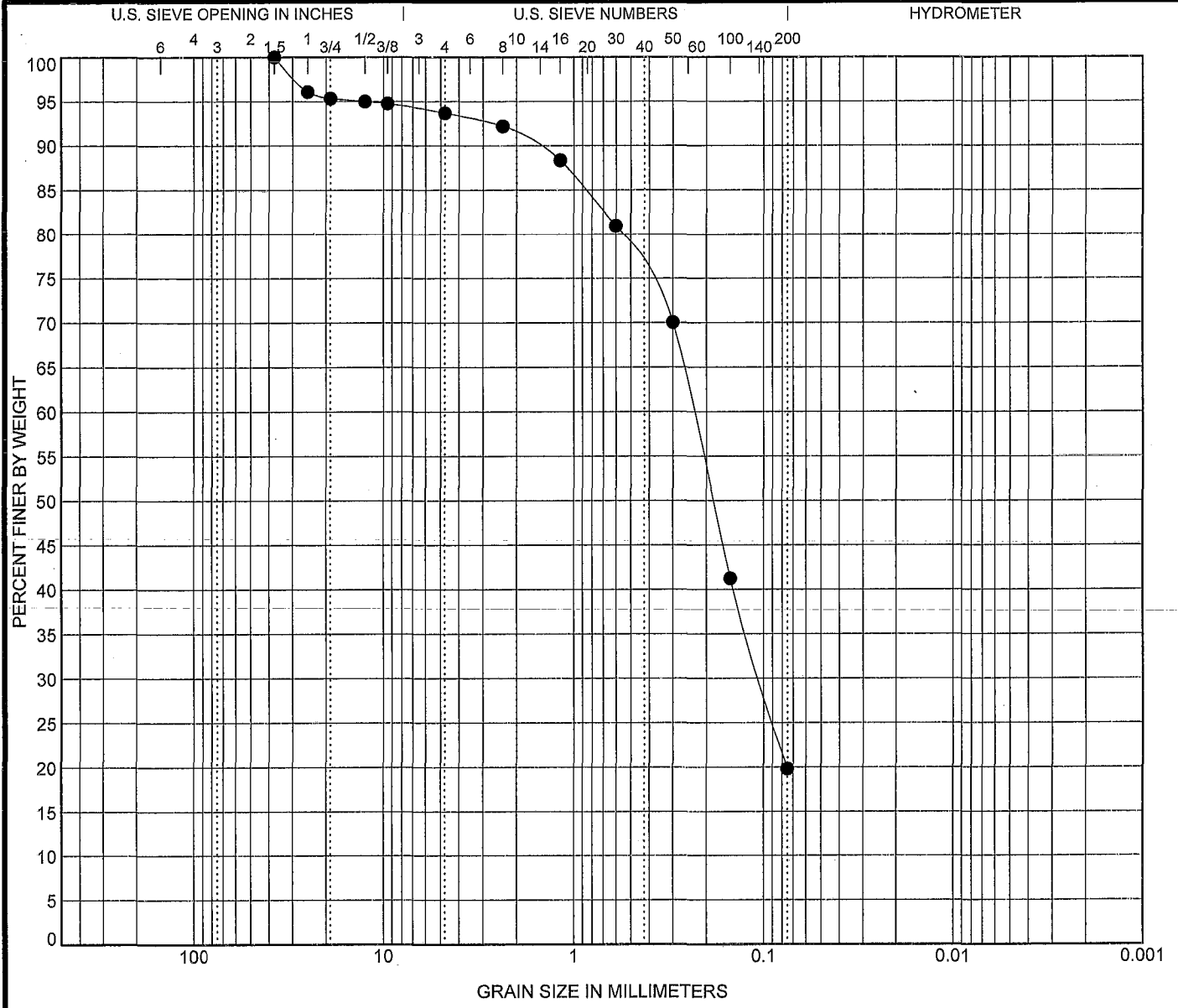
GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B-9
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COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-5 at 0-5 ft	Silty SAND							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
37.5	0.236	0.185	0.104		6.3	73.9	19.8	

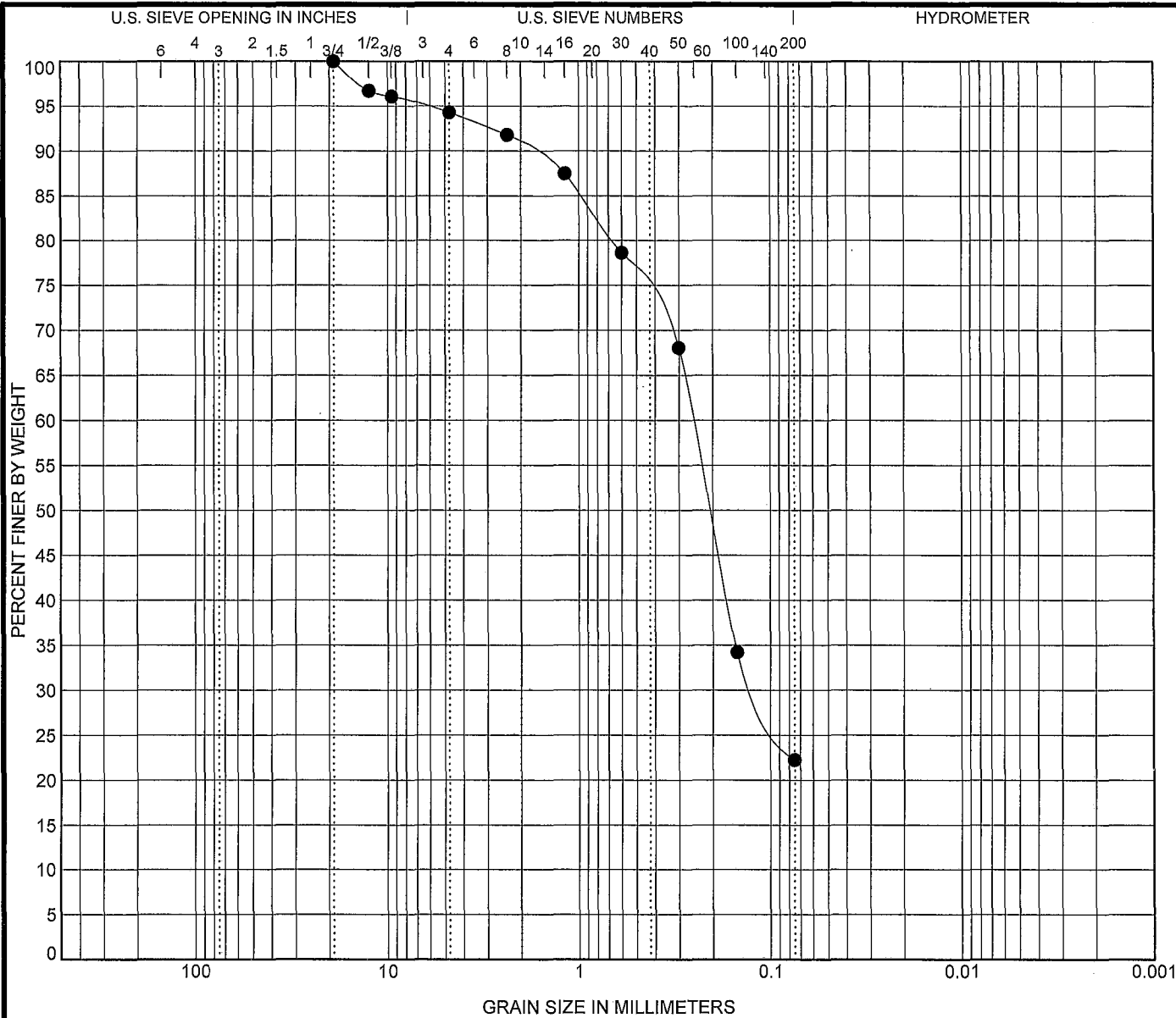


GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B- 10
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GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-5 at 15 ft	Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
19	0.254	0.207	0.117		5.7	72.0	22.3	

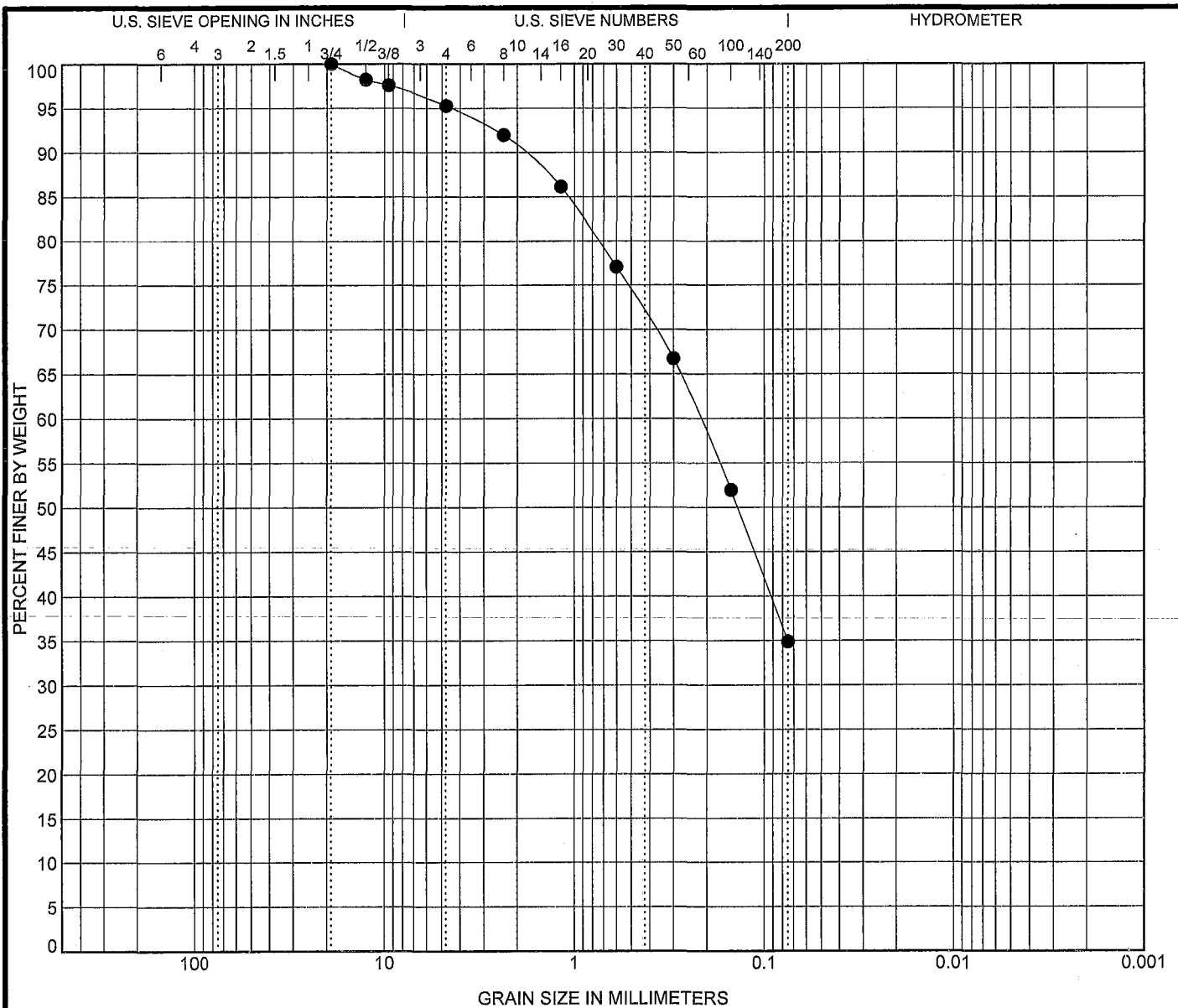
GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B- 11
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COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-6 at 0-5 ft	Silty SAND							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
19	0.219	0.138			4.7	60.4	34.9	

GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



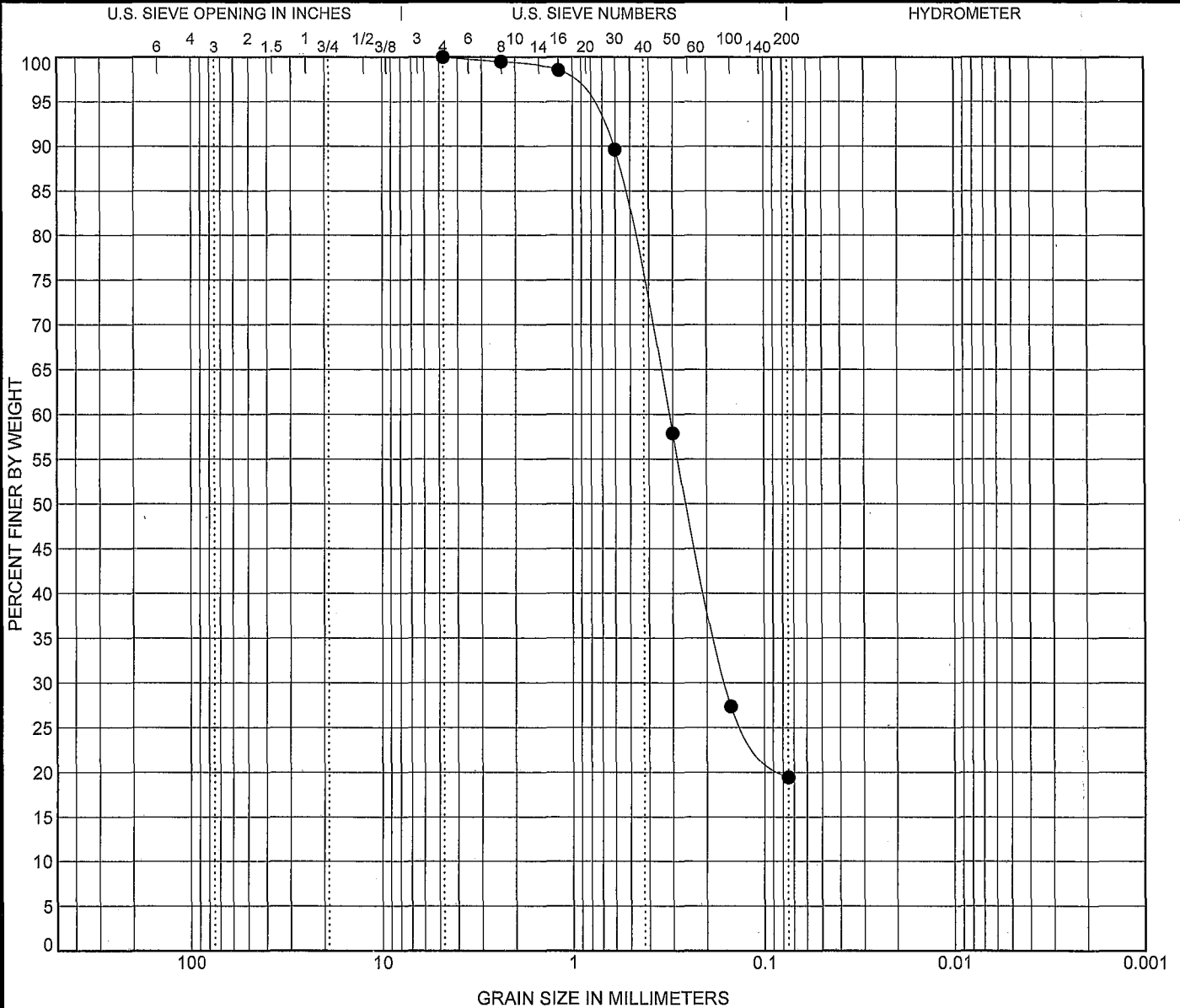
GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO.
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FIGURE B- 12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-6 at 25 ft	Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
4.75	0.314	0.251	0.159		0.0	80.5	19.5	

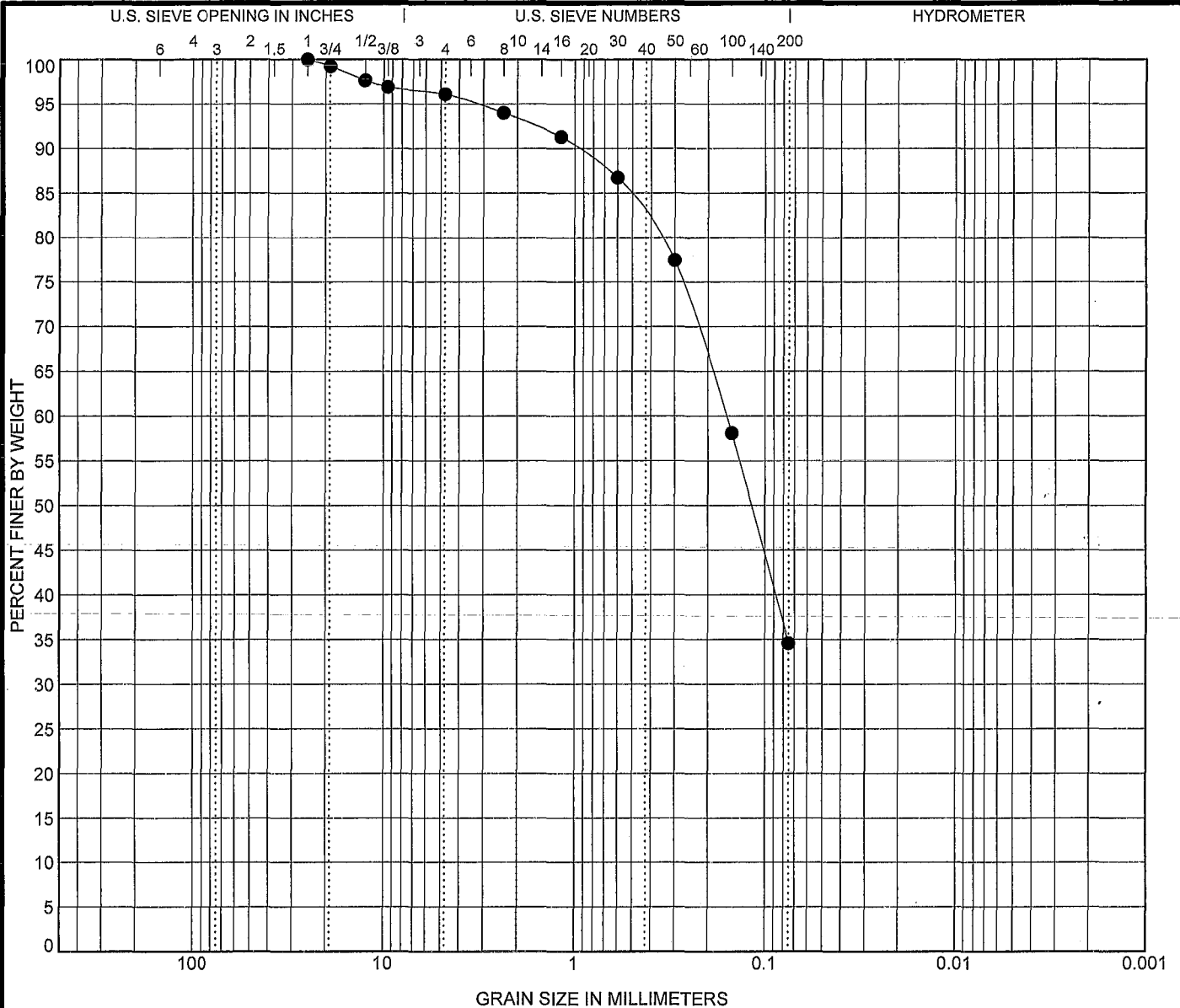
GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



GRAIN SIZE DISTRIBUTION

Sewer and AC Water Group 837
San Diego, California

PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B- 13
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COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-7 at 0-5 ft	Silty SAND							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
25	0.161	0.118			3.9	61.5	34.6	



GRAIN SIZE DISTRIBUTION

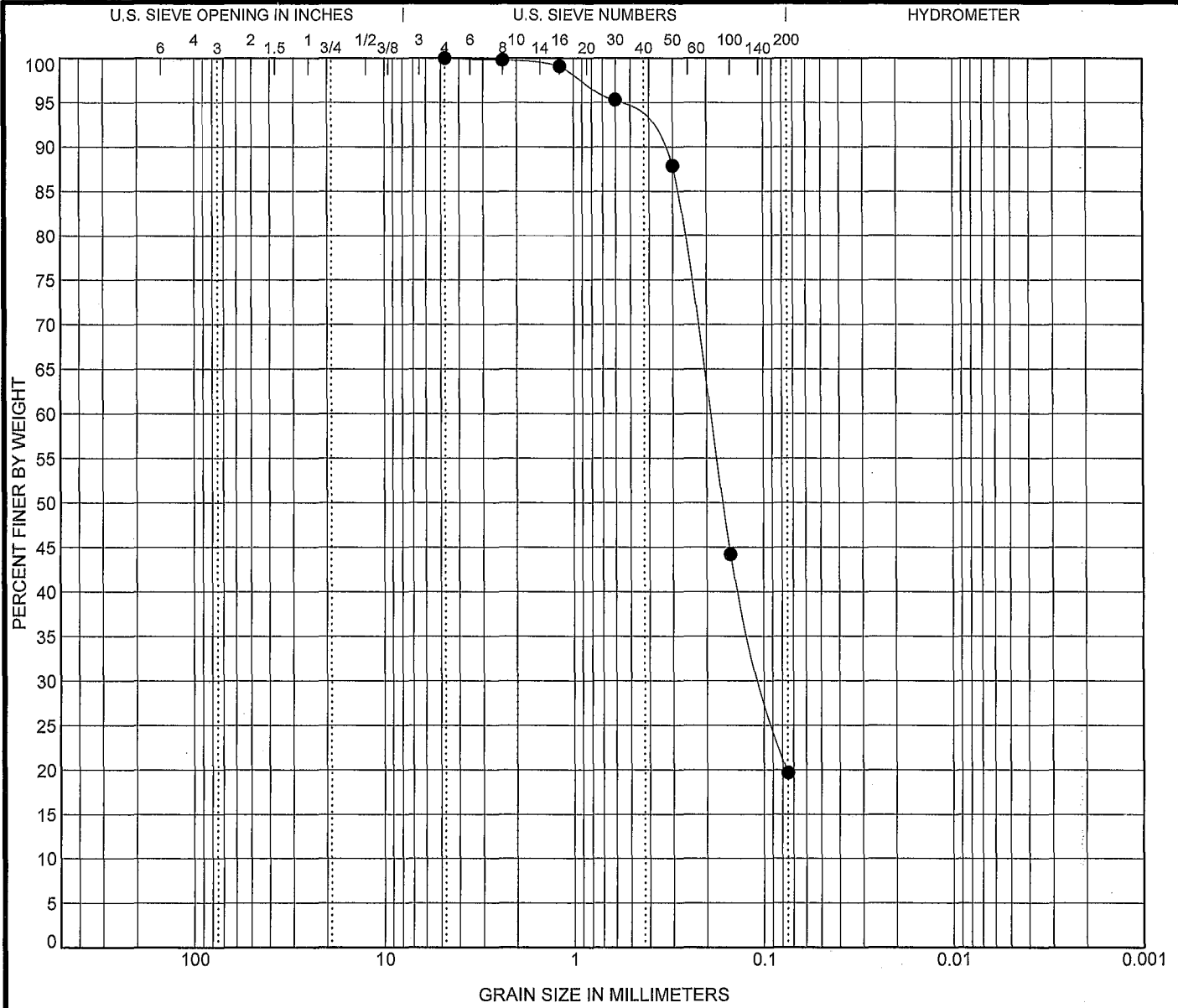
Sewer and AC Water Group 837
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FIGURE B- 14


GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16

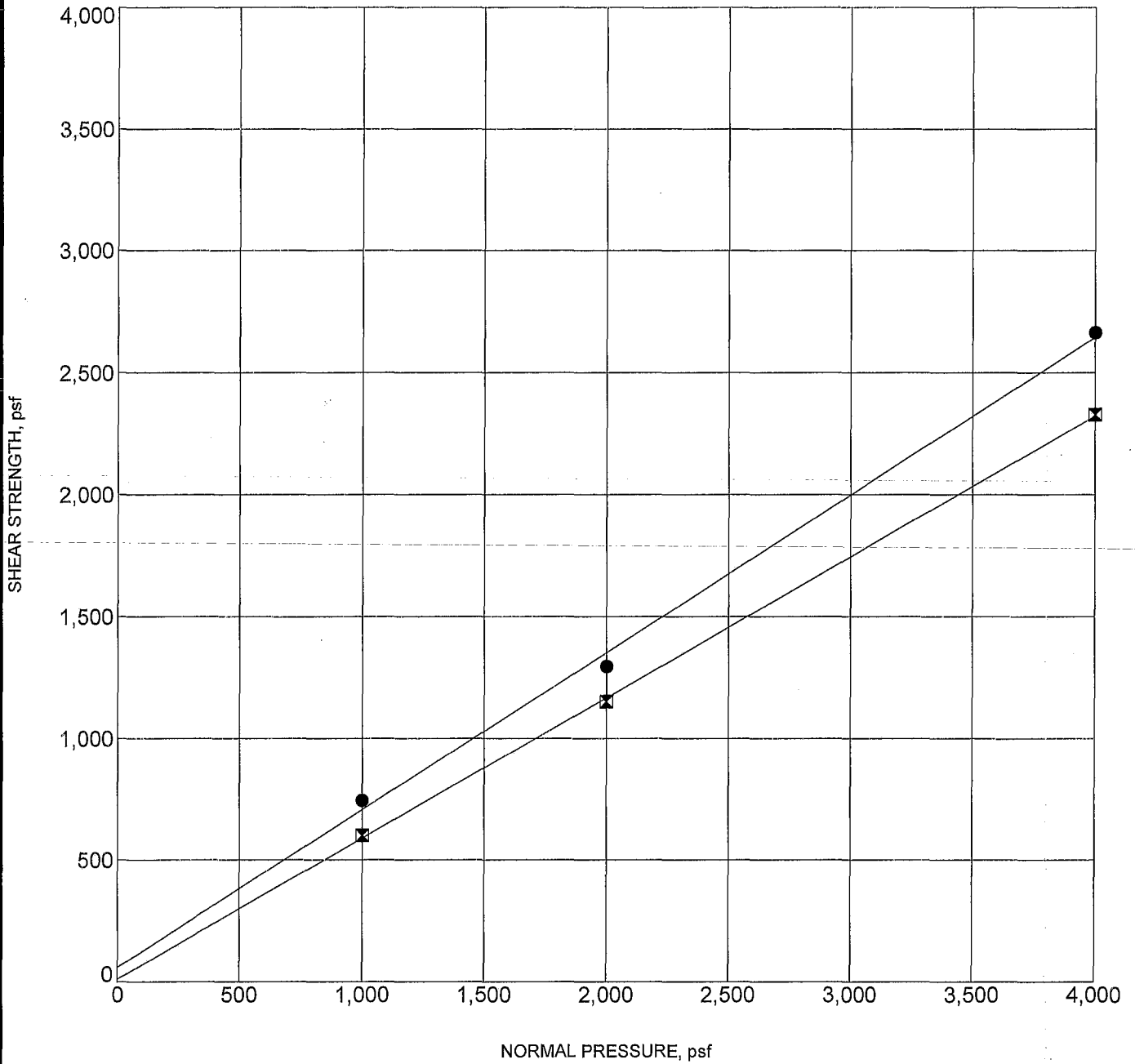


COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Sample Location	U.S.C.S. Classification						Cc	Cu
● B-7 at 15 ft	Silty SANDSTONE							
D ₁₀₀	D ₆₀	D ₅₀	D ₃₀	D ₁₀	%Gravel	%Sand	%Silt	%Clay
4.75	0.193	0.164	0.1		0.0	80.3	19.7	

GRAIN SIZE 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16

 TWINING	GRAIN SIZE DISTRIBUTION		
	Sewer and AC Water Group 837 San Diego, California		
	PROJECT NO. 160769.2	REPORT DATE November 2016	FIGURE B- 15



Boring No.: B-1
Sample Depth (ft): 20
Sample Description: Silty SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 104.5

Shear Strength Parameters
Peak —●— **Ultimate** —✕—
Cohesion, C (psf): 60 12
Friction Angle, ϕ (deg): 33 30
Initial Moisture (%): 8.4
Final Moisture (%): 21.0

DIRECT SHEAR 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT, 11/16/16



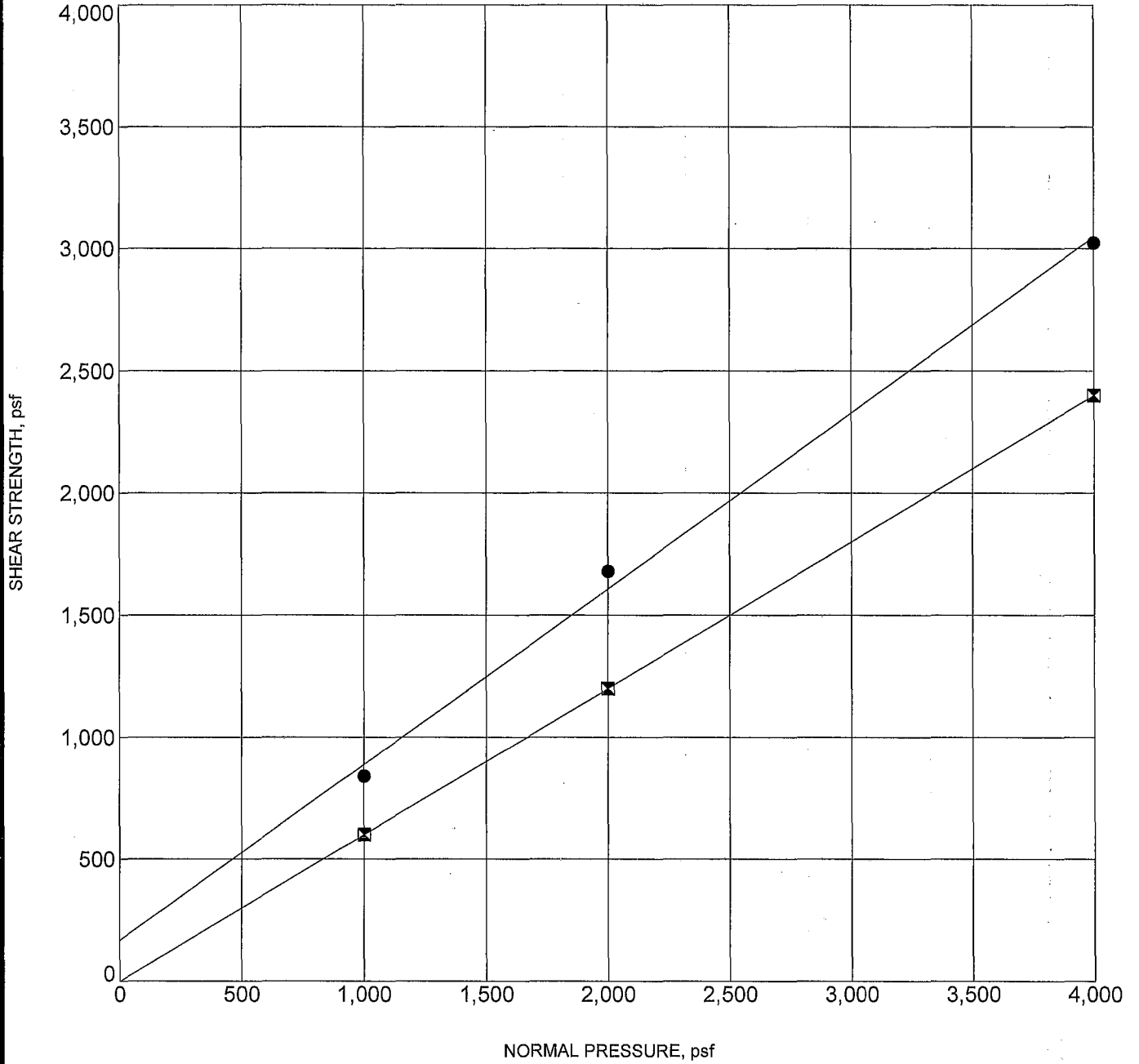
DIRECT SHEAR TEST

Sewer and AC Water Group 837
San Diego, California

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FIGURE B-16



Boring No.: B-2
Sample Depth (ft): 25
Sample Description: Silty SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 113.1

Shear Strength Parameters
Peak —●— **Ultimate** —✕—
Cohesion, C (psf): 170 0
Friction Angle, ϕ (deg): 36 31
Initial Moisture (%): 6.1
Final Moisture (%): 17.9

DIRECT SHEAR, 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT, 11/16/16



DIRECT SHEAR TEST

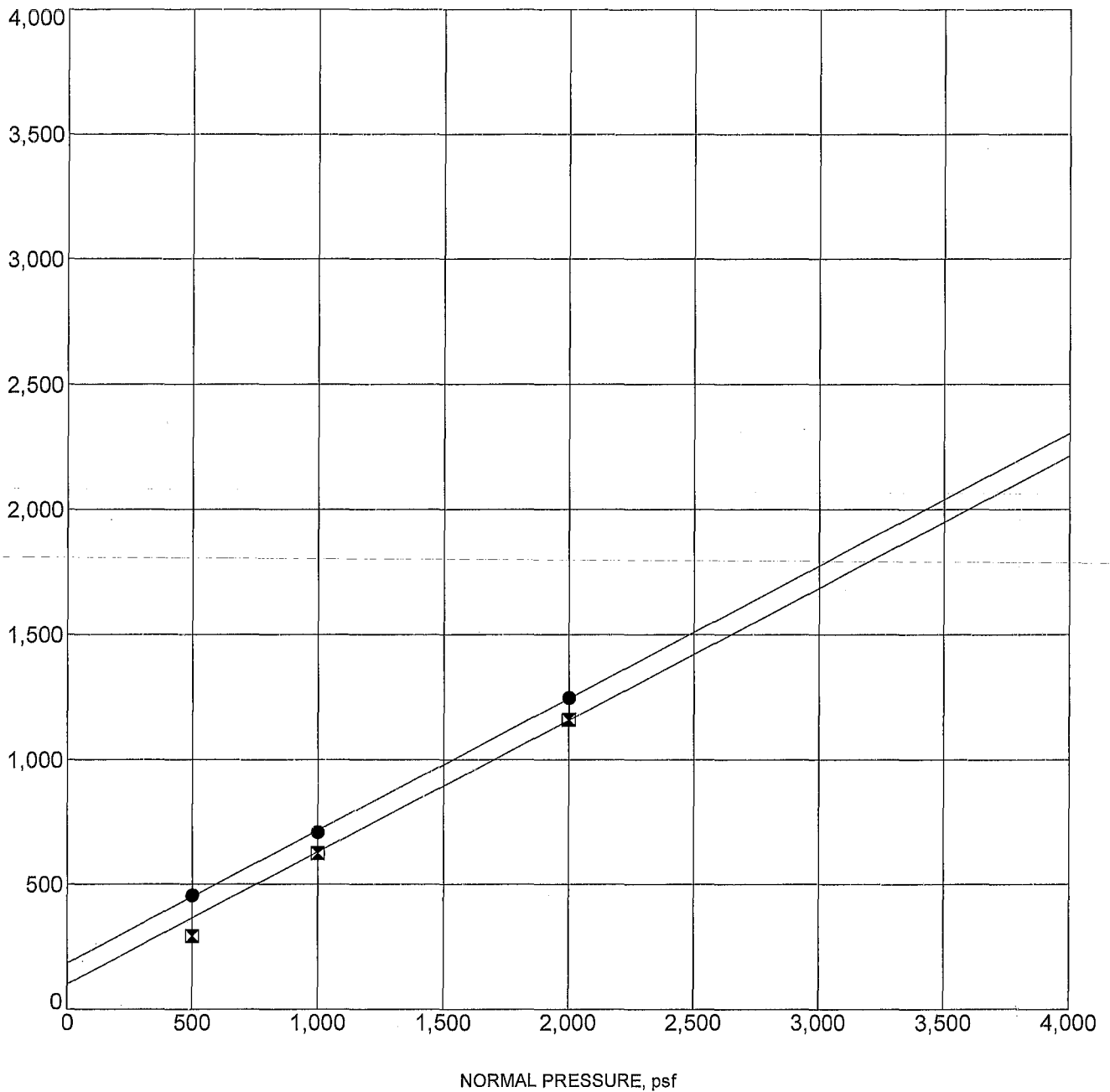
Sewer and AC Water Group 837
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FIGURE B-17

SHEAR STRENGTH, psf



Boring No.: B-3
Sample Depth (ft): 10
Sample Description: Silty SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 114.7

Shear Strength Parameters
 Peak ● Ultimate ☒
Cohesion, C (psf): 190 100
Friction Angle, ϕ (deg): 28 28
Initial Moisture (%): 9.5
Final Moisture (%): 20.4



