

ORIGINAL

City of San Diego

CONTRACTOR'S NAME: Burtech Pipeline Incorporated
ADDRESS: 102 Second Street, Encinitas, CA 92024
TELEPHONE NO.: (760) 634-2822 FAX NO.: (760) 634-2415
CITY CONTACT: Michelle Muñoz - Contract Specialist, Email: MichelleM@sandiego.gov
Phone No. (619) 533-3482, Fax No. (619) 533-3633
CCrown/RWBustamante/Lad

BIDDING DOCUMENTS



FOR

WATER AND SEWER GROUP JOB 954

BID NO.: K-17-1501-DBB-3-A
SAP NO. (WBS/IO/CC): B-10187 / B-13203
CLIENT DEPARTMENT: 2013 / 2011
COUNCIL DISTRICT: 2, 3
PROJECT TYPE: KB / JA

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

OCTOBER 26, 2016

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:

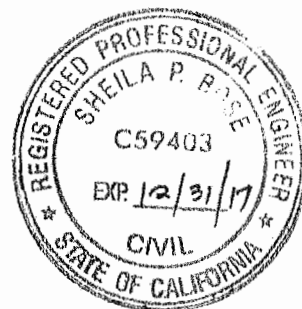
S. Bose

For City Engineer

9/12/16

Date

Seal



NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for the installation of approximately 4,472 lineal feet of 12-inch and 16-inch water mains, water services, valves, fire hydrants and markers, and the installation of approximately 1,315 linear feet of 8-inch sewer mains, laterals, manholes, resurfacing, curb ramps and all other work and appurtenances. 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 web site: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$4,300,000**.
4. **BID DUE DATE AND TIME ARE: OCTOBER 26, 2016 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 C34 and C42**
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	6.9%
2. ELBE participation	15.4%
3. Total mandatory participation	22.3%
 - 7.2. The Bid may be declared non-responsive if the Bidder fails to meet the following
 - 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

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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: October 5, 2016
Time: 10:00 AM
Location: 1010 Second Avenue, Suite 1400, San Diego, CA 92101 (Large Conf. Room)

Attendance at the Pre-Bid 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 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 Base bid alone; or for the Base bid plus one or more alternates.

10. SUBMISSION OF QUESTIONS:

- 10.1.** 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: Michelle Muñoz

OR:

MichelleM@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 in the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

3. 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 the Notice Inviting Bids.
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")	2012	PITS070112-01

Title	Edition	Document Number
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")*	2012	PITS070112-02
City of San Diego Standard Drawings*	2012	PITS070112-03
Caltrans Standard Specifications	2010	PITS070112-04
Caltrans Standard Plans	2010	PITS070112-05
California MUTCD	2012	PITS070112-06
City Standard Drawings - Updates Approved For Use (when specified)*	Varies	Varies
Standard Federal Equal Employment Opportunity Construction Contract Specifications and the Equal Opportunity Clause Dated 09-11-84	1984	769023
NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/publicworks/edocref/index.shtml		

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 addendum 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 PROCESS:**
 - 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):**
- 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 Pledge of Compliance.
 - 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:

Burtech Pipeline Incorporated, a corporation, as principal, and NORTH AMERICAN SPECIALTY INSURANCE COMPANY, 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 Three Million Seven Hundred Fifty Six Thousand Eight Hundred Thirty Two Dollars and 50/100 (\$3,756,832.50) for the faithful performance of the annexed contract, and in the sum of Three Million Seven Hundred Fifty Six Thousand Eight Hundred Thirty Two Dollars and 50/100 (\$3,756,832.50) for the benefit of laborers and materialmen designate 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.

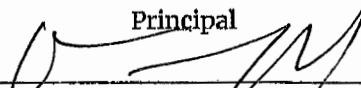
PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

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

Dated NOVEMBER 11, 2016

Approved as to Form

BURTECH PIPELINE, INCORPORATED

By  Principal

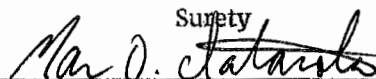
DOMINIC J. BURTECH, JR., PRESIDENT

Printed Name of Person Signing for Principal


Mara W. Elliot, City Attorney

By 
Deputy City Attorney

NORTH AMERICAN
SPECIALTY INSURANCE COMPANY

By  Surety
MARK D. IATAROLA,
Attorney-in-fact

Approved:

By: 
Stephen Samara
Principal Contract Specialist
Public Works Department

6 HUTTON CENTRE DRIVE, SUITE 850

Local Address of Surety

SANTA ANA, CA 92707

Local Address (City, State) of Surety

714/550-7799

Local Telephone No. of Surety

Premium \$25,215.00

Bond No. 2220333

PREMIUM IS FOR CONTRACT TERM
AND IS SUBJECT TO ADJUSTMENT
BASED ON FINAL CONTRACT PRICE

California Acknowledgment Form

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 } ss.

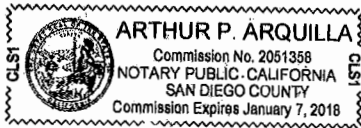
On 11/17/16 before me, Arthur P. Arquilla, Notary Public
(here insert name and title of the officer)
personally appeared Dominic Butech

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.

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

Seal

WITNESS my hand and official seal.



Arthur P. Arquilla
Signature of Notary

Optional Information

To help prevent fraud, it is recommended that you provide information about the attached document below.
This is not required under California State notary public law.

Document Title: _____ # of Pages: _____

Notes

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.

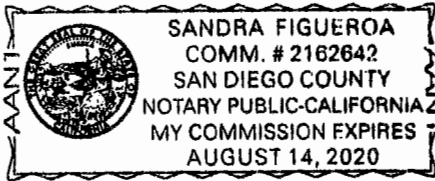
State of California)
County of SAN DIEGO)

On 11/11/2016 before me, SANDRA FIGUEROA, NOTARY PUBLIC,
Date Here Insert Name and Title of the Officer
personally appeared MARK D. IATAROLA
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.

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 Sandra Figueroa
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended 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: MARK D. IATAROLA
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY
WASHINGTON INTERNATIONAL INSURANCE COMPANY

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT North American Specialty Insurance Company, a corporation duly organized and existing under laws of the State of New Hampshire, and having its principal office in the City of Manchester, New Hampshire, and Washington International Insurance Company, a corporation organized and existing under the laws of the State of New Hampshire and having its principal office in the City of Schaumburg, Illinois, each does hereby make, constitute and appoint:

JOHN G. MALONEY, HELEN MALONEY, MICHELLE M. BASUIL,

and MARK D. IATAROLA

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of: FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both North American Specialty Insurance Company and Washington International Insurance Company at meetings duly called and held on the 9th of May, 2012:

'RESOLVED, that any two of the Presidents, any Managing Director, any Senior Vice President, any Vice President, any Assistant Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Company when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached.'



By [Signature] Steven P. Anderson, Senior Vice President of Washington International Insurance Company & Senior Vice President of North American Specialty Insurance Company



By [Signature] Michael A. Ito, Senior Vice President of Washington International Insurance Company & Senior Vice President of North American Specialty Insurance Company

IN WITNESS WHEREOF, North American Specialty Insurance Company and Washington International Insurance Company have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers this 17th day of September, 2015.

North American Specialty Insurance Company
Washington International Insurance Company

State of Illinois
County of Cook ss:

On this 17th day of September, 2015, before me, a Notary Public personally appeared Steven P. Anderson, Senior Vice President of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company and Michael A. Ito, Senior Vice President of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



[Signature] M. Kenny, Notary Public

I, Jeffrey Goldberg, the duly elected Assistant Secretary of North American Specialty Insurance Company and Washington International Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said North American Specialty Insurance Company and Washington International Insurance Company, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 11th day of NOVEMBER, 2016.

[Signature] Jeffrey Goldberg, Vice President & Assistant Secretary of Washington International Insurance Company & North American Specialty Insurance Company

ATTACHMENTS

ATTACHMENT A
SCOPE OF WORK

SCOPE OF WORK

1. **SCOPE OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for the installation of approximately 4,472 lineal feet of 12-inch and 16-inch water mains, water services, valves, fire hydrants and markers, and the installation of approximately 1,315 linear feet of 8-inch sewer mains, laterals, manholes, resurfacing, curb ramps and all other work and appurtenances.

1.1. The Work shall be performed in accordance with:

1.1.1. The Notice Inviting Bids and Plans numbered **38101-01-D** through **38101-21-D**, **38101-T1-D** through **38101-T72-D**, inclusive.

2. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$4,300,000**.

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

Pacific Highway, North of Sassafras through Laurel Street and West Palm, East of Pacific Highway and West Juniper Street, between Kettner Boulevard and Pacific Highway.

4. **CONTRACT TIME:** The Contract Time for completion of the Work shall be **190 Working Days**.

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

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

Option	Classifications
1	CLASS A
2	CLASS C34 and C42

4.3. 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

NOTE: THIS IS A SAMPLE PHASED FUNDING SCHEDULE AGREEMENT FORM.

The particulars left blank in this sample 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-17-1501-DBB-3-A

CONTRACT OR TASK TITLE: Water and Sewer Group Job 954

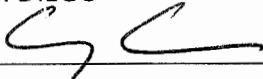
CONTRACTOR: Burtech Pipeline Inc

Funding Phase	Phase Description	Phase Start	Phase Finish	Not-to-Exceed Amount
1	Construction activities associated with this contract and specifications.	NTP	NOC	\$3,756,832.50
Total				\$3,756,832.50

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: CASEY CROWN
Project Manager

Department Name: PUBLIC WORKS

Date: 21 NOV 2016

CONTRACTOR

By: 

Name: Dominic J. Burtech

Title: President & CEO

Date: November 21, 2016

END OF PHASED FUNDING SCHEDULE AGREEMENT

ATTACHMENT C
EQUAL OPPORTUNITY CONTRACTING PROGRAM

EQUAL OPPORTUNITY CONTRACTING PROGRAM REQUIREMENTS

1. To The WHITEBOOK, Chapter 10, Sections D and E, DELETE each in its entirety, and SUBSTITUTE with the following:

D. CITY'S EQUAL OPPORTUNITY COMMITMENT.

1. Nondiscrimination in Contracting Ordinance.

1. The Contractor, Subcontractors and Suppliers shall comply with requirements of the City's Nondiscrimination in Contracting Ordinance, San Diego Municipal Code §§22.3501 through 22.3517.

The Contractor 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. The Contractor shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions.

The Contractor shall include the foregoing clause in all contracts between the Contractor and Subcontractors and Suppliers.

2. Disclosure of Discrimination Complaints. As part of its Bid or Proposal, 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 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.
3. Upon the City's request, the Contractor agrees to provide to the City, within 60 days, a truthful and complete list of the names of all Subcontractors and Suppliers that the Contractor has used in the past 5 years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by the Contractor for each subcontract or supply contract.
4. The Contractor further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code §§22.3501 through 22.3517. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in remedies being ordered against the Contractor up to and including contract termination,

debarment and other sanctions for violation of the provisions of the Nondiscrimination in Contracting Ordinance. The Contractor further understands and agrees that the procedures, remedies and sanctions provided for in the Nondiscrimination in Contracting Ordinance apply only to violations of the Ordinance.

E. EQUAL EMPLOYMENT OPPORTUNITY OUTREACH PROGRAM.

1. The Contractor, Subcontractors and Suppliers shall comply with the City's Equal Employment Opportunity Outreach Program, San Diego Municipal Code §§22.2701 through 22.2707.

The Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Prime Contractor shall ensure their subcontractors comply with this program. Nothing in this section shall be interpreted to hold a prime contractor liable for any discriminatory practice of its subcontractors.

The Contractor shall include the foregoing clause in all contracts between the Contractor and Subcontractors and Suppliers.

2. If the Contract is competitively solicited, the selected Bidder shall submit a Work Force Report (Form BB05), within 10 Working Days after receipt by the Bidder of Contract forms to the City for approval as specified in the Notice of Intent to Award letter from the City.
3. If a Work Force Report is submitted, and the City determines there are under-representations when compared to County Labor Force Availability data, the selected Bidder shall submit an Equal Employment Opportunity Plan.
4. If the selected Bidder submits an Equal Employment Opportunity Plan, it shall include the following assurances:
 1. The Contractor shall maintain a working environment free of discrimination, harassment, intimidation and coercion at all sites and in all facilities at which the Contractor's employees are assigned to work.
 2. The Contractor reviews its EEO Policy, at least annually, with all on-site supervisors involved in employment decisions.
 3. The Contractor disseminates and reviews its EEO Policy with all employees at least once a year, posts the policy statement and EEO posters on all company bulletin boards and job sites, and documents every dissemination, review and posting with a written record to identify the time, place, employees present, subject matter, and disposition of meetings.

4. The Contractor reviews, at least annually, all supervisors' adherence to and performance under the EEO Policy and maintains written documentation of these reviews.
5. The Contractor discusses its EEO Policy Statement with subcontractors with whom it anticipates doing business, includes the EEO Policy Statement in its subcontracts, and provides such documentation to the City upon request.
6. The Contractor documents and maintains a record of all bid solicitations and outreach efforts to and from subcontractors, contractor associations and other business associations.
7. The Contractor disseminates its EEO Policy externally through various media, including the media of people of color and women, in advertisements to recruit, maintains files documenting these efforts, and provides copies of these advertisements to the City upon request.
8. The Contractor disseminates its EEO Policy to union and community organizations.
9. The Contractor provides immediate written notification to the City when any union referral process has impeded the Contractor's efforts to maintain its EEO Policy.
10. The Contractor maintains a current list of recruitment sources, including those outreaching to people of color and women, and provides written notification of employment opportunities to these recruitment sources with a record of the organizations' responses.
11. The Contractor maintains a current file of names, addresses and phone numbers of each walk-in applicant, including people of color and women, and referrals from unions, recruitment sources, or community organizations with a description of the employment action taken.
12. The Contractor encourages all present employees, including people of color and women employees, to recruit others.
13. The Contractor maintains all employment selection process information with records of all tests and other selection criteria.
14. The Contractor develops and maintains documentation for on-the-job training opportunities, participates in training programs, or both for all of its employees, including people of color and women, and establishes apprenticeship, trainee, and upgrade programs relevant to the Contractor's employment needs.

15. The Contractor conducts, at least annually, an inventory and evaluation of all employees for promotional opportunities and encourages all employees to seek and prepare appropriately for such opportunities.
16. The Contractor ensures the company's working environment and activities are non-segregated except for providing separate or single-user toilets and necessary changing facilities to assure privacy between the sexes.

ATTACHMENT D
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) Standard Specifications for Public Works Construction (The GREENBOOK) currently in effect.
 - 2) The City of San Diego Standard Specifications for Public Works Construction (The WHITEBOOK).
-

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

1-2 TERMS AND DEFINITIONS.

Normal Working Hours. To the City Supplement, 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.

2-5.3.1 **General.** To the City Supplement, ADD the following:

7. For products for which an AML is available, products listed in the AML shall be used. A submittal review will be conducted for products not identified on an AML on a case-by-case basis when:
 - a) The product type or category is not in the AML.
 - b) The AML does not list at least two available manufacturers of the product.
 - c) The material or manufacturer listed in the AML is no longer available. Documentation to substantiate the product is no longer available or in production is required as part of the submittal.

In the case of conducting a submittal review when required by the Plans or Special Provisions, or when requested by the Engineer, all submittals shall be accompanied by the City's submittal form.

The Product Submittal Form is available for download at:

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

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

4. The following reports of explorations and tests of subsurface conditions at the Work Site have been provided for reference only:
 - a) "Geotechnical Evaluation Pacific Highway Trunk Sewer" dated January 29, 2004 and prepared by Ninyo & Moore.
5. The reports listed above are available for review by contacting the Contract Specialist. See also Appendix J.