DIRECT SHEAR TEST

Sewer and AC Water Group 837
San Diego, California

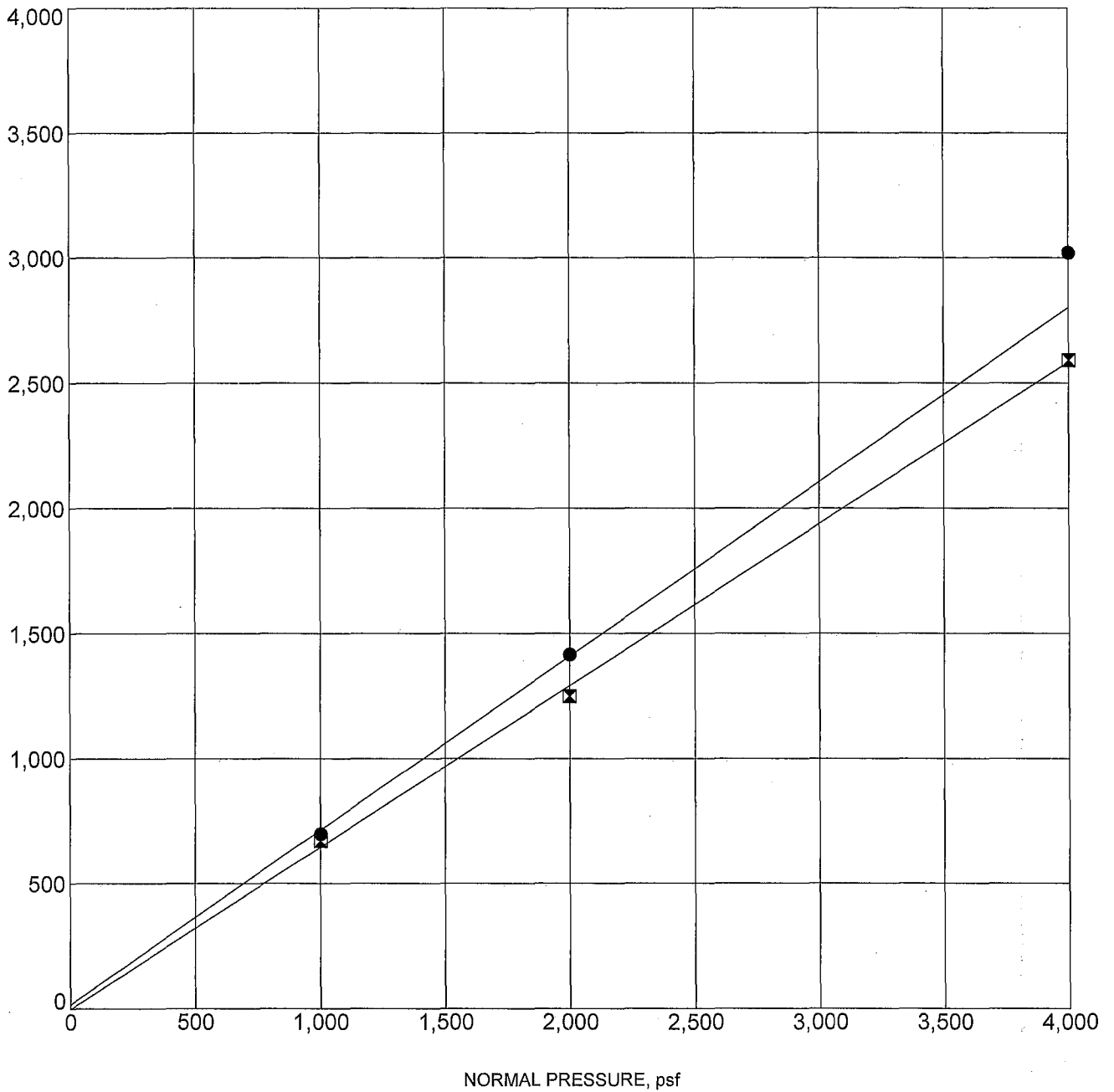
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FIGURE B-18

DIRECT SHEAR 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT, 11/16/16

SHEAR STRENGTH, psf



Boring No.: B-5
Sample Depth (ft): 30
Sample Description: Poorly graded SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 112.2

Shear Strength Parameters
Peak —●— **Ultimate** —✕—
Cohesion, C (psf): 20 0
Friction Angle, ϕ (deg): 35 33
Initial Moisture (%): 7.3
Final Moisture (%): 17.8

DIRECT SHEAR 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



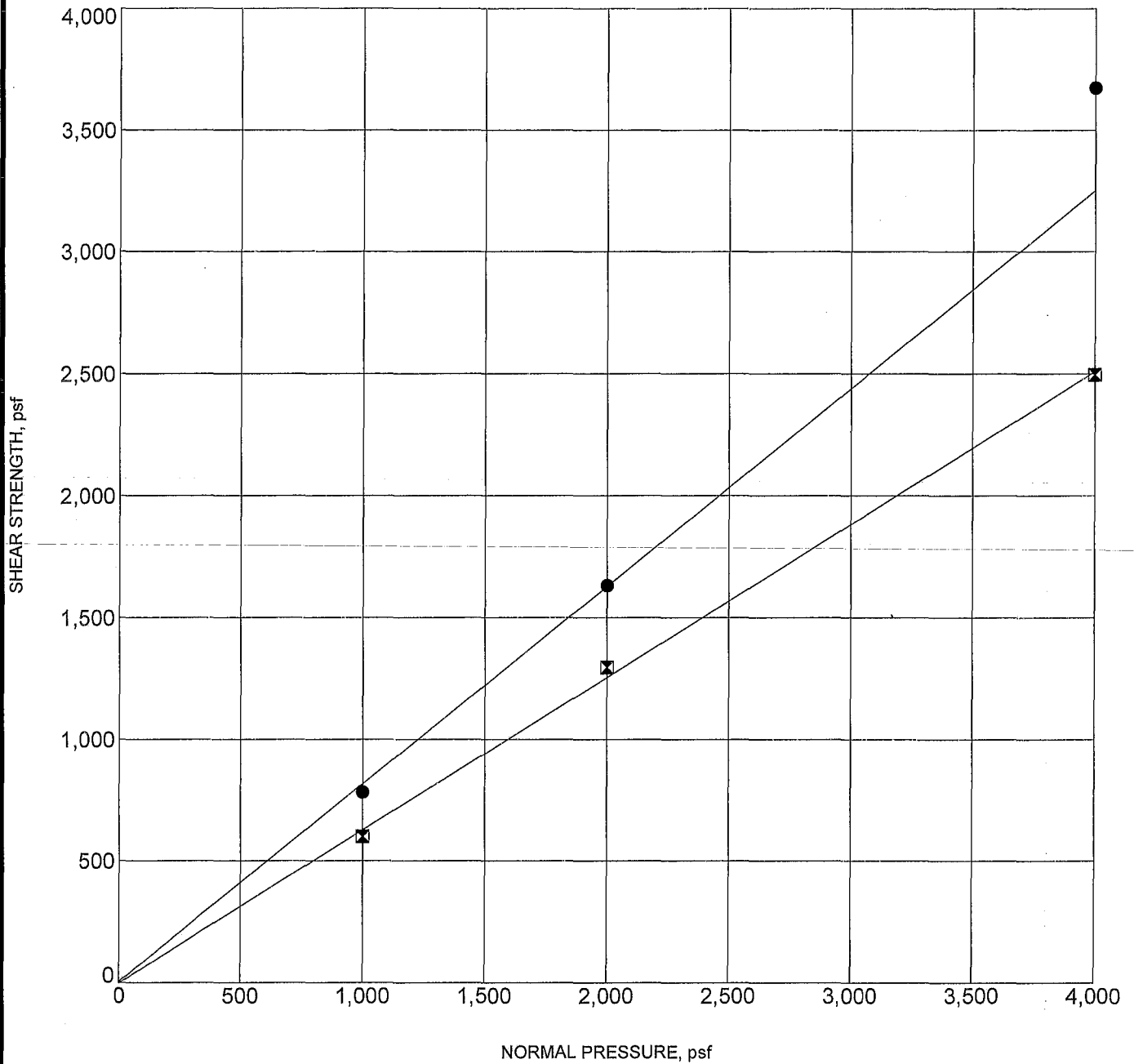
DIRECT SHEAR TEST

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FIGURE B-19



Boring No.: B-6
Sample Depth (ft): 20
Sample Description: Silty SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 115.5

Shear Strength Parameters
Peak —●— **Ultimate** —✕—
Cohesion, C (psf): 0 0
Friction Angle, Ø (deg): 39 32
Initial Moisture (%): 7.0
Final Moisture (%): 15.2



DIRECT SHEAR TEST

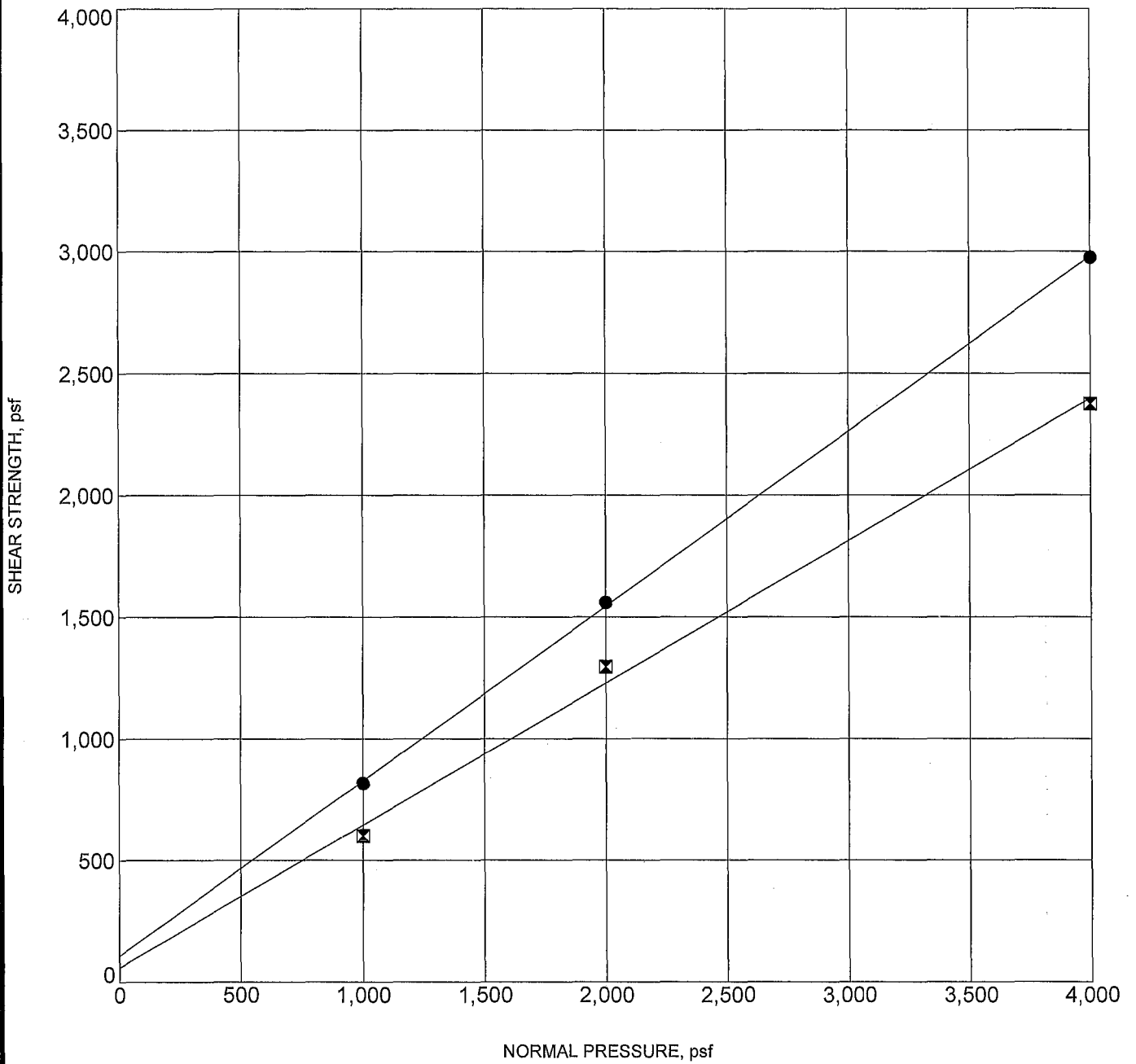
Sewer and AC Water Group 837
San Diego, California

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November 2016

FIGURE B-20

DIRECT SHEAR 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT 11/16/16



Boring No.: B-7
Sample Depth (ft): 25
Sample Description: Silty SANDSTONE
Strain Rate (in./min): 0.005
Dry Density (pcf): 110.0

Shear Strength Parameters
Peak —●— **Ultimate** —✕—
Cohesion, C (psf): 110 60
Friction Angle, ϕ (deg): 36 30
Initial Moisture (%): 15.8
Final Moisture (%): 21.2

DIRECT SHEAR, 160247.2 - SEWER GROUP 837.GPJ, TWINING LABS.GDT, 11/16/16



DIRECT SHEAR TEST

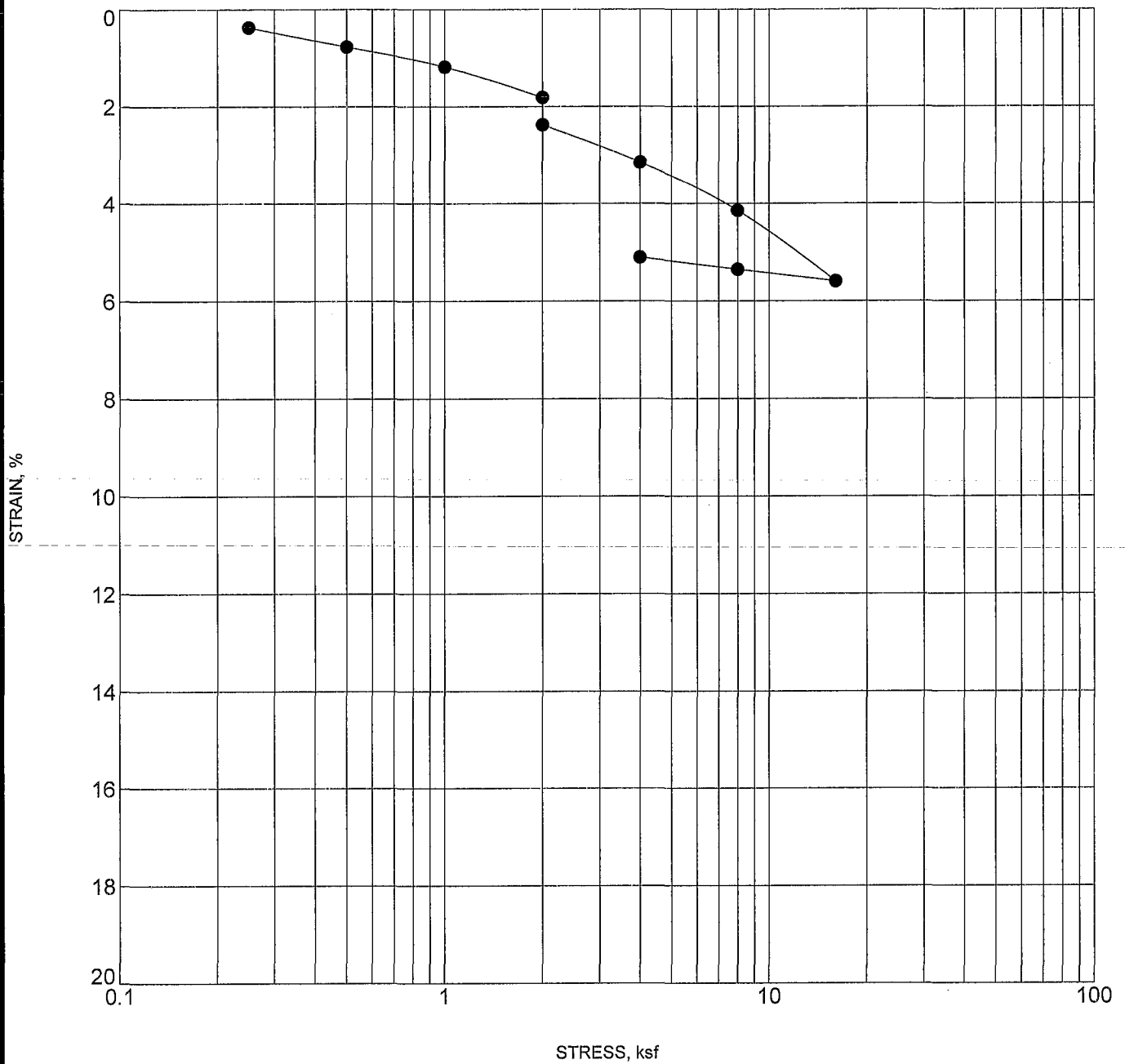
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FIGURE B-21

CONSOL. STRAIN 160247.2 - SEWER GROUP 837.GPJ TWINING LABS.GDT 11/16/16



Sample Location	Soil Description	Dry Density (pcf)	Moisture Content (%)
● B-3 at 10 ft	Silty SANDSTONE	96.4	9.5



CONSOLIDATION TEST

Sewer and AC Water Group 837
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FIGURE B-22

APPENDIX I
HAZARDOUS LABEL/FORMS

HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES

GENERATOR NAME _____ 24 HR. PHONE _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
EPA ID NO. _____ MANIFEST DOCUMENT NO. _____
EPA WASTE NO. _____ CA WASTE NO. _____ ACCUMULATION START DATE _____
CONTENTS, COMPOSITION _____
PROPER DOT SHIPPING NAME _____
TECHNICAL NAME (S) _____
UNNA NO. WITH PREFIX _____
PHYSICAL STATE | HAZARDOUS PROPERTIES | FLAMMABLE | TOXIC
 SOLID | LIQUID | CORROSIVE | REACTIVE | OTHER _____

HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

INCIDENT/RELEASE ASSESSMENT FORM ¹

If you have an emergency, Call 911

Handlers of hazardous materials are required to report releases. The following is a tool to be used for assessing if a release is reportable. Additionally, a non-reportable release incident form is provided to document why a release is not reported (see back).

Questions for Incident Assessment:

	YES	NO
1. Was anyone killed or injured, or did they require medical care or admitted to a hospital for observation?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did anyone, other than employees in the immediate area of the release, evacuate?	<input type="checkbox"/>	<input type="checkbox"/>
3. Did the release cause off-site damage to public or private property?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the release greater than or equal to a reportable quantity (RQ)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Was there an uncontrolled or unpermitted release to the air?	<input type="checkbox"/>	<input type="checkbox"/>
6. Did an uncontrolled or unpermitted release escape secondary containment, or extend into any sewers, storm water conveyance systems, utility vaults and conduits, wetlands, waterways, public roads, or off site?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will control, containment, decontamination, and/or clean up require the assistance of federal, state, county, or municipal response elements?	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the release or threatened release involving an unknown material or contains an unknown hazardous constituent?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the incident a threatened release (a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there an increased potential for secondary effects including fire, explosion, line rupture, equipment failure, or other outcomes that may endanger or cause exposure to employees, the general public, or the environment?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer is YES to any of the above questions – report the release to the California Office of Emergency Services at 800-852-7550 and the local CUPA daytime: (619) 338-2284, after hours: (858) 565-5255. Note: other state and federal agencies may require notification depending on the circumstances.

Call 911 in an emergency

If all answers are NO, complete a Non Reportable Release Incident Form (page 2 of 2) and keep readily available. Documenting why a “no” response was made to each question will serve useful in the event questions are asked in the future, and to justify not reporting to an outside regulatory agency.

If in doubt, report the release.

¹ This document is a guide for accessing when hazardous materials release reporting is required by Chapter 6.95 of the California Health and Safety Code. It does not replace good judgment, Chapter 6.95, or other state or federal release reporting requirements.

NON REPORTABLE RELEASE INCIDENT FORM

1. RELEASE AND RESPONSE DESCRIPTION

Incident # _____

Date/Time Discovered	Date/Time Discharge	Discharge Stopped <input type="checkbox"/> Yes <input type="checkbox"/> No
Incident Date / Time:		
Incident Business / Site Name:		
Incident Address:		
Other Locators (Bldg, Room, Oil Field, Lease, Well #, GIS)		
Please describe the incident and indicate specific causes and area affected. Photos Attached?: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Indicate actions to be taken to prevent similar releases from occurring in the future.		

2. ADMINISTRATIVE INFORMATION

Supervisor in charge at time of incident:	Phone:
Contact Person:	Phone:

3. CHEMICAL INFORMATION

Chemical	Quantity	<input type="checkbox"/>	GAL	<input type="checkbox"/>	LBS	<input type="checkbox"/>	FT ³
Chemical	Quantity	<input type="checkbox"/>	GAL	<input type="checkbox"/>	LBS	<input type="checkbox"/>	FT ³
Chemical	Quantity	<input type="checkbox"/>	GAL	<input type="checkbox"/>	LBS	<input type="checkbox"/>	FT ³
Clean-Up Procedures & Timeline:							
Completed By:				Phone:			
Print Name:				Title:			

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -		
B	INCIDENT MO DAY YR DATE	TIME OES NOTIFIED	(use 24 hr time)	OES CONTROL NO.
C	INCIDENT ADDRESS LOCATION	CITY / COMMUNITY	COUNTY	ZIP
D	CHEMICAL OR TRADE NAME (print or type)		CAS Number	
	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>		CHECK IF RELEASE REQUIRES NOTIFI - CATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>	
	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	QUANTITY RELEASED	
	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	TIME OF RELEASE	DURATION OF RELEASE —DAYS —HOURS —MINUTES	
E	ACTIONS TAKEN			
F	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)			
	<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____			
	<input type="checkbox"/> CHRONIC OR DELAYED (explain) _____			
	<input type="checkbox"/> NOTKNOWN (explain) _____			
G	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS			
H	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)			
I	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete.			
	REPORTING FACILITY REPRESENTATIVE (print or type)			DATE:
	SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____			DATE: _____

EMERGENCY RELEASE FOLLOW-UP NOTICE REPORTING FORM INSTRUCTIONS

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

**State Emergency Response Commission (SERC)
Attn: Section 304 Reports
Hazardous Materials Unit
3650 Schriever Avenue
Mather, CA 95655**

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference: Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.

APPENDIX J

SAMPLE ARCHAEOLOGY INVOICE

(FOR ARCHAEOLOGY ONLY)

Company Name

Address, telephone, fax

Date: Insert Date

To: Name of Resident Engineer
City of San Diego
Field Engineering Division
9485 Aero Drive
San Diego, CA 92123-1801

Project Name: Insert Project Name

SAP Number (WBS/IO/CC): Insert SAP Number

Drawing Number: Insert Drawing Number

Invoice period: Insert Date to Insert Date

Work Completed: Bid item Number – Description of Bid Item – Quantity – Unit Price– Amount

Detailed summary of work completed under this bid item: Insert detailed description of Work related to Archaeology Monitoring Bid item. See Note 1 below.

Summary of charges:

Description of Services	Name	Start Date	End Date	Total Hours	Hourly Rate	Amount
Field Archaeologist	Joe Smith	8/29/2011	9/2/2011	40	\$84	\$3,360
Laboratory Assistant	Jane Doe	8/29/2011	9/2/2011	2	\$30	\$60
Subtotal						\$3,420

Work Completed: Bid item Number – Description of Bid Item – Quantity – Unit Price– Amount

Detailed summary of work completed under this bid item: Insert detailed description of Work related to Archaeology Curation/Discovery Bid item. See Note 2 below.

Summary of charges:

Description of Services	Where work occurred (onsite vs offsite/lab)	Name	Start Date	End Date	Total Hours	Hourly Rate	Amount
Field Archaeologist		Joe Smith	8/29/2011	9/2/2011	40	\$84	\$3,360
Laboratory Assistant		Jane Doe	8/29/2011	9/2/2011	2	\$30	\$60
Subtotal							\$3,420

Total this invoice: \$ _____

Total invoiced to date: \$ _____

Note 1:

For monitoring related bid items or work please include summary of construction work that was monitored from Station to Station, Native American monitors present, MMC coordination, status and nature of monitoring and if any discoveries were made.

Note 2:

For curation/discovery related bid items or work completed as part of a discovery and curation process, the PI must provide a response to the following questions along with the invoice:

1. Preliminary results of testing including tentative recommendations regarding eligibility for listing in the California Register of Historical Resources (California Register).
 - a. Please briefly describe your application (consideration) of all four California Register criteria.
 - b. If the resource is eligible under Criterion D, please define the important information that may be present.
 - c. Were specialized studies performed? How many personnel were required? How many Native American monitors were present?
 - d. What is the age of the resource?
 - e. Please define types of artifacts to be collected and curated, including quantity of boxes to be submitted to the San Diego Archaeological Center (SDAC). How many personnel were required? How many Native American monitors were present?
2. Preliminary results of data recovery and a definition of the size of the representative sample.
 - a. Were specialized studies performed? Please define types of artifacts to be collected and curated, including quantity of boxes to be submitted to the SDAC. How many personnel were required? How many Native American monitors were present?
3. What resources were discovered during monitoring?
4. What is the landform context and what is the integrity of the resources?
5. What additional studies are necessary?
6. Based on application of the California Register criteria, what is the significance of the resources?
 - a. If the resource is eligible for the California Register, can the resource be avoided by construction?
 - b. If not, what treatment (mitigation) measures are proposed? Please define data to be recovered (if necessary) and what material will be submitted to the SDAC for curation. Are any specialized studies proposed?

(After the first invoice, not all the above information needs to be re-stated, just revise as applicable).

APPENDIX K

SAMPLE OF PUBLIC NOTICE

FOR SAMPLE REFERENCE ONLY



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
- Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
- This work is anticipated to be complete in your community by December 2016.

How your neighborhood may be impacted:

- Water service to some properties during construction will be provided by a two-inch highline pipe that will run along the curb. To report a highline leak call 619-515-3525.
- Temporary water service disruptions are planned. If planned disruptions impact your property, you will receive advance notice.
- Parking restrictions will exist because of the presence of construction equipment and materials.
- "No Parking" signs will be displayed 72 hours in advance of the work.
- Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
- Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
- This work is anticipated to be complete in your community by December 2016.

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- Parking restrictions will exist because of the presence of construction equipment and materials.
- "No Parking" signs will be displayed 72 hours in advance of the work.
- Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX

To contact the City of San Diego:  **Public Works**
619-533-4207 | engineering@sandiego.gov | sandiego.gov/CIP

Sewer and AC Water Group 837
Appendix K - Sample of Public Notice (Rev. Nov. 2016)

To contact the City of San Diego:  **Public Works**
619-533-4207 | engineering@sandiego.gov | sandiego.gov/CIP

This information is available in alternative formats upon request.