2-9.1 Permanent Survey Markers. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

1. Pursuant to Division 3, Chapter 15 of the Business and Professions Code, you shall not disturb survey monuments that "control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control" until they have been tied out by a Registered Land Surveyor or Registered Civil Engineer authorized to practice land surveying within the State of California.
2. Monument Preservation shall be performed by the City's Construction Management and Field Services (CMFS) Division on all Projects, unless permission is obtained for these services in writing by CMFS.
3. You shall submit to the Engineer a minimum of 7 Days prior to the start of the Work a list of controlling survey monuments which may be disturbed. CMFS shall do the following:
 - a) Set survey points outside the affected Work area that reference and locate each controlling survey monument that may be disturbed.
 - b) File a Corner Record or Record of Survey with the County Surveyor after setting the survey points to be used for re-establishment of the disturbed controlling survey monuments.
 - c) File a Corner Record of Record of Survey with the County Surveyor after re-establishment of the disturbed controlling survey monuments.

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

1. Other adjacent City projects are scheduled for construction for the same time period in the vicinity of Sassafras Street. See Appendix "E" for the approximate location. Coordinate the Work with the adjacent projects as listed below:
 - a) Upas Street Pipeline, Alice Altes, Project Manager 619-533-4105.

SECTION 4 - CONTROL OF MATERIALS

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. ADD the following:

14. 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>

4-1.10 Foreign Materials. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

1. Materials that are manufactured, produced, or fabricated outside of the United States shall be delivered to a distribution point in California, unless otherwise specified. Quality Control and related testing shall be performed to all applicable specified US standards. Manufacturer's testing and staff certification shall be traceable to a United States regulatory agency. Retain the materials for a sufficient period of time to permit inspection, sampling, and testing. You shall not be entitled to an extension of time for acts or events occurring outside of, at point of entry, or during transport to the United States.

SECTION 5 - UTILITIES

5-2 PROTECTION. ADD the following:

1. You shall repair or replace traffic signal and lighting system equipment within 72 hours after notification of defects by the Engineer.
2. While working in or around meter boxes, you shall protect in place all Advanced Metering Infrastructure (AMI) devices attached to the water meter or located in or near water meter boxes, coffins, or vaults in

accordance with Appendix K. This includes any antenna installed through the meter box lid.

- a) Avoid damaging the antenna, cable, and endpoints when removing the meter box lid and when disconnecting AMI endpoints from the register on top of the water meter.
- b) If meters or AMI devices need to be removed or relocated, the AMI endpoints shall be reinstalled with the Encoder/Receiver/Transmitter (ERT) pointing upwards.
- c) Because the AMI equipment is uniquely matched to each service location and to specific meter serial numbers, any AMI devices that are removed or disconnected shall be reinstalled on the same service lateral as well as to the same meter serial number it was attached to originally.
- d) Do not change or modify the lid if the lid has an antenna drilled through it.
- e) If you encounter damaged, disconnected, buried, or broken AMI endpoints, cables between the registers, antennae, lids, or ERTs, notify the Engineer within 24 hours.
- f) Any AMI equipment damaged by you shall be repaired or replaced by City Forces at your expense.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

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

5. For water projects where shutdowns of 16 inch and larger pipes are required, there is a shutdown moratorium from May until October. You shall plan and schedule Work accordingly. No additional payment or Working Days will be granted for delays due to this moratorium.
6. 30 Working Days shall be included in the stipulated Contract time for full depth asphalt final mill and resurfacing Work required per SDG-107.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

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

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 must 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 must 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 must 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.

7-4 WORKERS' COMPENSATION INSURANCE. DELETE in its entirety and SUBSTITUTE with the following:

7-4.1 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.

7-4.1.1 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.

7-8.6 Water Pollution Control. ADD the following:

1. Based on a preliminary assessment by the City, the Contract is subject to WPCP.

7-10.5.3 Steel Plate Covers. Table 7-10.5.3 (A), REVISE the plate thickness for 5'-3" trench width to read 1¾".

7-15 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT. To the City Supplement, Paragraph (4), Sentence (3), DELETE in its entirety and SUBSTITUTE with the following:

Your duty to indemnify and hold harmless does not include any claims or liability arising from the established active or sole negligence, or willful misconduct of the City, its officers, or employees.

7-16 COMMUNITY LIAISON. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

ADD:

7-16 COMMUNITY OUTREACH.

7-16.1 General.

1. To ensure consistency with the City's community outreach plan for the project, the City shall work with you to inform the public (which includes,

but shall not be limited to, property owners, renters, homeowners, business owners, recreational users, and other community members and stakeholders) of construction impacts. Your efforts to mitigate construction impacts by communicating with the public require close coordination and cooperation with the City.

2. You shall perform the community outreach activities required throughout the Contract Time. You shall assign a staff member who shall perform the required community outreach services.
3. You shall closely coordinate the Work with the businesses, institutions, residents, and property owners impacted by the Project.
4. Your example duties include notifying businesses, institutions, and residents of the commencement of construction activities not less than 5 Days in advance, coordinating access for vehicular and pedestrian traffic to businesses, institutions, and residences impacted by the Project, reporting activities at all Project progress meetings scheduled by the Engineer, attending the Project Pre-construction meeting, attending 2 community meetings, responding to community questions and complaints related to your activities, and documenting, in writing, as well as logging in all inquiries and complaints received into the City's internal public contact tracking system.
5. You shall execute the Information Security Policy (ISP) Acknowledgement Form - For Non-City Employees within 15 Days of the award of the Contract if any of the following apply:
 - a) Your contact information is made available on any outreach materials.
 - b) You will be the primary point of contact to resolve project related inquiries and complaints.
6. Electronic Communication.
 - a) All inquiries and complaints shall be logged in to the City's internal public contact tracking system within 24 hours of receipt of inquiries and complaints.
 - b) Any updates or a resolution of inquiries and complaints shall be documented in the City's internal public contact tracking system within 24 hours.
 - c) Copies of email communications shall be saved individually on to the City's internal public contact tracking system in an Outlook Message Format (*.msg).
 - d) All graphics, photos, and other electronic files associated with inquiries and/or complaints shall be saved into the individual records, located within the City's internal public contact tracking system.

7-16.1.1 Quality Assurance.

1. During the course of community outreach, you shall ensure that the character of all persons that conduct community outreach (distributing door hangers, attending community meetings, interacting with the public, and etc.) on your behalf shall:
 - a. Have the ability to speak and comprehend English and/or Spanish, as appropriate for the community or public they are informing.
 - b. Possess and display easily verifiable and readable personal identification that identifies the person as your employee.
 - c. Have the interpersonal skills to effectively, professionally, and tactfully represent you, the project, and the City to the public.

7-16.1.2 Submittals.

1. You shall submit to the Resident Engineer, for review and approval, all drafts of letters, notices, postcards, door hangers, signs, mailing lists, proposed addresses for hand-delivery, and any other notices and letters that are to be mailed and or distributed to the public.
 - a. Prior to distributing or mailing, you shall submit final drafts of letters, notices, postcards, door hangers, signs, and any other notices and letters to the Resident Engineer for final review and approval. Submit a PDF copy of the approved door hangers to the Engineer.
 - b. After distributing or mailing, you shall submit verification of delivery and any copies of returned notices to the Resident Engineer. Submit a PDF copy of the approved letters and notices to the Engineer.
2. You shall use the City's internal public contact tracking system to identify and summarize communications (via phone, in person, and email) with the public within 24 hours of receipt, even if your response to the individual is still incomplete. You shall upload to the City's internal public contact tracking system copies of all written, electronic, and verbal communications and conversations with the public.

7-16.1.3 Weekly Updates Recipients. 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:

Sheila Bose, Senior Civil Engineer, SBose@san Diego.gov

Casey Crown, Project Manager, CCrown@san Diego.gov

Resident Engineer, To be announced

7-16.2 Community Outreach Services.

7-16.2.1 Public Notice by Contractor.

1. Post Project Identification Signs in accordance with 7-10.6.2, "Project Identification Sign".
2. Notify businesses, institutions, property owners, residents or any other impacted stakeholders, within a minimum 300 feet (90 m) radius of the Project, of construction activities and utility service interruptions not less than 5 Days in advance.
3. Furnish and distribute public notices in the form of door hangers using the City's format to all occupants and/or property owners along streets:
 - a. Where Work is to be performed at least 5 Days before starting construction or survey activities or impacting the community as approved by the Resident Engineer.
 - b. Within 5 Days of the completion of your construction activities where Work was performed, you shall distribute public notices in the form of door hangers, which outlines the anticipated dates of Asphalt Resurfacing or Slurry Seal.
 - c. No less than 48 hours in advance and no more than 72 hours in advance of the scheduled resurfacing.
4. Leave the door hanger notices on or at the front door of each dwelling and apartment unit and at each tenant of commercial buildings abutting each of the street block segments. Where the front doors of apartment units are inaccessible, distribute the door hanger notices to the apartment manager or security officer.
5. Door Hanger Material: You shall use Blanks/USA brand, Item Number DHJ5B6WH, 1¼ inch (31.8 mm) Holes (removed), 2-up Jumbo Door Hanger in Bristol White, or approved equal.
6. Mailed Notice Material: You shall use Cougar by Domtar, Item Number 2834, or approved equal.
7. For all Work on private property, contact each owner and occupant individually a minimum of 15 Days prior to the Work. If the Work has been delayed, re-notify owners and occupants of the new Work schedule, as directed by the Resident Engineer.
8. A sample of public notices is included in the Contract Appendix I.

7-16.2.2 Communications with the Public.

1. Coordinate access for vehicular and pedestrian traffic to businesses, institutions, and residences impacted by the Project.

2. You shall provide updates on construction impacts to the Resident Engineer. You shall notify the Resident Engineer in advance about time-sensitive construction impacts and may be required to distribute construction impact notices to the public on short notice.
3. You shall incorporate community outreach activities related to construction impacts in the baseline schedule and update the Resident Engineer with each week's submittal of the Three-Week Look Ahead Schedule.
4. At the request of the Resident Engineer, you shall attend and participate in project briefings at community meetings.
5. You shall coordinate with the Resident Engineer on all responses and actions taken to address public inquiries and complaints within the 24 hours that they are received.

7-16.2.3 Communications with Media.

1. The City may allow members of the media access to its construction site(s) on a case-by-case basis only.
2. Occasionally, uninvited members of the media may show up at construction Sites. Members of the media (including, but not limited to newspapers, magazines, radios, television, bloggers, and videographers) do not have the legal right to be in the construction Site without the City's permission.
3. In the event that media representatives arrive near or on the construction Site(s), you shall keep them off the Site(s) in a courteous and professional manner until a Public Information Officer is available to meet them at an approved location.
4. You shall report all visits from members of the media to the Resident Engineer as quickly as possible so that the City's Public Information Officer can meet with the members of the media at the construction Site(s).
5. If the City allows members of the media to access a construction Site, you shall allow the City to escort the media representatives while they are on the construction Site and shall ensure their safety.
6. You shall require media representatives to sign in and out of the Site Visitor Log and to use personal protective equipment.
7. You have a right to speak to members of the media about your company and its role on the project. All other questions shall be referred to the City.

7-16.3 Exclusive Community Liaison Services.

1. You shall retain an Exclusive Community Liaison for the Project whose sole responsibilities shall be to implement 7-16.2, "Community Outreach Services" and the following:

1. Develop a contact list of community, tenants, property owners, and agencies with a stake in the project.
2. Prepare and present of materials in coordination with the Resident Engineer.
3. Respond to community questions and complaints related to your activities.
4. Write, edit, update, or produce brochures, pamphlets, and news releases.
5. Provide standard telephone inquiries and e-mail responses.
 - a) Respond to telephone calls and e-mails from the public.
 - b) Record calls and e-mails on to the City's internal public contact tracking system.
6. Provide a monthly summary report of all inquiries and complaints, including the name of the person, source of inquiry (via information line or email), phone number, address, date, and time of inquiry, who responded, and a summary of resolutions or pending resolutions to the Resident Engineer.
7. Report Exclusive Community Liaison activities at all progress meetings scheduled by the Resident Engineer.
8. Attendance at Pre-construction, community and stakeholders meetings.

7-16.3.1 Exclusive Community Liaison Work Plan. The Work plan for the Exclusive Community Liaison shall address the items of Work specified in these specifications. Present your Exclusive Community Liaison and submit your exclusive community outreach plan in writing within 15 Days of the Award of the Contract.

7-16.4 Payment.

1. The payment for the community outreach services shall be included in the Contract Price.
2. The payment for the exclusive community liaison services shall be included in the Bid item for "Exclusive Community Liaison Services".

7-20 ELECTRONIC COMMUNICATION. ADD the following:

1. Virtual Project Manager shall be used on this contract.

SECTION 9 - MEASUREMENT AND PAYMENT

9-3.2.5 Withholding of Payment. To the City Supplement, item 1, subsection i), DELETE in its entirety and SUBSTITUTE with the following:

- i) Your failure to comply with 7-2.3, "PAYROLL RECORDS" and 2-16, "CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM".

ADD:

9-3.7 Compensation Adjustments for Price Index Fluctuations. To the City Supplement, subsection c), item 2, DELETE in its entirety and SUBSTITUTE with the following:

- 2) In the event of an overrun of Contract time, adjustment in compensation for asphalt binder included in estimates during the overrun period shall be determined using the California Statewide Crude Oil Price Index in effect on the first business day of the month within the pay period in which the overrun began.

ADD the following:

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

SECTION 203 - BITUMINOUS MATERIALS

203-15 RUBBER POLYMER MODIFIED SLURRY (RPMS). To the City Supplement, CORRECT section numbering as follows:

OLD SECTION NUMBER	TITLE	NEW SECTION NUMBER
203-15	RUBBER POLYMER MODIFIED SLURRY (RPMS)	203-16
203-15.1	General	203-16.1
203-15.2	Materials	203-16.2
203-15.3	Composition and Grading	203-16.3
203-15.4	Mix Design	203-16.4

ADD the following:

RPMS shall be used on this contract.

SECTION 207 – PIPE

207-9.2.3 Fittings. To the City Supplement, ADD the following:

8. Flange gaskets shall be 3.2 mm (1/8 inch) thick acrylic or aramid fibers bound with nitrile for all sizes of pipe. Gaskets shall be full-face type with pre-punched holes free of asbestos material. All insulating flange kits shall require full face gaskets.

207-9.2.6 Polyethylene Encasement for External Corrosion Protection. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

1. When soils have been determined to be mildly corrosive through resistivity testing as specified in the City of San Diego Sewer and Water Design Guides, the outside surfaces of ductile iron pipe and fittings for general use shall be coated with bituminous coating 1 mil (25 um) thick in accordance with AWWA C151 or AWWA C110. Polyethylene encasement shall be provided in accordance with AWWA C105.

207-17.2.3 Pipe Manufacturer. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

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

207-26.4 Butterfly Valves. To the City Supplement, Paragraph (2), DELETE the last sentence.

To the City Supplement, Paragraph (3), DELETE in its entirety and SUBSTITUTE with the following:

3. The operator shall be manual with a 2 inch (50 mm) square operating nut and shall open the valve when turned counterclockwise.

SECTION 212 - LANDSCAPE AND IRRIGATION MATERIALS

ADD:

212-3.2.2.3 Trench Marker Tape. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

1. Trench marker tape shall be installed in accordance with Standard Drawing SDM-105, "Warning/Identification Tape Installation".

SECTION 300 – EARTHWORK

300-1.4 Payment. To the City Supplement, item 2, DELETE in its entirety and SUBSTITUTE with the following:

2. Payment for existing pavement removal and disposal of up to 12 inches thick, within the excavation e.g., trench limits, shall be included in the Bid item for the installation of the mains or the Work item that requires pavement removal.

SECTION 302 – ROADWAY SURFACING

302-3 PREPARATORY REPAIR WORK. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

302-3 PREPARATORY REPAIR WORK.

1. Prior to the placement of asphalt concrete or the application of slurry, you shall complete all necessary preparation and repair Work to the road segment.
2. Unless otherwise specified, preparatory Work shall include tree trimming, weed spray, weed abatement, crack sealing, asphalt repair, mill and pave, hump removal, miscellaneous asphalt patching, removal of raised pavement markers, and removal of pavement markings.
3. You shall repair areas of distressed asphalt concrete pavement by milling or removing damaged areas of pavement to a minimum depth of 2 inches (50.8 mm) for residential streets and a minimum depth of 3 inches (76.2 mm) for all others to expose firm and unyielding pavement.
4. You shall prepare subgrade as needed and install a minimum of 2 inches (50.8 mm) for residential streets and a minimum of 3 inches (76.2 mm) for all other streets of compacted asphalt concrete pavement over compacted native material as directed by the Engineer.
5. If the base material is exposed in order to achieve the minimum specified depth, the material shall be compacted to 95% relative compaction (dig out). Compaction tests shall be made to ensure compliance with the specifications.
6. The Engineer shall determine when and where the test shall occur. The City will pay for the soils testing required by the Engineer which meets the required compaction. You shall reimburse the City for the cost of retesting failing compaction tests. If additional base material is required, you shall use Class 2 Aggregate Base in accordance with 200-2.2, "Crushed Aggregate Base".

7. Recycled base material shall conform to crushed miscellaneous base material in accordance with 200-2.4, "Crushed Miscellaneous Base".
8. Prior to replacing asphalt, the area shall be cleaned by removing all loose and damaged material, moisture, dirt, and other foreign matter and shall be tack coated in accordance with 302-5.4, "Tack Coat".
9. You shall install new asphalt within the repair area or for patches in accordance with 302-5, "Asphalt Concrete Pavement". Asphalt concrete shall be C2-PG 64-10 in compliance with 400-4, "Asphalt Concrete".
10. No preparatory asphalt Work shall be done when the atmospheric temperature is below 50° F (10° C) or during unsuitable weather.
11. Following the asphalt placement, you shall roll the entire area of new asphalt in both directions at least twice. The finished patch shall be level and smooth in compliance with 302-5.6.2, "Density and Smoothness". After placement and compaction of the asphalt patch, you shall seal all finished edges with a 4 inch (101.6 mm) wide continuous band of SS-1H.
12. The minimum dimensions for each individual repair shall be 4 feet by 4 feet (1.2 m by 1.2 m) and shall be subject to the following conditions:
 - a) If the base material is exposed to achieve the required minimum removal thickness, the base material shall be prepared conforming to 301-1, "SUBGRADE PREPARATION".
 - b) When additional base material is required, then you shall use Class 2 Aggregate Base in accordance with 200-2.2, "Crushed Aggregate Base". Recycled base material shall conform to crushed miscellaneous aggregate base material in accordance with 200-2.4, "Crushed Miscellaneous Base".
 - c) You may use grinding as a method for removal of deteriorated pavement when the areas indicated for removal are large enough (a minimum of the machine drum width) and when approved by the Engineer.
 - d) For both scheduled and unscheduled base repairs, failed areas may be removed by milling or by excavation provided that the edges are cut cleanly with a saw. The areas shall be cleaned and tack coated in accordance with 302-5.4, "Tack Coat" before replacing the asphalt. The areas for scheduled repairs have been marked on the street.
 - e) Base Repairs with RAC. Areas where failed paving is removed either by cold milling or by excavation shall be restored to existing pavement grade with ¾ inch (19.1 mm) RAC at 8 inch (203.2 mm) depth unless otherwise directed by the Engineer. These areas have been marked on the street as "DO". The asphalt concrete shall be B3-PG 64-10 as specified in 400-4, "Asphalt Concrete". Preliminary quantities are identified in the Contract Appendix but may need to

be increased and approved by the Engineer at the time of construction. Base repairs shall not exceed 15% RAP in content.

- f) **Unscheduled Base Repair with RAC.** If paving operations cause damage outside of your control and require additional base repair, the areas shall be removed either by cold milling or by excavation and shall be restored to existing pavement grade with $\frac{3}{4}$ inch (19.1 mm) RAC at 8 inch (203.2 mm) depth unless otherwise directed by the Engineer. The asphalt concrete shall be B3-PG 64-10 as specified in 400-4, "Asphalt Concrete". **Unscheduled** base repairs shall not exceed 15% RAP.
- g) A base repair is considered **unscheduled** when it is not identified on the pavement with a "DO" or when you are directed by the Engineer to perform a base repair for the proper placement of an asphalt overlay.

302-3.1 Asphalt Patching.

1. Asphalt patching shall consist of patching potholes, gutter-line erosions, and other low spots in the pavement that are deeper than $\frac{1}{2}$ inch (12.7 mm) in accordance with 302-5.6.2, "Density and Smoothness".
2. The areas requiring patching have been identified in the Contract Documents, marked on the streets, or as directed by the Engineer. You shall identify any new areas that may require patching prior to slurry Work to ensure the smoothness and quality of the finished product.
3. You shall identify and repair any areas that may require patching prior to the placement of slurry seal for a smooth and finished product.
4. Asphalt overlay shall not be applied over deteriorating pavement. Preparatory asphalt Work shall be completed and approved by the Engineer before proceeding with asphalt overlay.
5. You shall remove distressed asphalt pavement either by saw cutting or milling to expose firm and unyielding pavement, prepare subgrade (as needed), and install compacted asphalt concrete pavement over compacted native material as directed by the Engineer.
6. Prior to replacing asphalt, the area shall be cleaned and tack coated in accordance with 302-5.4, "Tack Coat".
7. Following the asphalt placement, you shall roll the entire patch in both directions and shall cover the patch at least twice.
8. After placement and compaction of the asphalt patch, you shall seal all finished edges with a 4 inch (101.6 mm) wide continuous band of SS-1H.
9. Base repairs shall not exceed 15% RAP in content.

302-3.2

Payment.

1. The payment for the replacement of existing pavement when required shall be included in the Contract Unit Price for "Asphalt Pavement Repair" for the total area replaced and no additional payment shall be made regardless of the number and size of replacements completed. No payment shall be made for areas of over-excavation or outside trench areas in utility Works unless previously approved by the Engineer. No payment for pavement replacement will be made when the damage is due to your failure to protect existing improvements. You shall reimburse the City for the cost of retesting all failing compaction tests.
2. The areas and quantities shown on the road segments and in the appendices are given only for your aid in planning the Work and preparing Bids. The Engineer will designate the limits to be removed and these designated areas shall be considered to take precedence over the area shown in an Appendix to the Contract Documents. The quantities shown in the appendices are based on a street assessment survey and may vary.
3. At the end of each day, you shall submit to the Engineer an itemized list of the asphalt pavement repair Work completed. The list shall include the location of the Work and the exact square footage of the repair.
4. The payment for preparatory repair Work and tack coating shall be paid at the Contract Unit Price for "Asphalt Pavement Repair".
5. The payment for milling shall be included in the Bid item for "Asphalt Pavement Repair" unless Bid items for asphalt milling Work has been provided.
6. The payment for miscellaneous asphalt patching shall be included in the Contract Unit Price for the slurry Work and no additional payment shall be made, unless a Bid item for "Miscellaneous Asphalt Patching" has been provided.

302-5.1.1 Damaged AC Pavement Replacement. To the City Supplement, DELETE in its entirety.

302-5.1.2 Measurement and Payment. To the City Supplement, DELETE in its entirety.

302-5.2.1 Measurement and Payment. To the City Supplement, item c), ADD the following:

Imported Subgrade material shall be paid per bid item "Imported Backfill".

SECTION 306 – UNDERGROUND CONDUIT CONSTRUCTION

306-1 OPEN TRENCH OPERATIONS. To the City Supplement, CORRECT section numbering as follows:

OLD SECTION NUMBER	TITLE	NEW SECTION NUMBER
306-1.8	House Connection Sewer (Laterals) and Cleanouts	306-1.9
306-1.7.1	Payment	306-1.9.1
306-1.7.2	Sewer Lateral with Private Replumbing	306-1.9.2
306-1.7.2.1	Location	306-1.9.2.1
306-1.7.2.2	Permits	306-1.9.2.2
306-1.7.2.3	Submittals	306-1.9.2.3
306-1.7.2.4	Trenchless Construction	306-1.9.2.4
306-1.7.2.5	Payment	306-1.9.2.5
306-1.7.3.6	Private Pump Installation	306-1.9.2.6
306-1.7.3.7	Payment	306-1.9.2.7

306-1.4.5 Water Pressure Test. To the City Supplement, Paragraph (2), DELETE in its entirety and SUBSTITUTE with:

2. Pressure testing of pipe and fittings at the lowest elevation shall be performed at 150% of the specified test pressure and no less than 100% of the specified test pressure at the highest elevation.

Specified test pressure for Class 235 pipe will be 150 psi

Specified test pressure for Class 305 pipe will be 200 psi

306-1.6 Basis of Payment for Open Trench Installations. To the City Supplement, ADD the following:

8. The payment for imported backfill when you elect to import material from a source outside the project limits and when authorized by the Engineer shall be included in the Bid item for "Imported Backfill". The price shall include the removal and disposal of unsuitable materials.

306-1.8.3 Polyurethane Lining. To the City Supplement, item 5, DELETE in its entirety.

306-20.8

Carrier Pipe. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Carrier pipe materials shall be approved by the Engineer. You shall use only HDPE. You shall furnish and install a structurally sound, leak-proof, fusible high density polyethylene pipe for all piping identified for installation by horizontal directional drilling. You shall be responsible for the sizing of the carrier pipe to withstand all installation forces, curvature, residual forces, and final in-place loading. The selected material shall have an inside diameter no less than stated on the Plans. Individual pipe lengths shall be assembled by butt-fusion unless otherwise specified.

SECTION 703 – ENCOUNTERING OR RELEASING HAZARDOUS SUBSTANCES**703-20**

PAYMENT. To the City Supplement, item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. The payment for waste management shall be included in the applicable Bid items as follows:
 - a) "Preparation of Hazardous Waste Management Plan and Reporting" (LS).
 - b) "Monitoring of Contaminated Soil" (HR).
 - c) "Testing, Sampling, Site Storage, and Handling of Soils Containing RCRA Hazardous Waste" (TON).
 - d) "Loading, Transportation, and Disposal of soils containing RCRA Hazardous Waste" (TON).
 - e) "Testing, Sampling, Site Storage, and Handling of Petroleum Contaminated Soil" (TON).
 - f) "Loading, Transportation, and Disposal of Petroleum Contaminated Soil" (TON).
 - g) "Testing, Sampling, Site Storage, and Handling of Soils Containing Non-RCRA Hazardous Waste" (TON).
 - h) "Loading, Transportation, and Disposal of Soils Containing Non-RCRA Hazardous Waste" (TON).
 - i) "Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Containerized RCRA Hazardous Waste" (55 Gal DRUMS).
 - j) "Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Containerized Non-RCRA Hazardous Waste" (55 Gal DRUMS).
 - k) "Testing, Sampling, Site Storage, Handling, Transportation, and Recycling/Disposal of Universal Waste" (TON).

- l) "Testing, Sampling, Site Storage, Handling, Transportation, and Recycling/Disposal of Regulated Waste" (TON).
- m) "Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water" (GAL).
- n) "Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Non-RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water" (GAL).

SECTION 705 – WATER DISCHARGES

- 705-2.6.1** **General.** To the City Supplement, item 3, CORRECT reference to Section 803 to read "Section 703".
- 705-2.6.3** **Community Health and Safety Plan.** To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:
- 705-2.6.3** **Community Health and Safety Plan.** See 703-2, "Community Health and Safety Plan."

SECTION 707 – RESOURCE DISCOVERIES

ADD:

- 707-1.1** **Environmental Document.** The City of San Diego Environmental Analysis Section (EAS) of the Development Services Department has prepared an Addendum to Mitigated Negative Declaration No. 255100 and Mitigation Monitoring and Reporting Program for **Sewer and Water Group Job 954** as referenced in the Contract Appendix. You must comply with all requirements of the Addendum to Mitigated Negative Declaration No. 255100 and Mitigation Monitoring and Reporting Program as set forth in the Contract **Appendix A**.

Compliance with the City's environmental document shall be included in the Contract Price, unless bid items has been provided.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

SUPPLEMENTARY SPECIAL PROVISIONS

APPENDICES

APPENDIX A

**ADDENDUM TO MITIGATED NEGATIVE DECLARATION
AND MITIGATION MONITORING AND REPORTING PROGRAM**

SEWER AND WATER GROUP JOB 954 PROJECT
ADDENDUM TO MITIGATED NEGATIVE DECLARATION NO. 255100
(Project No. 409189)
AND
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

ADOPTED ON SEPTEMBER 1, 2015

WHEREAS, on February 5, 2015, The City of San Diego Public Works Department submitted an application to the Development Services Department for a Public Project Assessment for the Sewer and Water Group Job 954 Project (Project); 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, 2015; and

WHEREAS, the Deputy Director of the Development Services Department as designated by the City Manager considered the issues discussed in Addendum to Mitigated Negative Declaration No. 255100 (Declaration) prepared for this Project; NOW THEREFORE,

BE IT RESOLVED, by the Deputy Director for the Development Services Department as designated by the City Manager that it is certified that the Declaration has been completed in compliance 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.), that the Declaration reflects the independent judgment of the City of San Diego as Lead Agency and that the information contained in said Declaration, together with any comments received during the public review process, has been reviewed and considered by the Director of the Department of Development Services as designated by the City Manager in connection with the approval of the Project.

BE IT FURTHER RESOLVED, that the Deputy Director of the Department of Development Services finds on the basis of the entire record that project revisions now mitigate potentially significant effects on the environment previously identified in the Initial Study, that

there is no substantial evidence that the Project will have a significant effect on the environment, and, therefore, that said Declaration is hereby adopted.

BE IT FURTHER RESOLVED, that pursuant to CEQA Section 21081.6, the Deputy Director of the Department of Development Services as designated by the City Manager hereby adopts the Mitigation Monitoring and Reporting Program, or alterations to implement the changes to the Project in order to mitigate or avoid significant effects on the environment, which is attached hereto as Exhibit A.

BE IT FURTHER RESOLVED, that the Declaration and other documents constituting the record of proceedings upon which the approval is based are available to the public at the office of the Development Services Department, 1222 First Avenue, San Diego, CA 92101.

BE IT FURTHER RESOLVED, that Development Services Staff is directed to file a Subsequent Action Notice of Determination with the Clerk of the Board of the Supervisors for the County of San Diego regarding the project.

APPROVED: Kerry Santoro, Deputy Director, Development Services Department

By: 

Date: September 1, 2015

ATTACHMENT: Exhibit A: Mitigation Monitoring and Reporting Program

EXHIBIT A

MITIGATION MONITORING AND REPORTING PROGRAM SEWER AND WATER GROUP JOB 954 PROJECT PROJECT NO. 409189

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 Development Services Department, 1222 First Avenue, Fifth Floor, San Diego, CA, 92101.

MITIGATION, MONITORING AND REPORTING PROGRAM: To ensure that site development would avoid significant environmental impacts, a Mitigation, Monitoring, and Reporting Program (MMRP) is required. Compliance with the mitigation measures shall be the responsibility of the applicant. The mitigation measures are described below.

Historical Resources (Archaeology)

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 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 ¼ 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
 - a. 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.
 - b. 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).
 - c. 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 (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 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 Man.

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.

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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.)

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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.

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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.