APPENDIX L

ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION

Protecting AMI Devices in Meter Boxes and on Street Lights

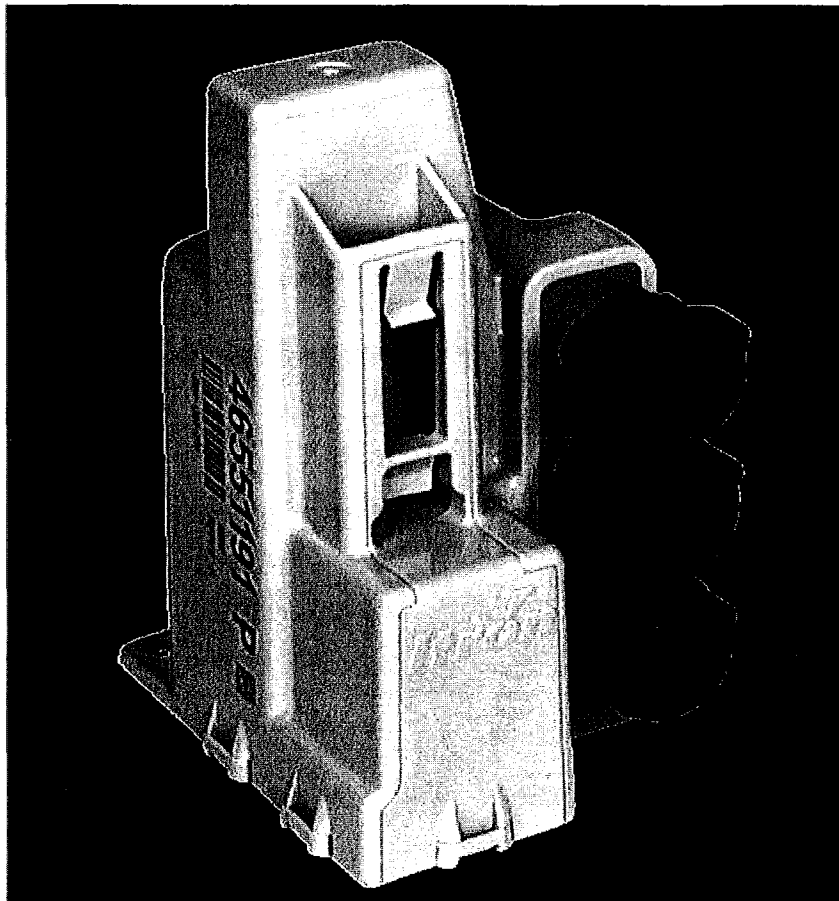
The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **All AMI devices shall be protected per Section 5-2, "Protection", of the 2015 Whitebook.**

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

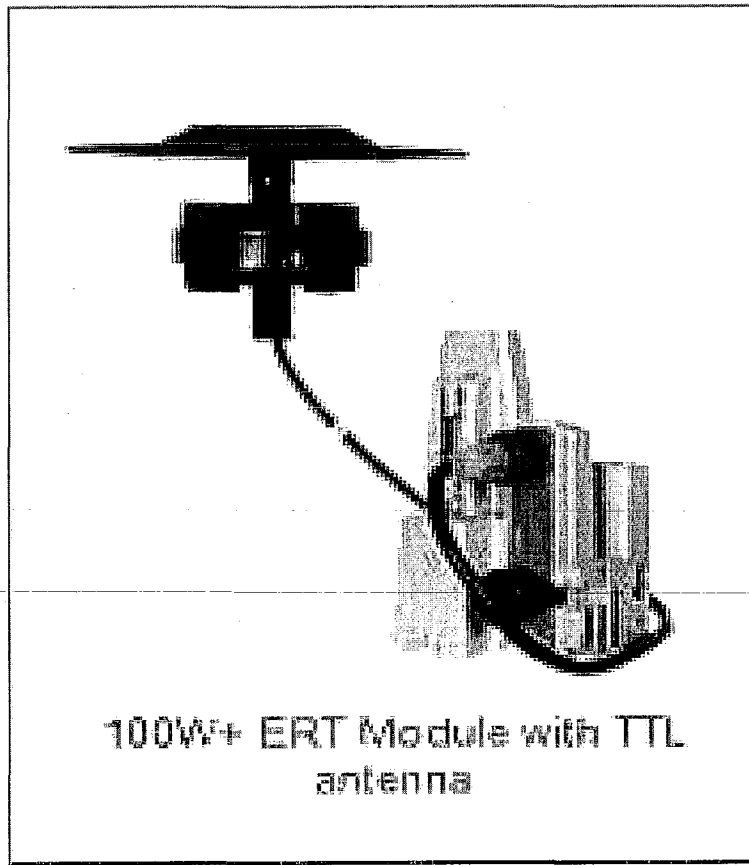
- A. Endpoints, see Photo 1:

Photo 1



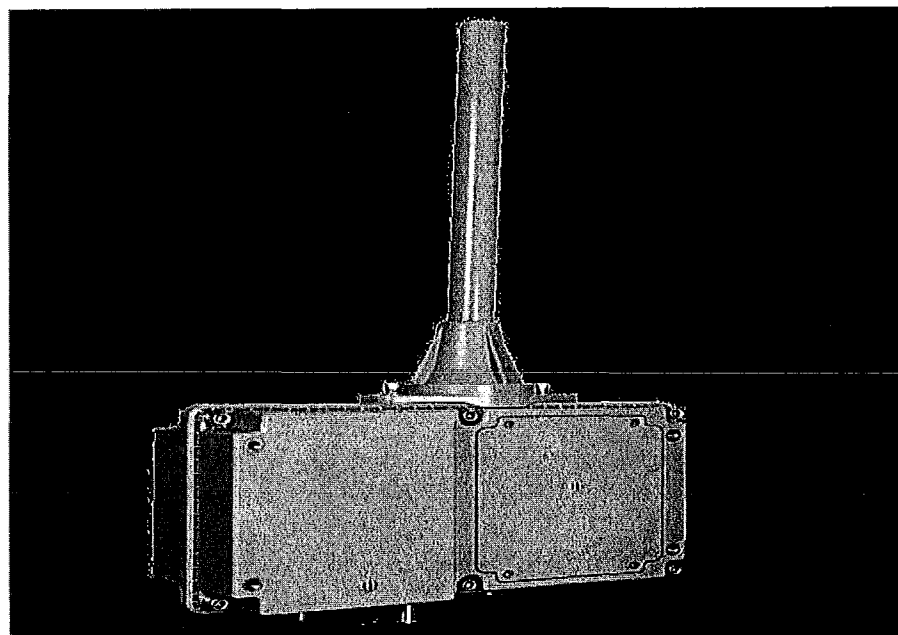
B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:

Photo 2



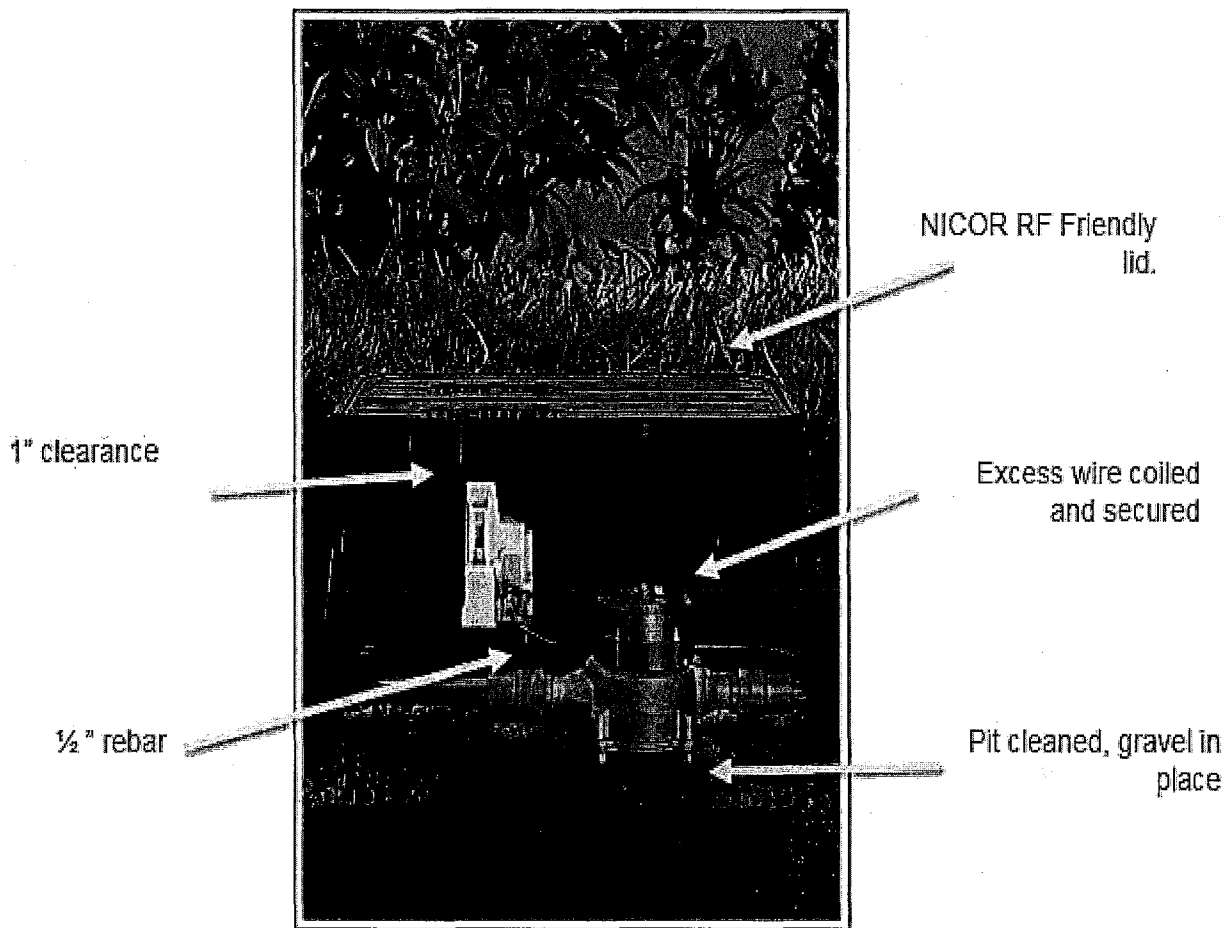
Network Devices, see Photo 3:

Photo 3



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:

Photo 4



The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

Photo 5

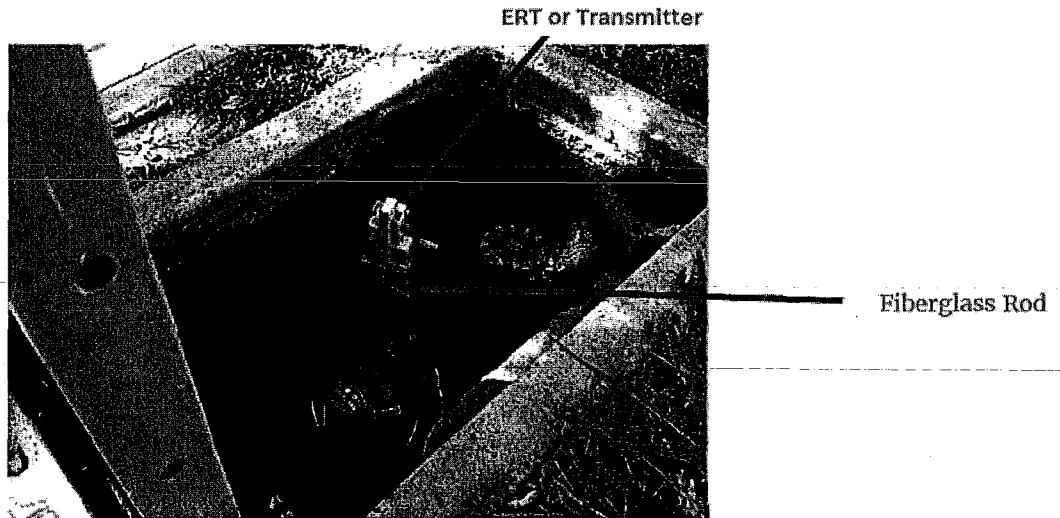
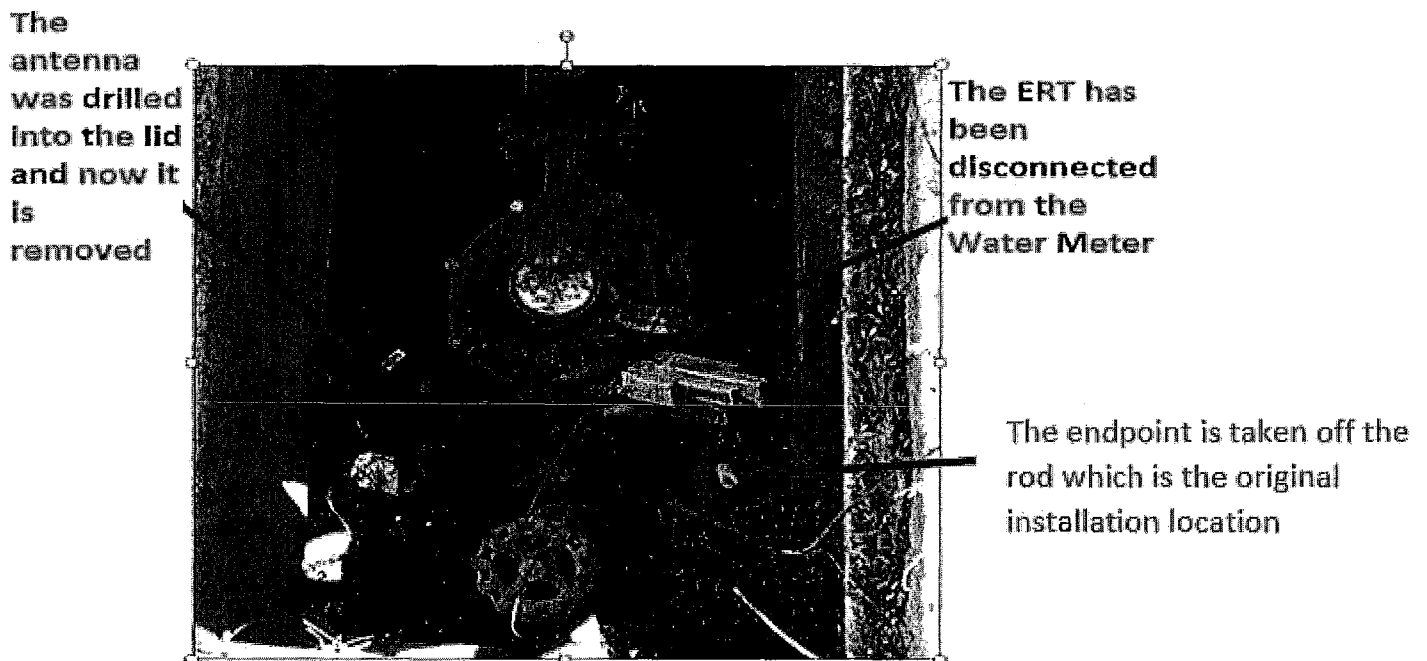


Photo 6 below is an example of disturbance that shall be avoided:

Photo 6



You are responsible when working in and around meter boxes. If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:

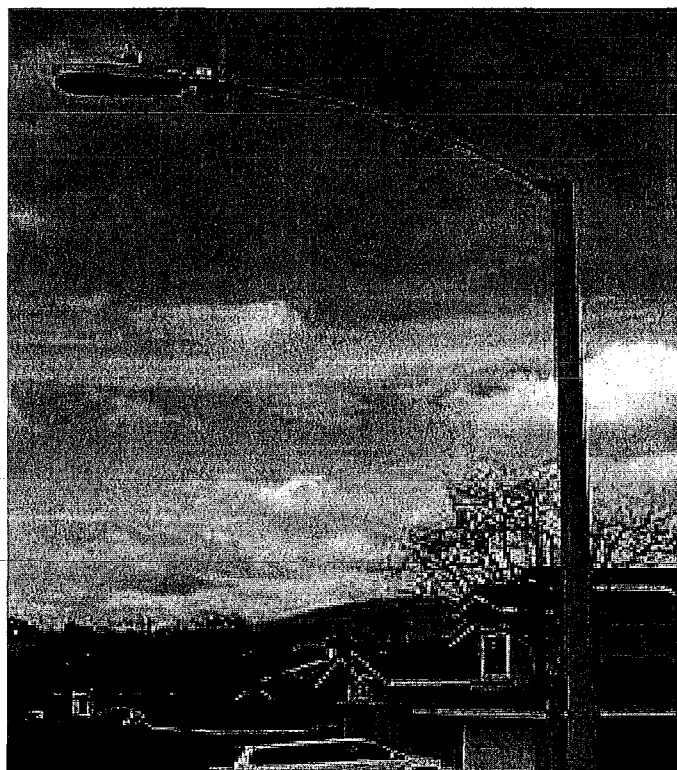
Photo 7



Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.**

Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

Photo 8



Network Device

Photo 9



If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.

ATTACHMENT F
INTENTIONALLY LEFT BLANK

ATTACHMENT G
CONTRACT AGREEMENT

CONTRACT AGREEMENT

CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and **KTA Construction, Inc.**, herein called "Contractor" for construction of **Sewer and AC Water Group 837**; Bid No. **K-17-1510-DBB-3**; in the amount of **Two Million Eight Hundred Seventy Thousand Nine Hundred One and Zero Cents (\$2,870,901.00)**, which is comprised of the Base Bid.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:
 - (a) The attached Faithful Performance and Payment Bonds.
 - (b) The attached Proposal included in the Bid documents by the Contractor.
 - (c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
 - (d) Phase Funding Schedule Agreement.
 - (e) That certain documents entitled **Sewer and AC Water Group 837**, on file in the office of the Public Works Department as Document No. **B-13214, B-15071**, as well as all matters referenced therein.
2. The Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **Sewer and AC Water Group 837**, Bid Number **K-17-1510-DBB-3**, San Diego, California.
3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances.
4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
5. This contract is effective as of the date that the Mayor or designee signs the agreement.

CONTRACT AGREEMENT (continued)

IN WITNESS WHEREOF, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code 522.3102 authorizing such execution.

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

Mara W. Elliott, City Attorney

By 

By 

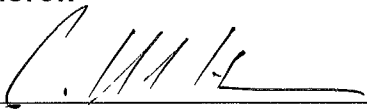
Print Name: Stephen Samara
Principal Contract Specialist
Public Works Department

Print Name: Pedro De Lara, Jr.
Deputy City Attorney

Date: 4-12-17

Date: 4/17/17

CONTRACTOR

By 

Print Name: Paul M. Henderson

Title: President

Date: 7/24/17

City of San Diego License No.: 61995007394

State Contractor's License No.: 398884

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000008798

CERTIFICATIONS AND FORMS

The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this bid are true and correct.

BIDDER'S GENERAL INFORMATION

To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23
UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

CONTRACTOR CERTIFICATION

DRUG-FREE WORKPLACE

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 7-13.3, "Drug-Free Workplace", of the project specifications, and that;

This company_has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

CONTRACTOR CERTIFICATION

AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the American With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 7-13.2, "American With Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

CONTRACTOR CERTIFICATION

CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 7-13.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than \$50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

CONTRACTOR CERTIFICATION

Equal Benefits Ordinance Certification

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

AFFIDAVIT OF DISPOSAL

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

WHEREAS, on the _____ DAY OF _____, 2_____ the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

(Name of Project or Task)

as particularly described in said contract and identified as Bid No. _____; SAP No. (WBS/IO/CC) _____; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

NOW, THEREFORE, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

and that they have been disposed of according to all applicable laws and regulations.

Dated this _____ DAY OF _____, _____.

By: _____
Contractor

ATTEST:

State of _____ County of _____

On this _____ DAY OF _____, 2_____, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared _____ known to me to be the _____ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

LIST OF SUBCONTRACTORS

***** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *** TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY *** SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION**

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3 Subcontracts, which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB ^①	WHERE CERTIFIED ^②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

^① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

^② As appropriate, Bidder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC		
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

NAMED EQUIPMENT/MATERIAL SUPPLIER LIST

*** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *** TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY *** SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB ^①	WHERE CERTIFIED ^②
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						

- ① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE,SLBE and ELBE):
- | | | | |
|---|--------|--|---------|
| Certified Minority Business Enterprise | MBE | Certified Woman Business Enterprise | WBE |
| Certified Disadvantaged Business Enterprise | DBE | Certified Disabled Veteran Business Enterprise | DVBE |
| Other Business Enterprise | OBE | Certified Emerging Local Business Enterprise | ELBE |
| Certified Small Local Business Enterprise | SLBE | Small Disadvantaged Business | SDB |
| Woman-Owned Small Business | WoSB | HUBZone Business | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB | | |
- ② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:
- | | | | |
|--|--------|--|----------|
| City of San Diego | CITY | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission | CPUC | | |
| State of California's Department of General Services | CADoGS | City of Los Angeles | LA |
| State of California | CA | U.S. Small Business Administration | SBA |

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE

*** FOR USE WHEN LISTING SUBCONTRACTORS ON ALTERNATES ***
 TO BE SUBMITTED WITH OTHER REQUIRED FORMS
 (Use Additional Sheets As Needed)

ALTERNATE A

SUBCONTRACTOR NAME, LOCATION, PHONE & EMAIL	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, ALBE, SDB, WOSB, HUBZone, OR SDVOSB	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
QUALITY CONSTRUCTION & Name: <u>ENTERPRISE, INC.</u> Address: <u>8895 TOWN CENTER DRIVE,</u> City: <u>SAN DIEGO</u> State: <u>CA</u> Zip: <u>92122</u> Phone: <u>714-585-1505</u> Email: <u>QUALITYCENTENTER@GMAIL.COM</u>	CONSTRUCTOR	1005282	AC PAVING	\$ 21,715. ⁰⁰	SLBE	CITY	
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

- As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WOSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		
- As appropriate, Bidder shall indicate if Subcontractor is certified by:

City of San Diego	CPUC	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC		
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

ELECTRONICALLY SUBMITTED FORMS

THE FOLLOWING FORMS MUST BE SUBMITTED IN PDF FORMAT WITH BID SUBMISSION

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND - See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions**

- B. CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

Bids will not be accepted until ALL forms are submitted as part of the bid submittal

BID BOND

**See Instructions to Bidders, Bidder Guarantee of Good Faith
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That KTA Construction, Inc. as Principal, and
The Guarantee Company of North America USA as Surety, are

held and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum of **10% OF THE TOTAL BID AMOUNT** for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has submitted a Bid to said OWNER to perform the WORK required under the bidding schedule(s) of the OWNER's Contract Documents entitled

Sewer and AC Water Group 837, K-17-1510-DBB-3

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in the manner required in the "Notice Inviting Bids" enters into a written Agreement on the form of agreement bound with said Contract Documents, furnishes the required certificates of insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in such suit, including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this 26th day of January, 2017

KTA Construction, Inc. (SEAL)

The Guarantee Company of North America USA (SEAL)

(Principal)

(Surety)

By: [Signature]

By: [Signature]

(Signature)

Janice Martin, Attorney-in-Fact
(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA

County of San Diego

On JAN 26 2017 before me, Sarah Myers, Notary Public,
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Janice Martin
Name(s) of Signer(s)



Place Notary Seal Above

who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~it~~/~~they~~ executed the same in ~~his~~/her/~~its~~/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~its~~/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature [Signature]
Signature of Notary Public Sarah Myers

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

Description of Attached Document

Title or Type of Document: _____

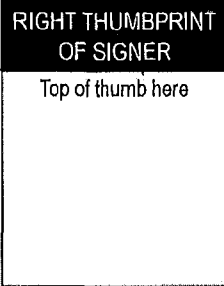
Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

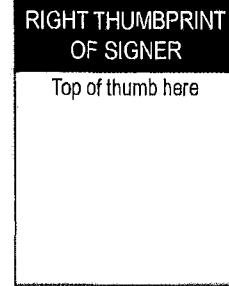
- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer is Representing: Surety Company

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer is Representing: _____



The Guarantee Company of North America USA
Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Lawrence F. McMahon, Maria Vhanneza Guise, Sarah Myers, Charlotte Aquino, James D. Castle, Jennifer L. Clampert, Janice Martin
Alliant Insurance Services, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

- 1. To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and
2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below
3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.
4. In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner - Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 23rd day of February, 2012.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

[Signature of Stephen C. Ruschak]

[Signature of Randall Musselman]

STATE OF MICHIGAN
County of Oakland

Stephen C. Ruschak, Vice President

Randall Musselman, Secretary

On this 23rd day of February, 2012 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of



Cynthia A. Takai
Notary Public, State of Michigan
County of Oakland
My Commission Expires February 27, 2018
Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

[Signature of Cynthia A. Takai]

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.



IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 26th day of January, 2017.

[Signature of Randall Musselman]

Randall Musselman, Secretary

CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal In the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

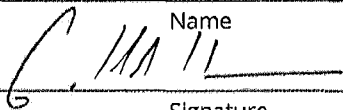
- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.

- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: KTA Construction Inc.