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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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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

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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

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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 (EXHIBIT A) Hydrant Meter

(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:	<input type="checkbox"/>	<input type="checkbox"/> 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 and Sewer Group Job 954	
Appendix B - Fire Hydrant Meter Program (Rev. July 2016)	
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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.			
City Purchase Order No.		Contractor's Phone #:	Invoice No.
Resident Engineer (RE):		Contractor's fax #:	Invoice Date:
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					\$ -		\$ -		\$ -	0.00%	\$ -
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

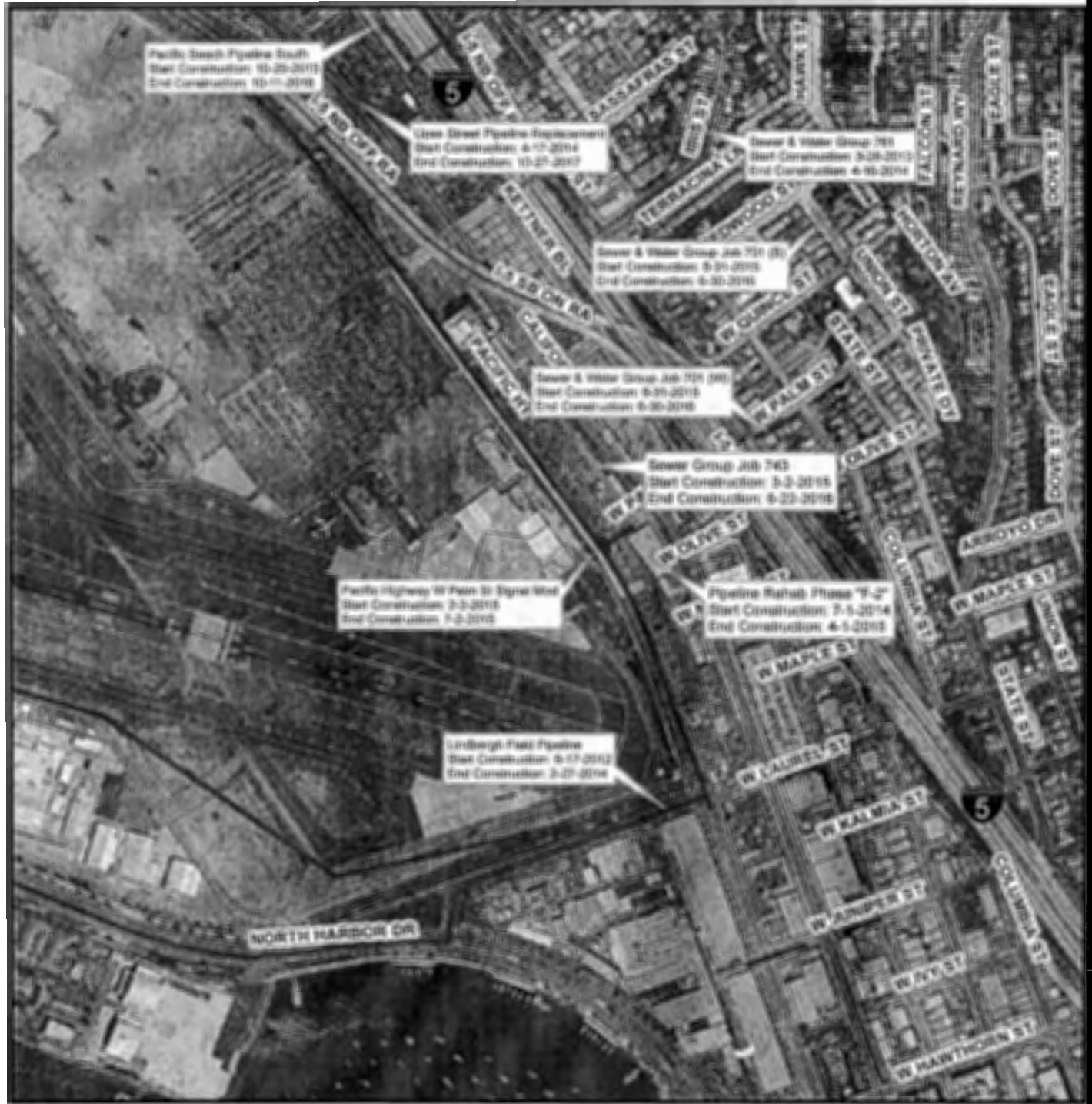
Retention and/or Escrow Payment Schedule

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
ADJACENT PROJECTS

WATER AND SEWER GROUP JOB 954



Legend

- Water and Sewer Group Job 954 (W)
- Water and Sewer Group Job 954 (S)
- Pacific Hwy W Palm St Signal Mod
- Lindbergh Field Pipeline
- Pacific Beach Pipeline South
- Pipeline Rehabilitation Phase "F-2"
- Pipeline Rehabilitation V-1
- Sewer & Water Group 761(S)
- Sewer & Water Group Job 701 (W)
- Sewer & Water Group Job 701(S)
- Sewer Group Job 743
- Upas Street Pipeline Replacement Project



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APPENDIX F
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:

Is Discharge Within Limits?

Comment/Action Taken

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							

SAMPLE

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 G
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 _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

EDS. _____ HAZARDOUS WASTE DOCUMENT NO. _____

EDS. WASTE NO. _____ CA WASTE NO. _____ ACCUMULATION START DATE _____

CONTENTS, COMPOSITION _____

PROPER OR SHIPPING NAME _____

TECHNICAL NAME (S) _____

UNNA NO. WITH PROPS _____

PHYSICAL STATE: SOLID LIQUID | HAZARDOUS PROPERTIES: CORROSIVE REACTIVE FLAMMABLE TOXIC 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)
C	INCIDENT ADDRESS LOCATION	CITY/COMMUNITY COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type)	CAS Number
E	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>	CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>
F	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
G	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	QUANTITY RELEASED TIME OF RELEASE DURATION OF RELEASE —DAYS —HOURS —MINUTES
H	ACTIONS TAKEN	
I	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) _____	
J	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS	
K	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)	
L	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) _____ 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 H

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 I

SAMPLE OF PUBLIC NOTICES



PROJECT NAME

PROJECT NAME

The work will consist of:

- *Edit this information:* The construction work will include pot holing in the northbound curb lane of Torrey Pines Road between Coast Walk and Princess Street.

How your neighborhood may be impacted:

- *Edit this information:* Traffic delays due to lane closure.
- Two-way traffic will be maintained at all times.

Anticipated Construction Schedule

- *Edit this information:* The project upgrades for the entire neighborhood have been ongoing and now are scheduled to start on your street.
- The entire neighborhood project started in ____ and is anticipated to be complete in ____.

Hours and Days of Operation

- *Edit this information:* Monday to Friday (7:30 a.m. to 4 p.m.)

The work will consist of:

- *Edit this information:* The construction work will include pot holing in the northbound curb lane of Torrey Pines Road between Coast Walk and Princess Street.

How your neighborhood may be impacted:

- *Edit this information:* Traffic delays due to lane closure.
- Two-way traffic will be maintained at all times.

Anticipated Construction Schedule

- *Edit this information:* The project upgrades for the entire neighborhood have been ongoing and now are scheduled to start on your street.
- The entire neighborhood project started in ____ and is anticipated to be complete in ____.

Hours and Days of Operation

- *Edit this information:* Monday to Friday (7:30 a.m. to 4 p.m.)

For questions related to this work

Call: (619) 533-4207

Email: engineering@sandiego.gov

Visit: sandiego.gov/CIP

For questions related to this work

Call: (619) 533-4207

Email: engineering@sandiego.gov

Visit: sandiego.gov/CIP



This information is available in alternative formats upon request.

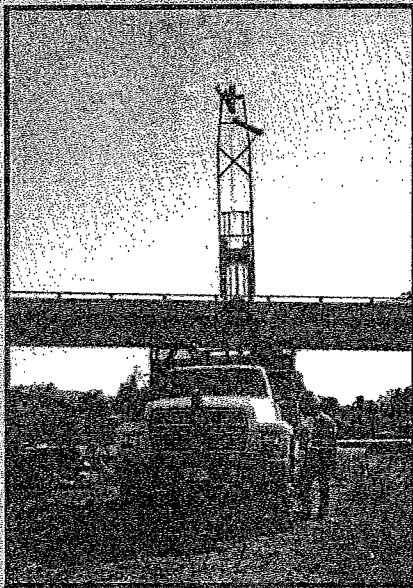


This information is available in alternative formats upon request.

APPENDIX J

GEOTECHNICAL EVALUATION PACIFIC HIGHWAY TRUNK SEWER

**GEOTECHNICAL EVALUATION
PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA**



Geotechnical
and
Environmental
Sciences
Consultants

Ninyo & Moore

**GEOTECHNICAL EVALUATION
PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA**

PREPARED FOR

Mr. Kevin Gibson
Rick Engineering
5620 Friars Road
San Diego, California 92110-2596

PREPARED BY

Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
5710 Ruffin Road
San Diego, California 92123

January 29, 2004
Project No. 105147001

January 29, 2004
Project No. 105147001

Mr. Kevin Gibson
Rick Engineering
5620 Friars Road
San Diego, California 92110-2596

Subject: Geotechnical Evaluation
Pacific Highway Trunk Sewer
San Diego, California

Dear Mr. Gibson:

In accordance with your authorization, we have prepared this geotechnical evaluation report for the proposed Pacific Highway Trunk Sewer project. This report presents our geotechnical findings, conclusions, and recommendations regarding the proposed improvements.

We appreciate the opportunity to be of service on this project. If you have any questions or comments regarding our report, please contact the undersigned.

Sincerely,
NINYO & MOORE



Francis O. Moreland, C.E.G.
Senior Project Geologist

FOM/RI/EO/msf

Distribution: (6) Addressee



Erik Olsen, G.E.
Chief Geotechnical Engineer

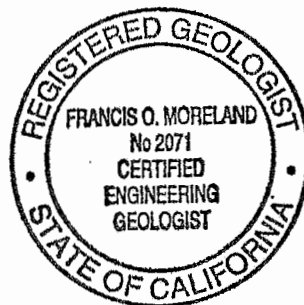


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Figure 7 – Lateral Earth Pressures for Braced Excavations

Figure 8 – Thrust Block/Jacking Pit Reaction Lateral Earth Pressure Diagram

Appendices

Appendix A – Boring Logs

Appendix B – Laboratory Testing

Appendix C – Typical Earthwork Guidelines

1. INTRODUCTION

In accordance with your authorization and our proposal dated September 19, 2003, we have completed a geotechnical evaluation for the design of the Pacific Highway Trunk Sewer project. The project study area is located in San Diego, California (Figure 1). The purpose of this evaluation was to provide design recommendations regarding the geotechnical aspects of the proposed project. This report presents the results of our background review, subsurface evaluation, laboratory testing, geotechnical analyses, our conclusions regarding the geotechnical conditions along the subject alignment, and our recommendations for design.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services for this project included the following:

- Review of in-house data on the alignment vicinity and readily available published geotechnical literature, including geologic maps, geologic reports, and aerial photographs.
- Geologic reconnaissance of the pipeline alignment.
- Coordination and mobilization for the subsurface exploration. Mark-out of existing underground utilities was conducted through Underground Service Alert.
- Performing a subsurface evaluation consisting of the excavating, logging, and sampling of six borings to evaluate the subsurface soils.
- Performing laboratory testing on selected samples.
- Geotechnical analysis of the data obtained.
- Preparing this geotechnical report presenting our findings, conclusions, and recommendations for the design and construction of the proposed project.

3. PROJECT DESCRIPTION

It is our understanding that the City of San Diego will construct a new trunk sewer pipeline along Pacific Highway. The project will consist of constructing a 36-inch diameter pipeline along Grape Street from North Harbor drive to Pacific Highway and along Pacific Highway from Grape Street to Juniper Street. From Juniper Street, a 24-inch pipeline will continue northward to Sassafras Street. Several smaller connecting pipelines will also be constructed as well as associ-

ated manholes. The depth of the pipeline will be approximately 20 to 25 feet below the ground surface and at or below mean sea level.

4. SITE DESCRIPTION

The new sections of sewer pipeline will generally be constructed along the southbound lanes of Pacific Highway and the westbound lane of Grape Street. Surrounding properties are generally developed for commercial and industrial uses. Elevations along the relatively flat alignment range from approximately 10 feet Mean Sea Level (MSL) at Grape Street and Harbor Drive to approximately 22 feet MSL on Pacific Highway near Palm Street.

5. FIELD EXPLORATION AND LABORATORY TESTING

Six borings were drilled on January 8 and 9, 2004, using 8-inch diameter, hollow-stem augers on a truck-mounted drill rig. The borings were excavated to depths of up to approximately 31.5 feet below the ground surface (bgs). Relatively undisturbed and bulk samples were collected from the borings. The approximate locations of the borings are shown on Figures 2 through 5. The boring logs are presented in Appendix A.

Laboratory testing of representative soil samples included in-situ moisture content and dry density, gradation analyses, shear strength, permeability, and corrosivity. The results of the in-situ moisture content and dry density tests are shown at the corresponding sample depth on the boring logs in Appendix A. The results of the other laboratory tests performed are presented in Appendix B.

6. GEOLOGY AND SUBSURFACE CONDITIONS

Our findings regarding regional and local geology, including faulting and seismicity, landslides, and groundwater conditions along the proposed pipeline route are provided in the following sections.

6.1. Regional Geologic Setting

The project area is situated in the western San Diego County section of the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin south to the southern tip of Baja California (Norris and Webb, 1990). The province varies in width from approximately 30 to 100 miles. In general, the province consists of rugged mountains underlain by Jurassic metavolcanic and metasedimentary rocks, and Cretaceous igneous rocks of the southern California batholith. The portion of the province in San Diego County, in which the project area is situated, generally consists of uplifted and dissected Tertiary- and Quaternary-age sedimentary rocks.

The Peninsular Ranges Province is traversed by a group of sub-parallel faults and fault zones trending roughly northwest. Several of these faults are considered active faults. The Whittier-Elsinore, San Jacinto, and San Andreas faults are active fault systems located northeast of the project area and the Agua Blanca-Coronado Bank and San Clemente faults are active faults located north and west of the project area. Active traces of the Rose Canyon fault have been mapped to the north and south of the project area. Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement. Further discussion of faulting relative to the site is provided in the Faulting and Seismicity section of this report.

6.2. Site Geology

Geologic units encountered during our subsurface evaluation include artificial fill, bay deposits, and terrace deposits. Generalized descriptions of the earth units encountered are provided in the subsequent sections. More detailed descriptions are provided on the boring logs in Appendix A.

6.2.1. Fill

Fill soils were encountered in borings B-1 through B-6 from the surface to depths of from 9 to 15 feet. In general, the fill soils consisted of light yellowish brown to brown, damp to moist, loose to very dense, clayey to silty fine sand.

6.2.2. Bay Deposits

Bay deposits were encountered below the fill to depths of 20 to 31.5 feet (the depth explored in boring B-6). In general, the bay deposits consist of gray, wet to saturated, very loose to medium dense, silty sand and sandy silt with local shell fragments.

6.2.3. Terrace Deposits

Terrace deposits (materials of the Bay Point Formation) were encountered in borings B-1 through B-5 below the bay deposits to the depths explored. In general, the terrace deposits consisted of brown, saturated, medium dense, silty sand and clayey sand.

6.3. Groundwater

Groundwater was encountered during our subsurface exploration at elevations from approximately Mean Sea Level (MSL) to approximately 6 feet above MSL. Based on our review of the referenced data and our subsurface exploration, we anticipate that the groundwater table along the proposed alignment is generally above the depths of the proposed pipeline excavations. Water seepage into the trench is likely to occur and dewatering should be anticipated. Seasonal and tidal fluctuations in groundwater conditions should also be anticipated.

6.4. Faulting and Seismicity

The project area is considered to be seismically active. Based on our review of the referenced geologic maps and stereoscopic aerial photographs, as well as on our geologic field mapping, the subject alignment is not underlain by known active or potentially active faults (i.e., faults that exhibit evidence of ground displacement in the last 11,000 years and

2,000,000 years, respectively) (see Figure 6). The Rose Canyon Fault has been mapped approximately 1 kilometer from the alignment.

In general, hazards associated with seismic activity include strong ground motion, ground surface rupture, liquefaction, seismically induced settlement, and tsunamis. These hazards are discussed in the following sections.

6.4.1. Strong Ground Motion

Based on a Probabilistic Seismic Hazard Assessment for California, issued by the United States Geological Survey/California Geological Survey (2003), the project is located in a zone where the horizontal peak ground acceleration having a 10 percent probability of exceedance in 50 years is 0.28g (28 percent of the acceleration of gravity). The requirements of the governing jurisdictions and applicable building codes should be considered in the project design.

6.4.2. Surface Rupture

Ground surface rupture due to faulting is considered unlikely in the project area, as there are no known underlying active faults. Lurching or cracking of the ground surface as a result of nearby or distant seismic events is also considered unlikely.

6.4.3. CBC Seismic Design Parameters

According to the 2001 California Building Code (CBC), the proposed project alignment is in Seismic Zone 4, and is within a Near-Source Zone. Table 1 includes the seismic design parameters for the site as defined in the 2001 edition of the CBC (California Building Standards Commission, 2001).

Table 1 – Seismic Design Parameters

Parameter	Value	2001 CBC Reference
Seismic Zone Factor, Z	0.40	Table 16 – I
Soil Profile Type	S_E	Table 16 – J
Seismic Coefficient C_a	$0.36N_a$	Table 16 – Q
Seismic Coefficient C_v	$0.96N_v$	Table 16 – R

Near-Source Factor, N_a	1.3	Table 16 – S
Near-Source Factor, N_v	1.6	Table 16 – T
Seismic Source Type	B	Table 16 – U

6.5. Landsliding

No landslides or indications of deep-seated landsliding were noted along the proposed alignment during our field exploration or our review of available geologic literature, topographic maps, and stereoscopic aerial photographs. The potential for significant large-scale slope instability along the alignment is not considered a design consideration.

6.6. Liquefaction

Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose, granular soils with clay contents of less than 20 percent, and saturated by a relatively shallow groundwater table, are susceptible to liquefaction. Based on the shallow groundwater table and relatively loose nature of some of the subsurface materials encountered in our exploratory borings, it is our opinion that the potential for liquefaction at the site during a nearby seismic event is high.

Seismic Source Type	B	Table 16 – U
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7. CONCLUSIONS

Based on our review of the referenced background data and subsurface evaluation, it is our opinion that the proposed pipeline project is feasible from a geotechnical standpoint, provided the conclusions and recommendations in this report are considered during the design and construction of the project. In our opinion, the following will be significant in the planning, design, and construction of the proposed project:

- The study alignments are underlain by artificial fill, bay deposits, and terrace deposits.
- Subsurface conditions along the alignments should not preclude cut-and-cover construction methods. In general, the alignments are likely to be rippable with standard heavy-duty excavation equipment.

- In general, soil materials generated from the trench excavations should be suitable for reuse as backfill for the trench zone, provided they are dried to near optimum moisture content where they are overly wet. Deleterious material, such as trash, was generally not encountered during our reconnaissance or subsurface exploration.
- Groundwater was encountered in our exploratory borings. Due to the anticipated depth of groundwater, dewatering during construction should be anticipated.

8. RECOMMENDATIONS

Recommendations pertaining to the geotechnical aspects of the project are based on the results of the engineering analysis, and our understanding of the project. Should the proposed project plans change, a supplemental geotechnical evaluation may be needed.

8.1. Earthwork

In general, earthwork should be performed in accordance with the recommendations presented in this report. The geotechnical consultant should be contacted for questions regarding the recommendations or guidelines presented herein. In addition, Typical Earthwork Guidelines for the project are included as Appendix C. In the event of a conflict in recommendations, the recommendations presented in the text of this report supersede those in Appendix C.

8.1.1. Site Preparation

The project alignment should be cleared and grubbed prior to grading. Clearing and grubbing should consist of the removal of asphalt concrete and other deleterious materials from the areas to be graded. Clearing and grubbing should extend to the outside of the proposed excavation areas. The debris generated during clearing and grubbing should be removed from areas to be graded and disposed of off site at a legal dumpsite.

8.1.2. Temporary Excavations and Shoring

We recommend that trenches and excavations be designed and constructed in accordance with Occupational Safety and Health Administration (OSHA) regulations. These regulations provide trench sloping and shoring design parameters for trenches up to

20 feet deep based on a description of the soil types encountered. Trenches over 20 feet deep should be designed by the Contractor's engineer based on site-specific geotechnical analyses. For planning purposes, we recommend that the following OSHA soil classifications be used:

Fill and Bay Deposits

Type C

Terrace Deposits

Type B

Upon making the excavations, the soil classifications and excavation performance should be confirmed in the field by the geotechnical consultant in accordance with the OSHA regulations.

Temporary excavations should be constructed in accordance with OSHA recommendations. For trench or other excavations, OSHA requirements regarding personnel safety should be met by laying back the slopes no steeper than 1.5:1 for fill or bay deposits, and 1:1 for terrace deposits. Temporary excavations that encounter seepage may be stabilized by placing sandbags or gravel along the base of the seepage zone. Excavations encountering seepage should be evaluated on a case-by-case basis. As an alternative to laying back the side walls, the excavations may be shored or braced. Temporary earth retaining systems will be subjected to lateral loads resulting from earth pressures. Shoring systems for excavations may be designed using the lateral earth pressure parameters indicated on Figure 7.

The design of the earth pressure diagram assumes that spoils from the excavation or other surcharge loads will not be placed above the excavation within a 1:1 plane extending up and back from the excavation. If spoil piles are placed closer than this to the braced excavation, the resulting surcharge loads should be considered in the bracing design. We recommend that an experienced structural engineer design the shoring systems. The shoring parameters presented in this report should be considered as guidelines.

We recommend that completed sections of excavated areas be backfilled as soon as practicable. The stability of the excavations decreases over time as the soil dries and weathers. On-site safety of personnel is the responsibility of the contractor.

8.1.3. Excavation Characteristics

Our evaluation of the excavation characteristics of the on-site materials is based on the results of our exploratory borings, our site observations, and our experience with similar materials. Our borings at the site encountered fill soils, bay deposits, and terrace deposits. In our opinion, excavation to the anticipated depths of pipe placement for pipeline construction can generally be performed with conventional equipment.

8.1.4. Micro-Tunneling/Jack-and-Bore

Design of shaft shapes, dimensions, and ground support systems for micro-tunneling/jack-and-bore excavations will be at the contractor's option in order to be compatible with his construction equipment and methods. Soldier piles with lagging or shored excavations may serve as a suitable support system for rectangular shafts, while circular steel ribs in conjunction with timber lagging or liner plates may be suitable for circular shafts.

Jacking reaction force is developed by the action of the micro-tunneling/jack-and-bore operation against the surface of the opposite wall of the jacking pit. The jacking force is resisted by the bearing of the wall. The allowable jacking force may be calculated using the lateral earth pressures shown on Figure 8. These earth pressures are applicable to bay deposits.

Caving of the pipe shaft may occur in the bay deposits. For stability and safety purposes, and to reduce ground movements, a full perimeter shaft support system should be installed as the excavation progresses.

8.1.5. Construction Dewatering

As indicated previously, because of the presence of shallow groundwater at the site, we anticipate that dewatering may be needed for much or all of the force main excavations. Nuisance water may be pumped from sumps within the utility excavation.

Based on the results of our geotechnical evaluation, we performed a cursory evaluation of anticipated groundwater flow into shored trench excavations. Assuming trench depths of up to 25 feet with trench box or sheet pile shoring extended to the trench bottom, we estimate inflow ranging from approximately 70 to 700 gallons per minute per 100 lineal feet of trench. Please note that these rates are based on published permeability correlations for generalized soil types and therefore may be highly variable. Actual groundwater inflow rates will vary significantly, depending on soil permeability, trench and groundwater depth, and shoring configuration. These rates do not include the flow through preferential pathways for utilities which are usually backfilled with gravel. At these locations, the inflow of water will increase, and the inflow rates may be higher.

Dewatering activities should be evaluated by a qualified dewatering contractor. Due to the soil conditions, we recommend a well point system or a system of localized sumps be utilized for dewatering. The system design used should be evaluated by the specialty dewatering contractor.

Dewatering of the groundwater within the excavation will affect the water level outside of the excavation. This will result in an increase of effective stresses and may induce settlement of soils underlying adjacent areas. Vibrations from driving of sheet piles or other piles can also induce settlement. Therefore, some distress to nearby structures, including concrete curbs, and asphalt concrete streets is possible. We recommend that the existing condition of these facilities be documented with photography and/or video recordings prior to, and monitored during, construction.

Discharge of water from excavations may require securing a National Pollution Discharge Elimination System (NPDES) permit. Compliance with the permit requirements may require testing and treatment of the water prior to discharge to storm drains.

8.2. Pipe Bedding and Modulus of Soil Reaction (E')

It is our recommendation that the new pipeline, where constructed in open excavations, be supported on 4 or more inches of granular bedding material. Granular pipe bedding should be provided to distribute vertical loads around the pipe. Bedding material and compaction requirements should be in accordance with this report, and the Standard Specifications for Public Works Construction (Public Works Standards, Inc., 2000), known as the "Greenbook." Section 306-1.2.1 in the Greenbook defines bedding requirements for the installation of pipe. The trench excavation should provide 6 to 8 inches of lateral clearance between the trench wall and the side of the pipe. Pipe bedding typically consists of graded aggregate. The pipe bedding and pipe zone backfill should conform to the following gradation limits:

Sieve Sizes	Percentage Passing Sieves
1"	100%
3/4"	90-100%
No. 4	50-95%
No. 30	25-45%
No. 200	3-9%

Pipe bedding and pipe zone backfill should have a Sand Equivalent (SE) of 30 or greater, and be placed around the sides and top of the pipe. In addition, the pipe zone backfill should extend 1 foot or more above the top of the pipe.

The modulus of soil reaction (E') is used to characterize the stiffness of soil backfill placed at the sides of buried flexible pipes for the purpose of evaluating deflection caused by the weight of the backfill over the pipe. A soil reaction modulus of 1,200 pounds per square inch (psi) may be used for a 0- to 5-foot deep excavation backfilled with granular soil compacted to 90 percent based on ASTM D 1557-02. A soil reaction modulus of 1,800 psi may be used for trenches 5 to 10 feet deep, a modulus of 2,100 psi for trenches 10 to 15 feet deep, and a modulus of 2,400 psi for trenches deeper than 15 feet.

8.3. Import Soil

We recommend that import material, if any, consist of granular, very low to low expansive material (Uniform Building Code Expansion Index of 50 or less). The import material should have an organic content of less than 3 percent by volume (1 percent by weight), not contain rocks or lumps over 3 inches in largest dimension, and not more than 40 percent larger than 3/4 inch. The import material should also have low corrosion potential (electrical resistivity greater than 1,000 ohm-cm, and soluble sulfate content of less than 0.2 percent). Import material should be evaluated by the geotechnical consultant at the borrow site for its suitability as fill prior to importation to the project site.

8.4. Trench Backfill

The soils encountered in the borings should be generally suitable for reuse as backfill of the trench zone provided they are free of organic material (less than 3 percent by volume or 1 percent by weight), contaminated material, clay lumps, debris, and rocks greater than 3 inches in diameter. Rocks greater than 3/4 inch in diameter should not exceed 40 percent of the backfill volume. Soils classified as silts or clays should not be used for backfill material in the pipe zone.

Backfill should be moisture conditioned to within approximately 2 percent of the optimum moisture content, placed, and compacted to 90 percent or greater relative compaction, as evaluated by American Society for Testing and Materials (ASTM) D 1557-02. Wet soils, if encountered, should be moisture conditioned to within approximately 2 percent of optimum prior to their placement as backfill. Backfill lift thickness will be dependent upon the type of compaction equipment utilized. Backfill should generally be placed in uniform lifts not exceeding 8 inches in loose thickness. The upper 1 foot of pavement subgrade, base, and asphalt concrete should be compacted to 95 percent or more relative compaction. Special care should be exercised to avoid damaging the pipes during compaction of the backfill.

8.5. Soil Corrosivity

Laboratory testing was performed on a sample of the on-site soils to evaluate pH and electrical resistivity, as well as chloride and sulfate contents. The pH and electrical resistivity tests were performed in accordance with California Test Method 643 and the sulfate and chloride tests were performed in accordance with California Test Methods 416 and 422, respectively. These laboratory test results are presented in Appendix B.

The results of the corrosivity testing indicated an electrical resistivity of the sample tested of approximately 1,400 ohm-cm. The soil pH of the sample was approximately 8.2, which is considered nearly neutral. The chloride content of the tested sample was approximately 240 parts per million (ppm). The sulfate content of the tested sample was approximately 0.02 percent. Based on our laboratory test results and California Department of Transportation (Caltrans) criteria, the alignment would not be classified as a corrosive site, which is defined as soil with more than 500 ppm chlorides, more than 0.20 percent sulfates, or pH less than 5.5.

8.6. Concrete

Concrete in contact with soil or water that contains high concentrations of soluble sulfates can be subject to chemical deterioration. Based on CBC criteria (CBC, 2001), the potential for sulfate attack is negligible for water-soluble sulfate contents in soil ranging from 0.00 to 0.10 percent by weight, and moderate for water-soluble sulfate contents ranging from 0.10 to 0.20 percent by weight. The potential for sulfate attack is severe for water-soluble sulfate contents ranging from 0.20 to 2.00 percent by weight and very severe for water-soluble sulfate contents over 2.00 percent by weight. Laboratory testing indicated the sulfate content of the sample tested was approximately 0.02 percent, which is considered a negligible potential for sulfate attack. Although our laboratory testing did not indicate a significant sulfate content, due to the potential for variable conditions at the site, we recommend that Type V cement be used for concrete structures in contact with soil. The concrete should have a water-cement ratio no greater than 0.45 by weight for normal-weight aggregate concrete, and a slump no greater than 4 inches.

8.7. Pre-Construction Conference

We recommend that a pre-construction conference be held. Owner representatives, the civil engineer, geotechnical consultant, and contractor should be in attendance to discuss the plans and the project.

8.8. Construction Observation

The conclusions and recommendations presented in this report are based on analysis of observed conditions encountered in our exploratory borings. If conditions are found to vary from those described in this report, the geotechnical consultant should be notified and additional recommendations will be provided upon request. The project geotechnical consultant should review the final project drawings and specifications prior to the commencement of construction. The geotechnical consultant should perform appropriate observation and testing services during construction operations.

The recommendations provided in this report are based on the assumption that Ninyo & Moore will provide geotechnical observation and testing services during construction. In the event that it is decided not to utilize the services of Ninyo & Moore during construction, we request that the selected consultant provide the client with a letter (with a copy to Ninyo & Moore) indicating that they fully understand Ninyo & Moore's recommendations, and that they are in full agreement with the design parameters and recommendations contained in this report. Construction of proposed improvements should be performed by qualified subcontractors utilizing appropriate techniques and construction materials.

9. LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered

during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

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. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to 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 Ninyo & Moore has no control.