Certified By Paul M. Henderson Title President

  Date 2-2-17
Name
Signature

USE ADDITIONAL FORMS AS NECESSARY

Bid Results for Project Sewer and AC Water Group Job 837 (K-17-1510-DBB-3)

Issued on 01/06/2017

Bid Due on February 2, 2017 2:00 PM (Pacific)

Exported on 02/03/2017

VendorID	Company Name	Address	City	ZipCode	Country	Contact	Phone	Fax	Email	Vendor Type
291284	KTA Construction, Inc.	821 Tavern Rd.	Alpine	91901	United States	Mike Henderson	619-562-9464	619-562-1685	adam@ktaconstruction.com	CADIR,PQUAL,Local

Respondee	Respondee Title	Respondee Phone	Respondee Email
Mike Henderson	President	619-562-9464	adam@ktaconstruction.com

Bid Format	Submitted Date	Status	Confirmation #	Ranking
Electronic	February 2, 2017 1:47:46 PM (Pacific)	Submitted	97055	0

Attachments		
File Title	File Name	File Type
Contractor's Certification of Pending Actions	Cert of Pending Actions - 837.pdf	General Attachments
Subs Add/Ded Alternates	Add Alt Subcontractor List.pdf	General Attachments
Bid Bond	Bid Bond - 837.pdf	Bid Bond

Line Items								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Unit Price	Line Total	Reference
1	Main Bid Sewer	524126	Bonds (Payment and Performance)	LS	1	\$26,000.00	\$26,000.00	2-4.1
2	Main Bid Sewer	334290	Remote Control Camera Inspection (EOC Type II)	AL	1	\$15,000.00	\$15,000.00	2-11.1.6
3	Main Bid Sewer	541690	Archaeological and Native American Monitoring Program	LF	2781	\$12.00	\$33,372.00	6-3.2.2.1
4	Main Bid Sewer	541690	Paleontological Monitoring Program	LF	2781	\$3.00	\$8,343.00	6-3.2.3.1
5	Main Bid Sewer	541690	Archaeological and Native American Mitigation and Curation (EOC Type I)	AL	1	\$10,000.00	\$10,000.00	6-3.2.4.1
6	Main Bid Sewer	541690	Paleontological Mitigation and Excavation	CY	10	\$2.00	\$20.00	6-3.2.5.1
7	Main Bid Sewer	541690	Suspension of Work - Resources	DAYS	5	\$100.00	\$500.00	6-3.2.2.1 OR 6-3.2.3.1
8	Main Bid Sewer	541330	WPCP Development	LS	1	\$750.00	\$750.00	7-8.6.4.2
9	Main Bid Sewer	237990	WPCP Implementation	LS	1	\$50,000.00	\$50,000.00	7-8.6.4.2
10	Main Bid Sewer	238990	Video Recording of Existing Conditions	LS	1	\$1,000.00	\$1,000.00	7-9.1.1
11	Main Bid Sewer	237110	Mobilization	LS	1	\$86,700.00	\$86,700.00	9-3.4.1
12	Main Bid Sewer		Field Orders (EOC Type II)	AL	1	\$200,000.00	\$200,000.00	9-3.5
13	Main Bid Sewer	237310	Additional Pavement Removal and Disposal	CY	100	\$25.00	\$2,500.00	300-1.4
14	Main Bid Sewer	237310	Asphalt Pavement Repair	TONS	100	\$150.00	\$15,000.00	302-3.2

Line Items								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Unit Price	Line Total	Reference
15	Main Bid Sewer	237310	Pavement Fabric	SY	1450	\$4.00	\$5,800.00	302-7.4
16	Main Bid Sewer	237310	Cold Mill AC Pavement (0 Inch - 1½ Inch)	SF	8482	\$1.50	\$12,723.00	302-1.12
17	Main Bid Sewer	237310	Rubber Polymer Modified Slurry (RPMS) Type I Over Type III and Striping	SF	125105	\$0.70	\$87,573.50	302-4.12.4
18	Main Bid Sewer	237310	Asphalt Concrete Overlay and Striping	TON	200	\$110.00	\$22,000.00	302-5.9
19	Main Bid Sewer	237310	Removal of Humps and Pavement Irregularities	LF	92	\$65.00	\$5,980.00	302-1.12
20	Main Bid Sewer	237310	Pavement Restoration Adjacent to Trench	SF	2000	\$12.00	\$24,000.00	302-5.2.1
21	Main Bid Sewer	237310	Road Hump	TON	30	\$240.00	\$7,200.00	302-5.9
22	Main Bid Sewer	237310	Cross Gutter	SF	305	\$12.00	\$3,660.00	303-5.9
23	Main Bid Sewer	237310	Crack Seal	LB	1300	\$7.00	\$9,100.00	302-14.5
24	Main Bid Sewer	237310	Additional Curb and Gutter Removal and Replacement	LF	500	\$40.00	\$20,000.00	303-5.9
25	Main Bid Sewer	237310	Additional Sidewalk Removal and Replacement	SF	1000	\$10.00	\$10,000.00	303-5.9
26	Main Bid Sewer	237110	Pavement Restoration for Final Connection	SF	550	\$12.00	\$6,600.00	901-2.5
27	Main Bid Sewer	237310	Contractor Date Stamps and Impressions	EA	3	\$300.00	\$900.00	303-5.9
28	Main Bid Sewer	237310	Curb Ramp (Case B) with Stainless Steel Detectable Warning Tiles (Refer to Sheet 15)	EA	4	\$3,000.00	\$12,000.00	303-5.10.2
29	Main Bid Sewer	237310	Curb Ramp (Type A) with Stainless Steel Detectable Warning Tiles	EA	6	\$3,000.00	\$18,000.00	303-5.10.2
30	Main Bid Sewer	237310	Curb Ramp (Type B) with Stainless Steel Detectable Warning Tiles	EA	2	\$3,000.00	\$6,000.00	303-5.10.2
31	Main Bid Sewer	237310	Curb Ramp (Type C2) with Stainless Steel Detectable Warning Tiles	EA	1	\$3,500.00	\$3,500.00	303-5.10.2
32	Main Bid Sewer	237310	Pedestrian Barricade	EA	7	\$750.00	\$5,250.00	701-2
33	Main Bid Sewer	237110	Handling and Disposal of Non friable Asbestos Material	LF	4866	\$5.50	\$26,763.00	306-3.3.4.5
34	Main Bid Sewer	237110	Additional Bedding	CY	250	\$5.00	\$1,250.00	306-15.1
35	Main Bid Sewer	237110	Trench Shoring	LS	1	\$20,000.00	\$20,000.00	306-15.2
36	Main Bid Sewer	237110	Imported Backfill For Trench	TON	400	\$5.00	\$2,000.00	306-15.12

Line Items								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Unit Price	Line Total	Reference
37	Main Bid Sewer	237110	Video Inspection of Pipelines and Culverts for Acceptance	LF	2766	\$1.25	\$3,457.50	306-18.7
38	Main Bid Sewer	541330	Traffic Control Design (Working Drawings)	LS	1	\$1,500.00	\$1,500.00	601-6
39	Main Bid Sewer	237310	Traffic Control	LS	1	\$7,500.00	\$7,500.00	601-6
40	Main Bid Sewer	237310	K-Rail	LF	200	\$20.00	\$4,000.00	601-6
41	Main Bid Sewer	237110	Temporary Resurfacing	TON	310	\$110.00	\$34,100.00	901-1.3
42	Main Bid Sewer	237110	Water Main (8 Inch, Class 235)	LF	2035	\$96.00	\$195,360.00	306-15.1
43	Main Bid Sewer	237110	Water Main (8 Inch, Class 305)	LF	2422	\$99.00	\$239,778.00	306-15.1
44	Main Bid Sewer	237110	Water Main (12 Inch, Class 305)	LF	160	\$125.00	\$20,000.00	306-15.1
45	Main Bid Sewer	237110	Gate Valve (8 Inch)	EA	21	\$1,600.00	\$33,600.00	306-15.5
46	Main Bid Sewer	237110	Gate Valve (12 Inch)	EA	2	\$2,900.00	\$5,800.00	306-15.5
47	Main Bid Sewer	237110	Water Service (1 Inch)	EA	95	\$2,000.00	\$190,000.00	306-15.8
48	Main Bid Sewer	237110	Fire Hydrant Assembly and Marker (6 Inch)	EA	7	\$6,500.00	\$45,500.00	306-15.6
49	Main Bid Sewer	237110	Blow-Off Valve Assembly (2 Inch)	EA	8	\$3,000.00	\$24,000.00	306-15.8
50	Main Bid Sewer	237110	Air and Vacuum (Air Release) Valve Assembly (2 Inch)	EA	7	\$5,500.00	\$38,500.00	306-15.8
51	Main Bid Sewer	237110	Sewer Main (8 Inch)	LF	453	\$160.00	\$72,480.00	306-15.1
52	Main Bid Sewer	237110	Sewer Main (8 Inch, SDR-26)	LF	2314	\$175.00	\$404,950.00	306-15.1
53	Main Bid Sewer	237110	Manholes (4 ft x 3 ft)	EA	16	\$5,000.00	\$80,000.00	306-16.6
54	Main Bid Sewer	237110	Connection to Existing Manhole and Rechanneling	EA	4	\$1,500.00	\$6,000.00	306-16.6
55	Main Bid Sewer	237310	Adjust Existing Manhole Frame and Cover to Grade	EA	3	\$750.00	\$2,250.00	301-1.7
56	Main Bid Sewer	237110	Sewer Lateral and Cleanout (4 Inch, Street)	EA	26	\$2,900.00	\$75,400.00	306-17.2
57	Main Bid Sewer	237110	Sewer Lateral Connection	EA	1	\$2,500.00	\$2,500.00	306-17.2
58	Main Bid Sewer	237110	Sewer Lateral with Private Replumbing (4 Inch, Trenchless Method)	EA	42	\$14,000.00	\$588,000.00	306-17.2
59	Main Bid Sewer	237110	Abandon and Fill Existing Sewer Main (6 Inch) Outside of the Trench Limit	LF	1895	\$5.00	\$9,475.00	306-3.3.3
60	Main Bid Sewer	237110	Abandon and Fill Existing Sewer Main (8 Inch) Outside of the Trench Limit	LF	211	\$6.00	\$1,266.00	306-3.3.3
61	Main Bid Sewer	237110	Abandon Existing Manhole Outside of Trench Limit	EA	8	\$2,000.00	\$16,000.00	306-3.3.3

Line Items								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Unit Price	Line Total	Reference
62	Main Bid Sewer	237110	Sewage Bypass and Pumping Plan (Diversion Plan)	LS	1	\$10,000.00	\$10,000.00	7-8.5.4
							Subtotal	\$2,870,901.00
63	Alternate Items A	237110	Furnished Materials for Contractor High-line Work	LF	11681	\$3.00	\$35,043.00	900-1.2
64	Alternate Items A	237110	High-lining Installation by the Contractor	LF	11681	\$7.00	\$81,767.00	901-1.3
65	Alternate Items A	237110	High-lining Removed by the Contractor	LF	11681	\$2.00	\$23,362.00	901-1.3
66	Alternate Items A	237110	Connections to The Existing System by Contractor (8 Inch Through 12 Inch)	EA	14	\$3,900.00	\$54,600.00	901-2.5
67	Alternate Items A	237110	Cut and Plug by Contractor	EA	14	\$4,100.00	\$57,400.00	901-2.5
							Subtotal	\$252,172.00
							Total	\$3,123,073.00

Subcontractors										
Name	Description	License Num	Amount	Type	DIR #	Address	Address 2	City	ZipCode	Country
Loveless & Linton Consulting-Archaeological	Archeo., Paleo., And Native American Monitoring	N/A	\$38,207.00	CAU,FEM,SLBE,DBE,CADIR,SD B,WOSB	1000011264	1421 W. Lewis St		San Diego	92103	United States
LSI Road Marking	Striping, pedestrian barricades	775886	\$11,142.75		1000003495	P.O. Box 2426		El Cajon	92021	United States
McGrath Consulting	WPCP	N/A	\$550.00	ELBE,SDB	1000037165	PO BOX 2488		El Cajon	92021	United States
American Asphalt South, Inc.	Slurry Seal and Crack Seal	784969	\$75,616.70	CAU,MAL E,PQUAL,CADIR	1000000645	PO Box 310036	14436 Santa Ana Ave	Fontana	92331	United States
T L Scanlan Construction	Trenchless Replumbs	1008991	\$167,161.05		1000036079	2308 shaylene Way		alpine	91901	United States
Quality Construction & Engineering Inc.	Concrete Flatwork and AC Paving	1005282	\$464,405.12	PQUAL,SL BE,CADIR,SDB	1000026419	8895 town center drive #105-351		san diego	92122	United States

Additive/Subcontractors										
Name	Description	License Num	Amount	Type	DIR #	Address	Address 2	City	ZipCode	Country
Quality Construction & Engineering Inc.	Concrete Flatwork and AC Paving	1005282	\$21,715.00	PQUAL,SL BE,CADIR,SDB	1000026419	8895 town center drive #105-351		san diego	92122	United States

Prime Self-Performance
75.08%