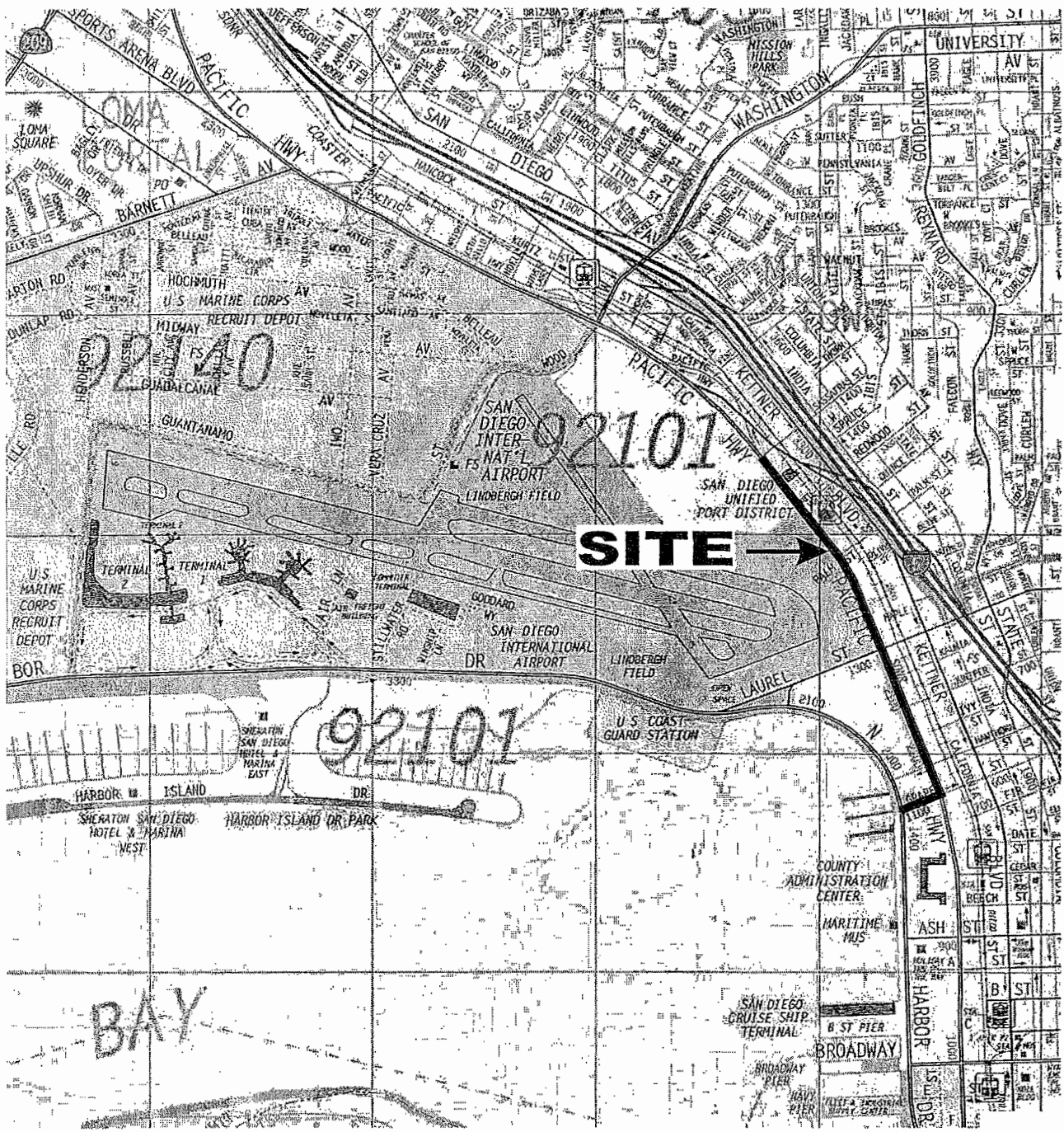
This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

10. SELECTED REFERENCES

- American Public Works Association and Associated General Contractors of California (APWA), 1991, Standard Specifications for Public Works Construction: BNI Building News, Los Angeles, California.
- California Building Standards Commission, 2001, California Building Code, Title 24, Part 2, Volumes 1 and 2.
- California Division of Mines and Geology (CDMG), 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada: International Conference of Building Officials.
- City of San Diego, 1954, Topographic Survey Map, Sheet 202-1713, Scale 1"=200'.
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- Norris, R.M., and Webb, R.W., 1990, Geology of California, Second Edition: John Wiley & Sons, Inc.
- Public Works Standards, Inc., 2000, "Greenbook," Standard Specifications for Public Works Construction.
- United States Department of the Interior, Bureau of Reclamation, 1989, Engineering Geology Field Manual.
- United States Geological Survey, 1967 (photo-revised 1975), Point Loma Quadrangle, California, San Diego County, 7.5-Minute Series (Topographic): Scale 1:24,000.
- United States Geological Survey/California Geological Survey, 2003, Probabilistic Seismic Hazards Assessment Model for California.

AERIAL PHOTOGRAPHS

Source	Date	Flight	Numbers	Scale
USDA	3-31-53	AXN-3M	195 and 196	1:20,000



REFERENCE: 2003 THOMAS GUIDE FOR SAN DIEGO COUNTY, STREET GUIDE AND DIRECTORY

Ninyo & Moore

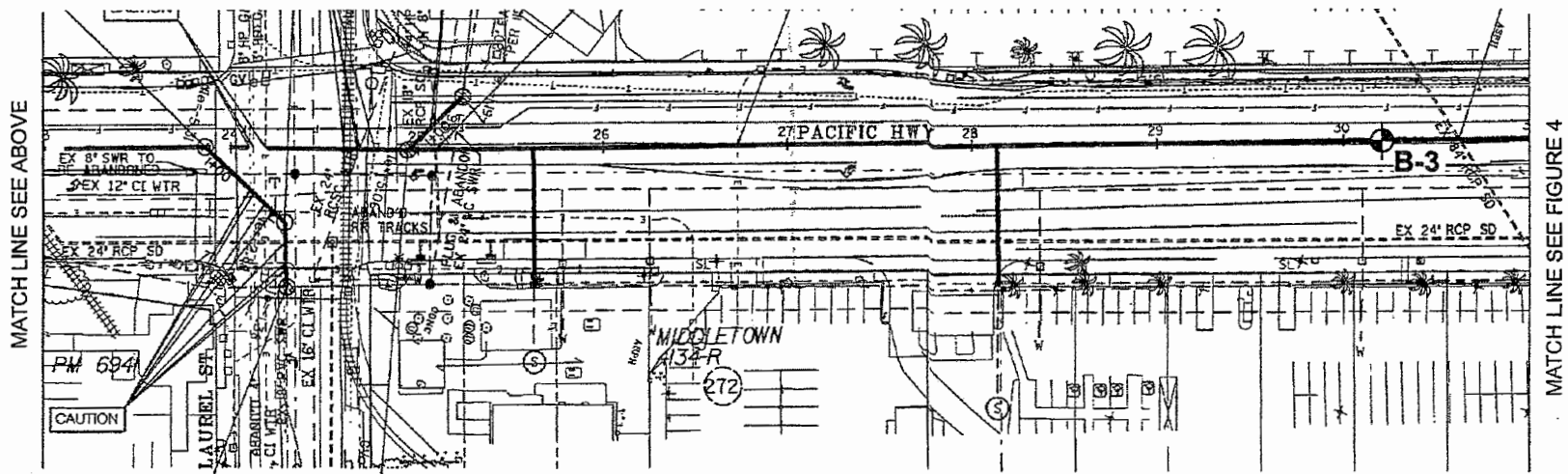
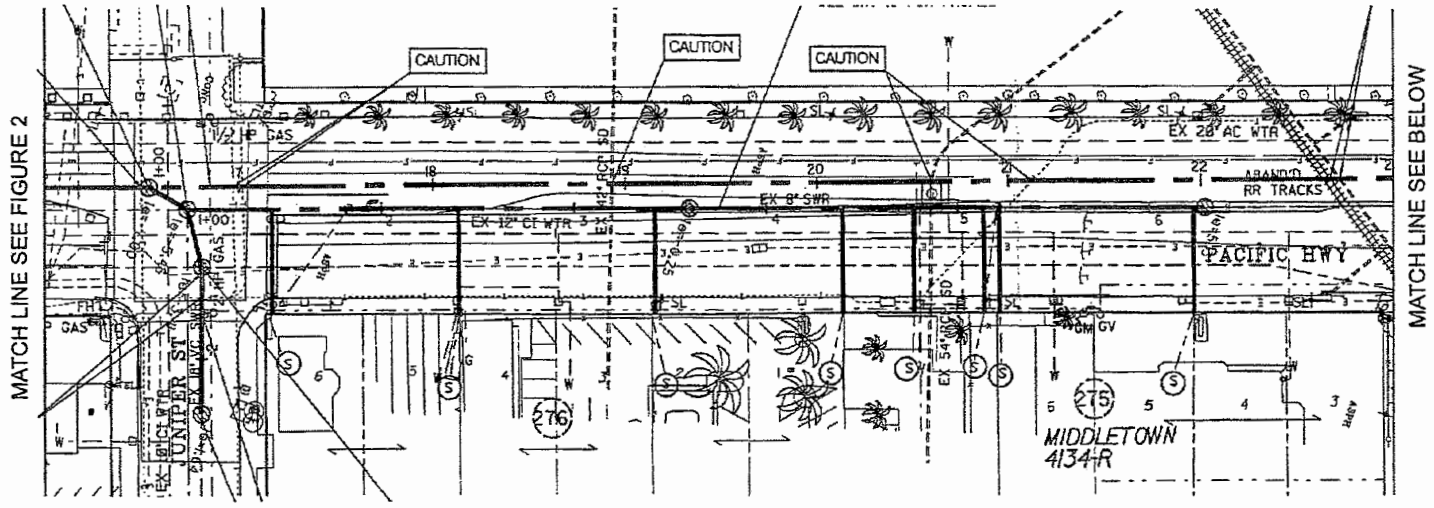
SITE LOCATION MAP

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.
105147001

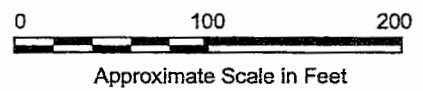
DATE
1/04

FIGURE
1



LEGEND

B-3 Approximate location of exploratory boring



REFERENCE: PACIFIC HIGHWAY TRUNK SEWER, CITY OF SAN DIEGO, UNDATED

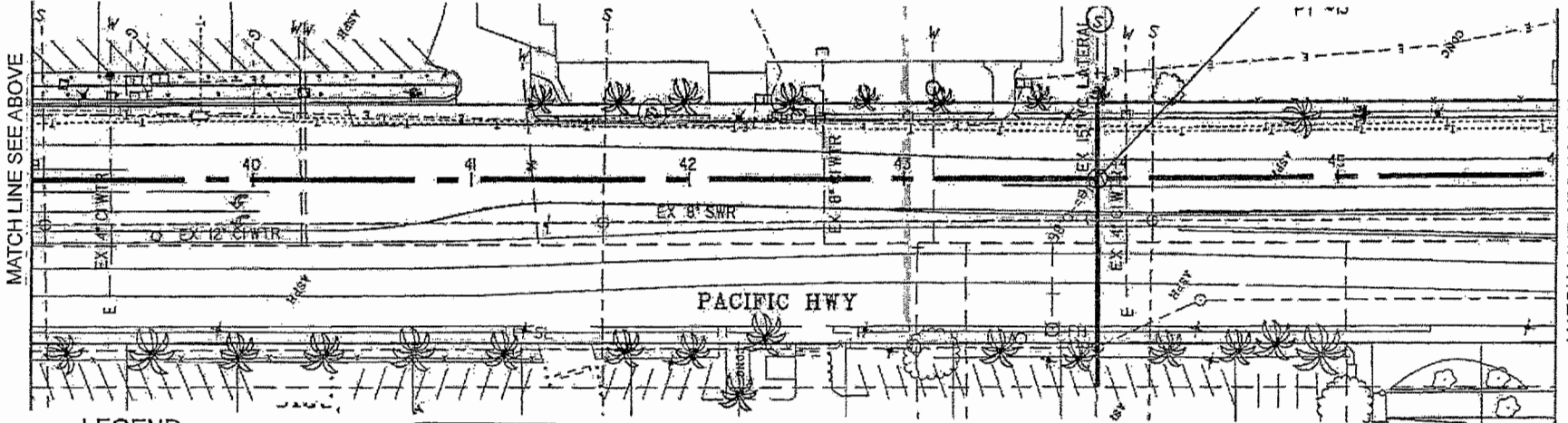
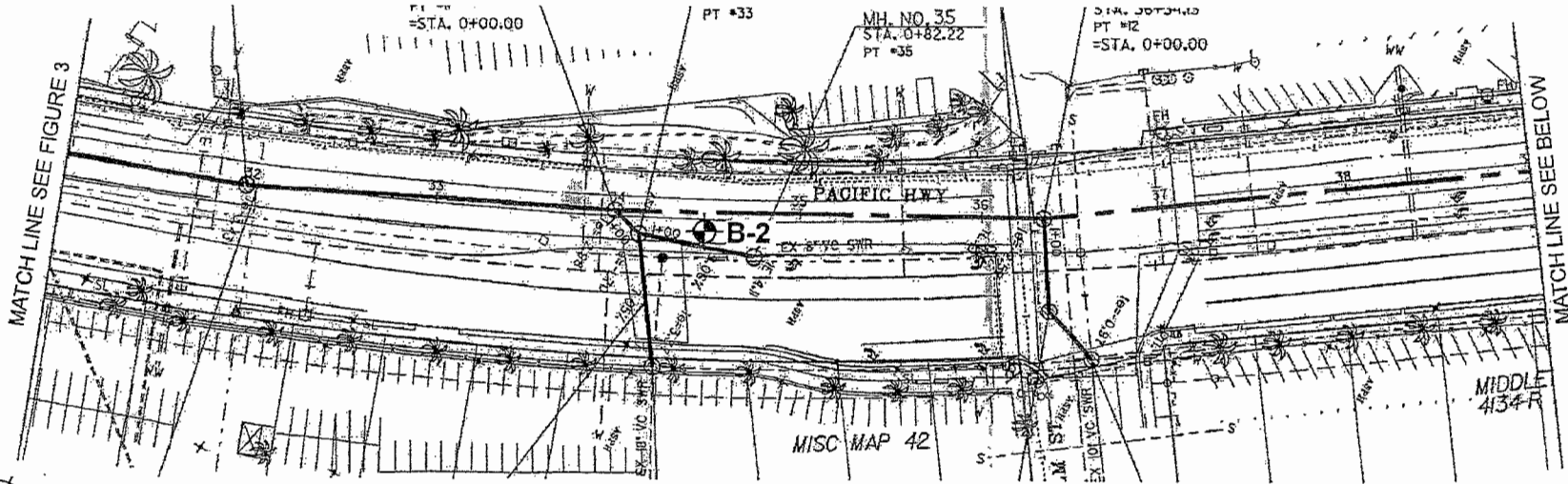


BORING LOCATION MAP

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

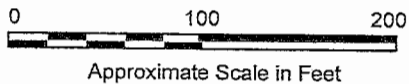
PROJECT NO.	DATE
105147001	1/04

FIGURE
3



LEGEND

B-2 Approximate location of exploratory boring



REFERENCE: PACIFIC HIGHWAY TRUNK SEWER, CITY OF SAN DIEGO, UNDATED



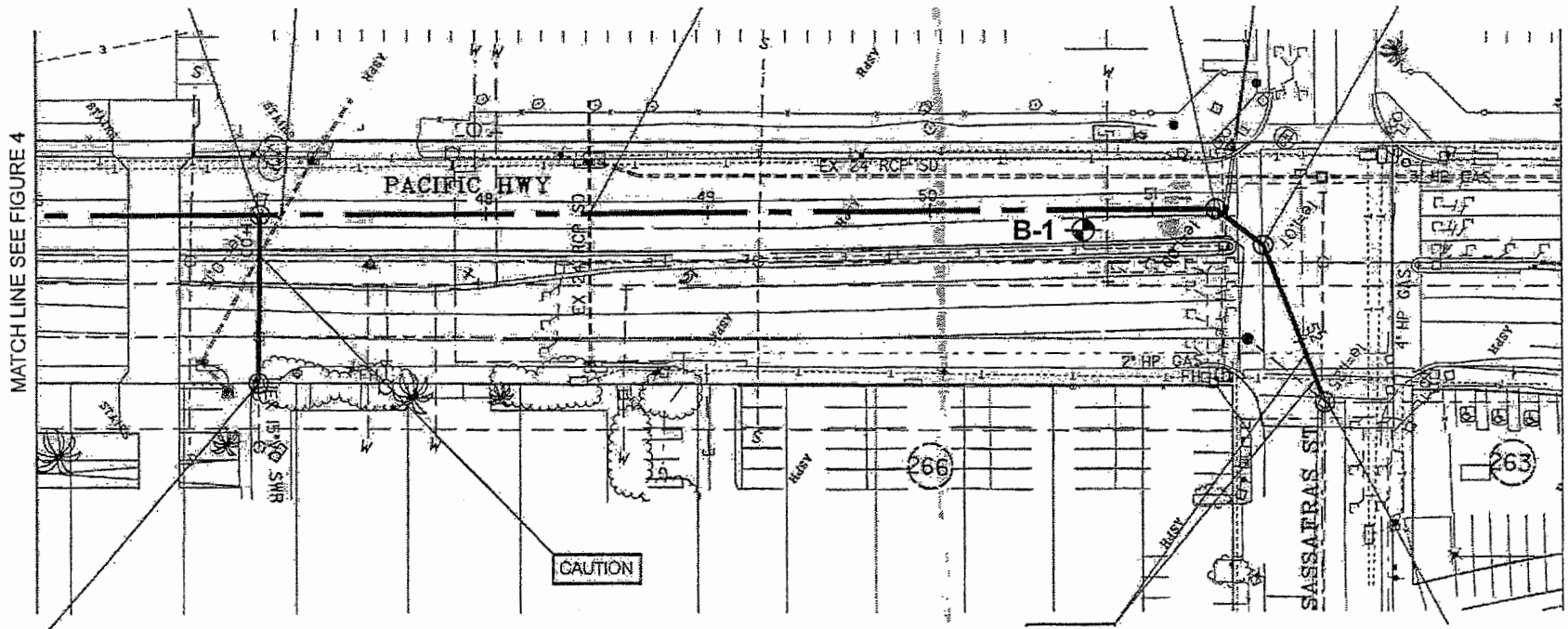
BORING LOCATION MAP

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.
105147001

DATE
1/04

FIGURE
4




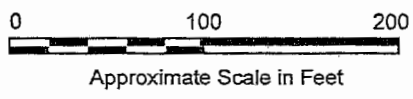
MATCH LINE SEE FIGURE 4

CAUTION



LEGEND

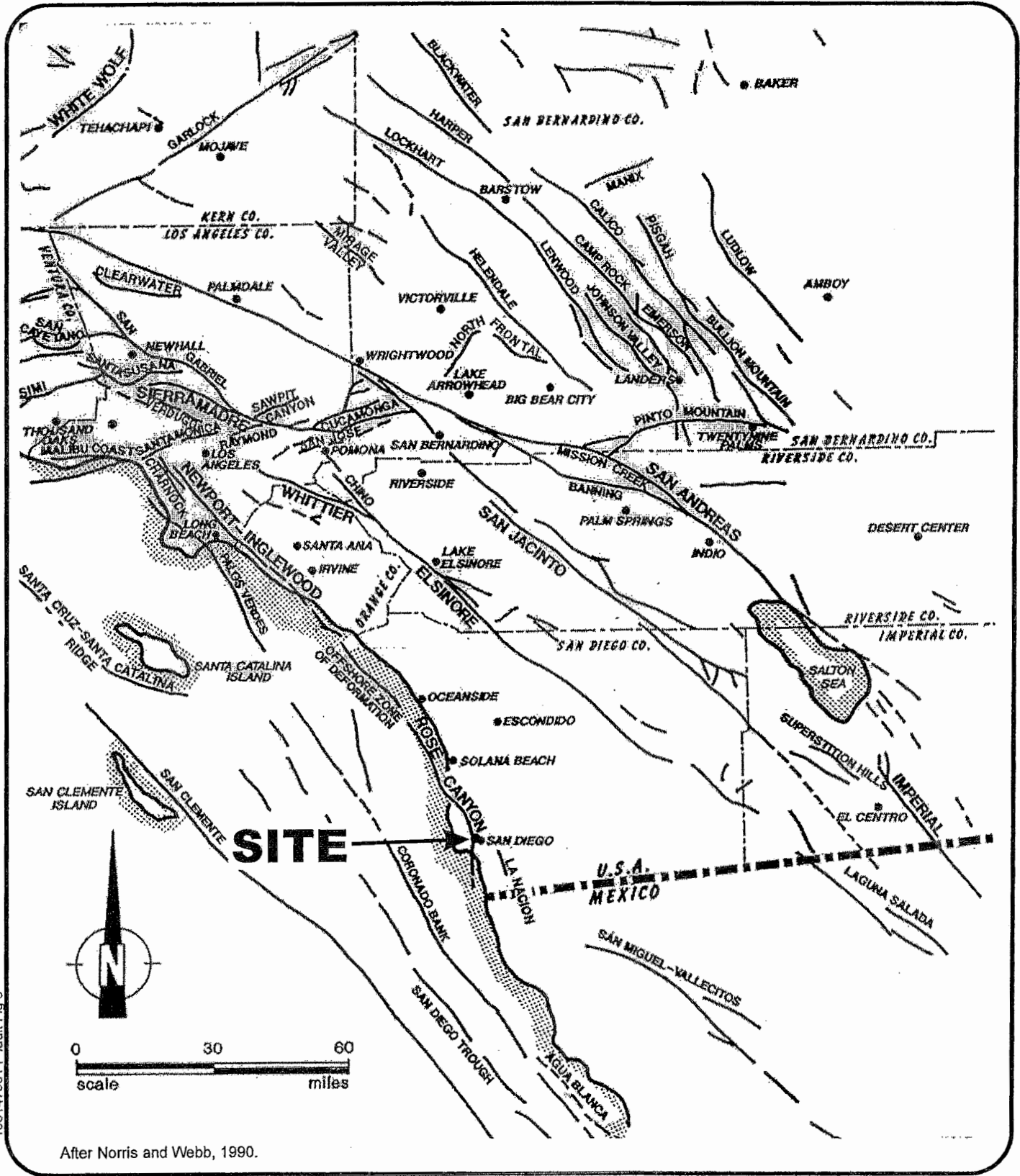
 **B-1** Approximate location of exploratory boring



REFERENCE: PACIFIC HIGHWAY TRUNK SEWER, CITY OF SAN DIEGO, UNDATED



BORING LOCATION MAP		
PACIFIC HIGHWAY TRUNK SEWER SAN DIEGO, CALIFORNIA		
PROJECT NO. 105147001	DATE 1/04	FIGURE 5

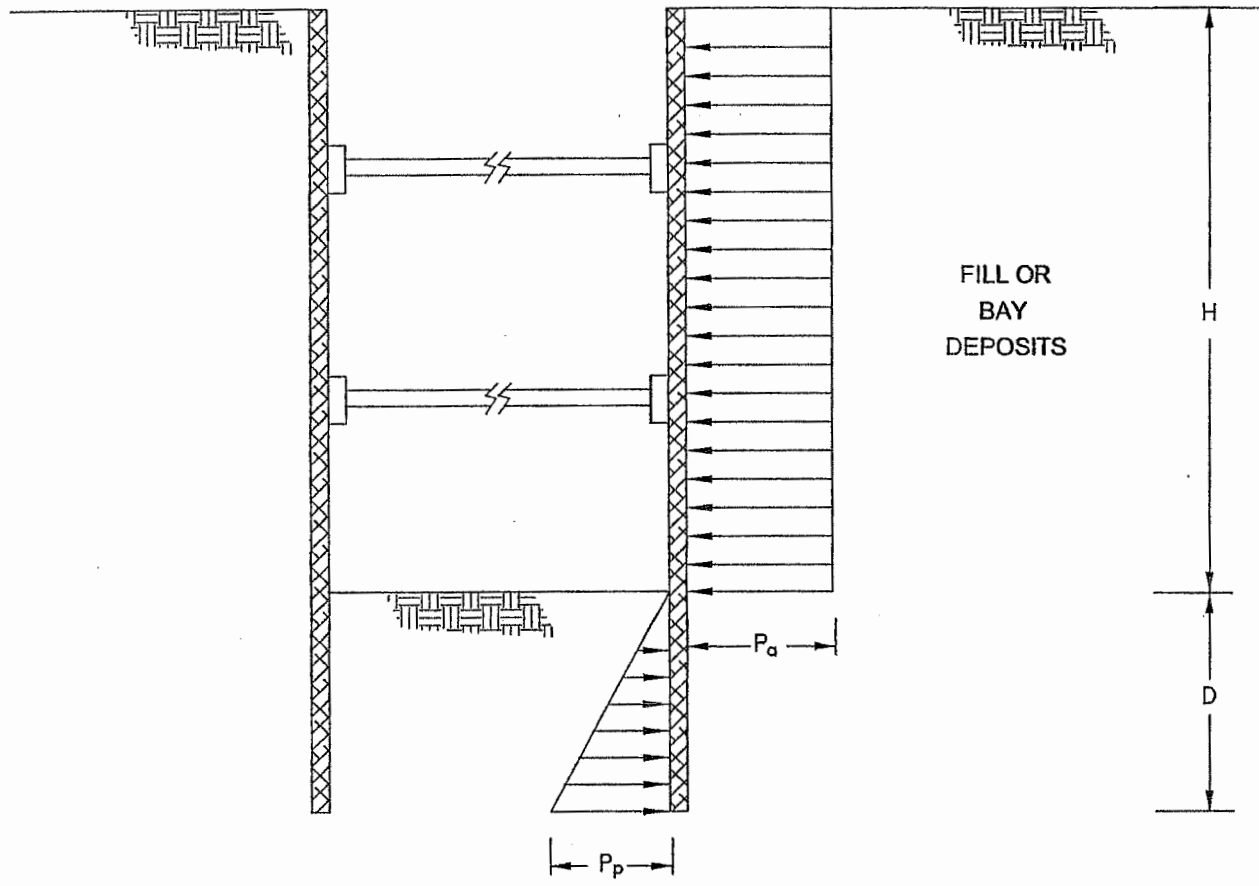


105147001 F fault, Fig 6

After Norris and Webb, 1990.



FAULT LOCATION MAP		
PACIFIC HIGHWAY TRUNK SEWER SAN DIEGO, CALIFORNIA		
PROJECT NO. 105147001	DATE 1/04	FIGURE 6



NOTES

1. Groundwater assumed below bottom of excavation.
2. $P_a = 26 H$ psf, $P_p = 300 D$ psf

NOT TO SCALE

105147001 F press Fig 7



LATERAL EARTH PRESSURES FOR BRACED EXCAVATIONS IN FILL OR BAY DEPOSITS

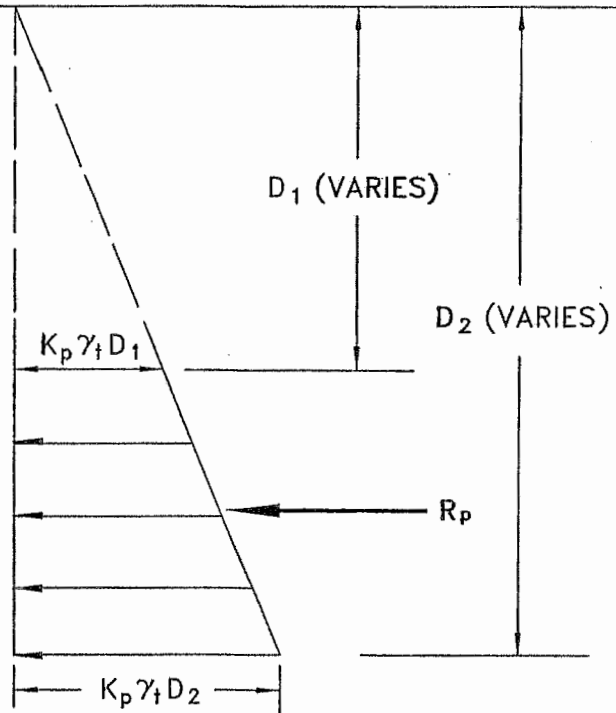
PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.	DATE
105147001	1/04

FIGURE
7

FILL OR
BAY DEPOSITS

THRUST
BLOCK
OR
JACKING PIT
REACTION



ASSUMED CONDITIONS:

$K_p = 3.0$

$\gamma_t = 110 \text{ pcf}$

NOTES:

Groundwater assumed below thrust block

$R_p = (1/2)K_p \gamma_t (D_2^2 - D_1^2) / \text{F.S.}$ F.S. = 1.5

105147001 F thrust Fig 8

Ninyo & Moore

THRUST BLOCK/JACKING PIT REACTION
LATERAL EARTH PRESSURE DIAGRAM

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.

105147001

DATE

1/04

FIGURE

8

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APPENDIX A
BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory excavations. The samples were bagged and transported to the laboratory for testing.

Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following methods.

The Modified Split-Barrel Drive Sampler

The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer in general accordance with ASTM D 3550-01. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

BORING LOG EXPLANATION SHEET

DEPTH (feet)	Bulk Driven SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
0	■						Bulk sample.
	■						Modified split-barrel drive sampler.
	X						No recovery with modified split-barrel drive sampler.
	■						Sample retained by others.
	▲						Standard Penetration Test (SPT).
5	▲						No recovery with a SPT.
	X	XX/XX					Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.
	X						No recovery with Shelby tube sampler.
	■						Continuous Push Sample.
	○		○				Seepage.
10							Groundwater encountered during drilling. Groundwater measured after drilling.
					■	SM	ALLUVIUM: Solid line denotes unit change. Dashed line denotes material change.
							Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Sheared Bedding Surface
15							
							The total depth line is a solid line that is drawn at the bottom of the boring.
20							



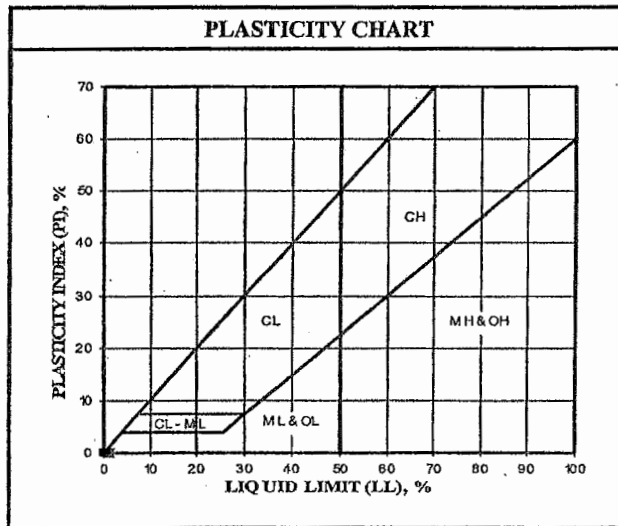
BORING LOG

EXPLANATION OF BORING LOG SYMBOLS

PROJECT NO.	DATE Rev. 01/03	FIGURE A-0
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U.S.C.S. METHOD OF SOIL CLASSIFICATION			
MAJOR DIVISIONS	SYMBOL	TYPICAL NAMES	
COARSE-GRAINED SOILS (More than 1/2 of soil >No. 200 sieve size)	GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size)	GW	Well graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS (More than 1/2 of coarse fraction <No. 4 sieve size)	SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (More than 1/2 of soil <No. 200 sieve size)	SILTS & CLAYS Liquid Limit <50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean
		OL	Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS Liquid Limit >50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS	Pt	Peat and other highly organic soils	

GRAIN SIZE CHART			
CLASSIFICATION	RANGE OF GRAIN SIZE		
	U.S. Standard Sieve Size	Grain Size in Millimeters	
BOULDERS	Above 12"	Above 305	
COBBLES	12" to 3"	305 to 76.2	
GRAVEL	3" to No. 4	76.2 to 4.76	
	Coarse Fine	3" to 3/4" 3/4" to No. 4	76.2 to 19.1 19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.074	
	Coarse	No. 4 to No. 10	4.76 to 2.00
	Medium	No. 10 to No. 40	2.00 to 0.420
	Fine	No. 40 to No. 200	0.420 to 0.074
SILT & CLAY	Below No. 200	Below 0.074	



Ningo & Moore	U.S.C.S. METHOD OF SOIL CLASSIFICATION
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DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven						1/8/04	B-1	
								GROUND ELEVATION	SHEET	OF
								15± (MSL)	1	2
								METHOD OF DRILLING 8" Diameter Hollow-Stem Auger		
								DRIVE WEIGHT	DROP	
								140 lb. Auto-Trip Hammer	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								EP	EP	RI
								DESCRIPTION/INTERPRETATION		
0								ASPHALT CONCRETE: Approximately 10" thick.		
								CONCRETE: Approximately 6" thick.		
			35	10.2	98.8		SM	FILL: Light brown, moist, medium dense, silty SAND.		
								Light brown to brown, loose, silty fine to medium sand; some shell fragments.		
5										
			12							
10							CL	BAY DEPOSITS: Gray, saturated, very soft to stiff, fine sandy CLAY.		
			push							
			26	47.9	73.8		SM	Gray, saturated, medium dense, fine silty SAND; some clay content.		
15										
			17					Slight organic odor.		
20										



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.

DATE

FIGURE

DEPTH (feet)	SAMPLES Bulk Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.				
							1/8/04	B-1				
							GROUND ELEVATION	15± (MSL)	SHEET	2	OF	2
							METHOD OF DRILLING	8" Diameter Hollow-Stem Auger				
							DRIVE WEIGHT	140 lb. Auto-Trip Hammer	DROP	30"		
							SAMPLED BY	EP	LOGGED BY	EP	REVIEWED BY	RI
							DESCRIPTION/INTERPRETATION					
20						SC	TERRACE DEPOSITS: Reddish brown, saturated, medium dense, clayey fine SAND. Thin rock layer at 20'.					
		22										
		23	16.6	115.2								
25												
		36	14.8	119.5								
						SM	Light brown to brown, saturated, medium dense, silty fine SAND; micaceous.					
30												
		23										
							Total Depth = 31.5 feet. Groundwater encountered at approximately 9 feet. Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/8/04.					
35												
40												



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.	DATE	FIGURE
		140 Page

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>1/8/04</u> BORING NO. <u>B-2</u> GROUND ELEVATION <u>22± (MSL)</u> SHEET <u>1</u> OF <u>2</u> METHOD OF DRILLING <u>8" Diameter Hollow-Stem Auger</u> DRIVE WEIGHT <u>140 lb. Auto-Trip Hammer</u> DROP <u>30"</u> SAMPLED BY <u>EP</u> LOGGED BY <u>EP</u> REVIEWED BY <u>RI</u> DESCRIPTION/INTERPRETATION		
	Bulk	Driven								
0								<u>ASPHALT CONCRETE: Approximately 8" thick.</u>		
								<u>CONCRETE: Approximately 8" thick.</u>		
			16	23.8	105.3		SC	<u>FILL:</u> Reddish brown and brown, moist, medium dense, clayey fine to medium SAND; few gravel.		
5			25	4.7	97.7		SM	Light brown and light gray, moist, medium dense, silty fine SAND; micaceous, some shell fragments.		
10			32	5.0	101.5			Few gravel.		
15			27				SM	<u>BAY DEPOSITS:</u> Gray, saturated, medium dense, silty fine to coarse SAND; abundant shell fragments.		
20							SP-SM	Gray, saturated, loose, silty fine SAND to fine SAND; abundant shell fragments.		



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO. _____ DATE _____ FIGURE _____

DATE DRILLED 1/8/04 BORING NO. B-2
 GROUND ELEVATION 22± (MSL) SHEET 2 OF 2
 METHOD OF DRILLING 8" Diameter Hollow-Stem Auger
 DRIVE WEIGHT 140 lb. Auto-Trip Hammer DROP 30"
 SAMPLED BY EP LOGGED BY EP REVIEWED BY RI
DESCRIPTION/INTERPRETATION

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.
	Bulk	Driven					
20			8				SP-SM
25			3				
30			28				SC
35							
40							

BAY DEPOSITS: (Continued)
 Gray, saturated, loose, silty fine SAND to fine SAND; abundant shell fragments.

 Very loose; scattered shell fragments; slight organic odor.

TERRACE DEPOSITS:
 Reddish brown, saturated, medium dense, clayey fine SAND.

Total Depth = 31.5 feet.
 Groundwater encountered at 16 feet.
 Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/8/04.



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
 SAN DIEGO, CALIFORNIA

PROJECT NO. _____ DATE _____ FIGURE _____
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DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>1/8/04</u> BORING NO. <u>B-3</u>	
	Bulk	Driven						GROUND ELEVATION <u>20± (MSL)</u>	SHEET <u>1</u> OF <u>2</u>
								METHOD OF DRILLING <u>8" Diameter Hollow-Stem Auger</u>	
								DRIVE WEIGHT <u>140 lb. Auto-Trip Hammer</u> DROP <u>30"</u>	
								SAMPLED BY <u>EP</u> LOGGED BY <u>EP</u> REVIEWED BY <u>RI</u>	
								DESCRIPTION/INTERPRETATION	
0								<u>ASPHALT CONCRETE</u> : Approximately 8" thick.	
								<u>CONCRETE</u> : Approximately 8" thick.	
			22	22.3	94.2		SC	<u>FILL</u> : Light brown, brown and olive, moist, medium dense, clayey fine SAND; few gravel.	
							SM	Light brown, moist, medium dense, silty fine SAND; abundant shell fragments.	
5			22	6.2	103.2				
10			27	4.9	93.8				
15			27				SM	<u>BAY DEPOSITS</u> : Gray, saturated, medium dense, silty fine SAND; a few scattered shell fragments.	
20									

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BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.
105147001

DATE
01/04

FIGURE
A-5

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven						1/8/04	B-3	
								GROUND ELEVATION	SHEET	
								20± (MSL)	2 OF 2	
								METHOD OF DRILLING		
								8" Diameter Hollow-Stem Auger		
								DRIVE WEIGHT	DROP	
								140 lb. Auto-Trip Hammer	30"	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								EP	EP	RI
								DESCRIPTION/INTERPRETATION		
20			20	25.8	95.5		SM	BAY DEPOSITS: (Continued) Gray, saturated, medium dense, silty fine SAND; a few scattered shell fragments.		
25			12					Loose; coarse- to fine-grained; slight organic odor.		
30			25				SM	TERRACE DEPOSITS: Brown to light brown, saturated, medium dense, silty fine SAND.		
35								Total Depth = 31.5 feet. Groundwater encountered at 15 feet. Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/8/04.		
40										

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BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

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FIGURE

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DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	GENERAL INFORMATION		
	Bulk	Driven						DATE DRILLED	BORING NO.	GROUND ELEVATION
								1/9/04	B-4	16± (MSL)
								8" Diameter Hollow-Stem Auger		1 OF 2
								140 lb. Auto-Trip Hammer	30"	
								EP	EP	RI
DESCRIPTION/INTERPRETATION										
0								ASPHALT CONCRETE: Approximately 8" thick.		
								CONCRETE: Approximately 8" thick.		
			24	5.7	104.6		CL+SM	FILL: Light brown and gray, moist, medium dense, silty fine SAND; micaceous; with clumps of light olive and brown, moist, firm, sandy CLAY.		
							SC	Brown, moist, loose, clayey fine SAND.		
5			11	10.0	94.0					
							SM	Light brown and gray, moist, medium dense, silty fine SAND; micaceous.		
10			22	6.0	93.9					
							SM	BAY DEPOSITS: Gray, wet, medium dense, silty fine SAND; slight organic odor.		
15			29	26.1	103.2			Saturated.		
20										



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO. 105147001	DATE 01/04	FIGURE A-7
--------------------------	---------------	---------------

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
	Bulk	Driven						1/9/04	B-4
								GROUND ELEVATION	SHEET
								16± (MSL)	2 OF 2
								METHOD OF DRILLING	
								8" Diameter Hollow-Stem Auger	
								DRIVE WEIGHT	DROP
								140 lb. Auto-Trip Hammer	30"
								SAMPLED BY	LOGGED BY
								EP	EP
								REVIEWED BY	RI
								DESCRIPTION/INTERPRETATION	
20			19				SM	TERRACE DEPOSITS: Brown, saturated, medium dense, silty fine to medium SAND.	
25			7					Loose; slightly clayey.	
30			18					Medium dense; silty fine sand; iron oxide staining.	
35								Total Depth = 31.5 feet. Groundwater encountered at 16 feet. Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/9/04.	
40									



BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.	DATE	FIGURE
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DEPTH (feet)	SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							1/9/04	B-5	
							GROUND ELEVATION	SHEET	OF
							17± (MSL)	1	2
							METHOD OF DRILLING 8" Diameter Hollow-Stem Auger		
							DRIVE WEIGHT	DROP	
							140 lb. Auto-Trip Hammer	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							EP	EP	RI
							DESCRIPTION/INTERPRETATION		
0							<u>ASPHALT CONCRETE</u> : Approximately 8" thick.		
						SM	<u>AGGREGATE BASE</u> : Approximately 1" thick.		
							<u>FILL</u> : Light gray and light brown, moist, medium dense, silty fine SAND; a few scattered shell fragments.		
		26	12.8	101.8			Light brown; loose; micaceous.		
5									
		13	16.7	82.8					
10									
		19	15.1	89.3			Medium dense; iron oxide staining.		
15						ML/SM	<u>BAY DEPOSITS</u> : Gray, saturated, loose to medium dense, silty fine SAND to fine sandy SILT.		
		26							
20									

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BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

PROJECT NO.

DATE

FIGURE

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
							1/9/04	B-5	
							GROUND ELEVATION	SHEET	OF
							17± (MSL)	2	2
							METHOD OF DRILLING 8" Diameter Hollow-Stem Auger		
							DRIVE WEIGHT	DROP	
							140 lb. Auto-Trip Hammer	30"	
							SAMPLED BY	LOGGED BY	REVIEWED BY
							EP	EP	RI
							DESCRIPTION/INTERPRETATION		
20		17				SM	TERRACE DEPOSITS: Olive, light brown and yellowish brown, saturated, medium dense, silty fine SAND; some clay content, iron oxide staining.		
25		17							
30		14					Light brown; fine to medium sand; no clay; micaceous.		
35							Total Depth = 31.5 feet. Groundwater encountered at 13 feet. Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/9/04.		
40									



BORING LOG		
PACIFIC HIGHWAY TRUNK SEWER SAN DIEGO, CALIFORNIA		
PROJECT NO.	DATE	FIGURE
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DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
	Bulk	Driven						1/9/04	B-6
								GROUND ELEVATION	SHEET
								10± (MSL)	1 OF 2
								METHOD OF DRILLING	
								8" Diameter Hollow-Stem Auger	
								DRIVE WEIGHT	DROP
								140 lb. Auto-Trip Hammer	30"
								SAMPLED BY	LOGGED BY
								EP	EP
								REVIEWED BY	RI
								DESCRIPTION/INTERPRETATION	
0								ASPHALT CONCRETE: Approximately 8" thick.	
							SM	AGGREGATE BASE: Approximately 2" thick.	
								FILL: Reddish brown, dark gray and olive, moist, medium dense, silty fine SAND; slightly clayey, abundant roots.	
22									
5									
17				6.4	97.3			Light brown; slightly micaceous.	
10									
16				14.9	109.7				
15							SM	BAY DEPOSITS: Gray, saturated, loose, silty fine SAND; slight organic odor.	
8									
20									

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BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

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DATE

FIGURE

105147001

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DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.	
	Bulk	Driven						1/9/04	B-6	
								GROUND ELEVATION	SHEET	OF
								METHOD OF DRILLING		
								DRIVE WEIGHT	DROP	
								SAMPLED BY	LOGGED BY	REVIEWED BY
								DESCRIPTION/INTERPRETATION		
20			14				SM	BAY DEPOSITS: (Continued) Gray, saturated, medium dense, silty fine SAND; strong organic odor; abundant shell fragments.		
25			4				ML	Gray, saturated, loose, fine sandy SILT; slight organic odor.		
30			39				SM	Gray, saturated, medium dense, silty fine SAND.		
35								Total Depth = 31.5 feet. Groundwater encountered at 13 feet. Backfilled with approximately 11 cubic feet of bentonite grout and patched with concrete on 1/9/04.		
40										

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BORING LOG

PACIFIC HIGHWAY TRUNK SEWER
SAN DIEGO, CALIFORNIA

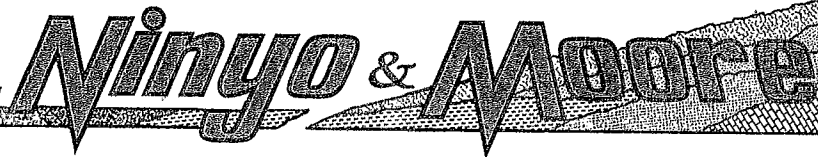
PROJECT NO.

DATE

FIGURE

105147001k Sewer (Rev. 10/1/0016)

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APPENDIX B

LABORATORY TESTING

Classification

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488-00. Soil classifications are indicated on the logs of the exploratory excavations in Appendix A.

In-Place Moisture and Density Tests

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory excavations were evaluated in general accordance with ASTM D 2937-00. The test results are presented on the logs of the exploratory excavations in Appendix A.

Gradation Analysis

Gradation analysis tests were performed on selected representative soil samples in general accordance with ASTM D 422-63. The grain size distribution curves are shown on Figures B-1 through B-3. The test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System.

Shear Strength Test

Shear strength tests were performed on undisturbed samples in general accordance with ASTM D 3080-98 to evaluate the shear strength characteristics of selected materials. The samples were inundated during shearing to represent adverse field conditions. The results are shown on Figures B-4 and B-5.

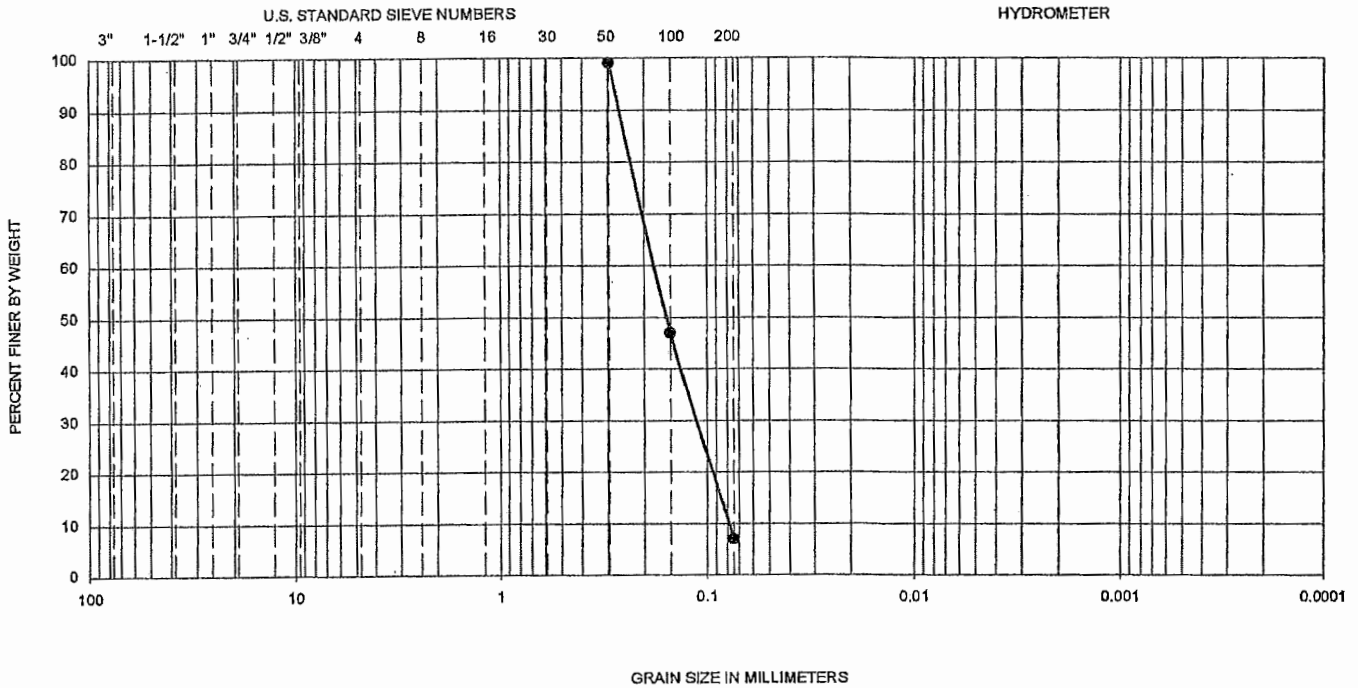
Soil Corrosivity Tests

Soil pH and minimum resistivity tests were performed on a representative sample in general accordance with California Test (CT) 643. The chloride content of the selected sample was evaluated in general accordance with CT 422. The sulfate content of the selected sample was evaluated in general accordance with CT 417. The test results are presented on Figure B-6.

Permeability Tests

Constant head permeability tests were performed on selected undisturbed soil samples in general accordance with ASTM D 2434-68. The samples were placed in the apparatus and saturated. Water flow through the soil was sustained using a pneumatically induced head at specified pressures. The quantity of flow, the elapsed time, and the hydraulic gradient were recorded. The permeability was then calculated using Darcy's equation. The results of the tests are presented on Figure B-7.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-2	20.0-21.5	--	--	--	0.08	0.13	0.19	2.4	1.1	7	SP-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422-63

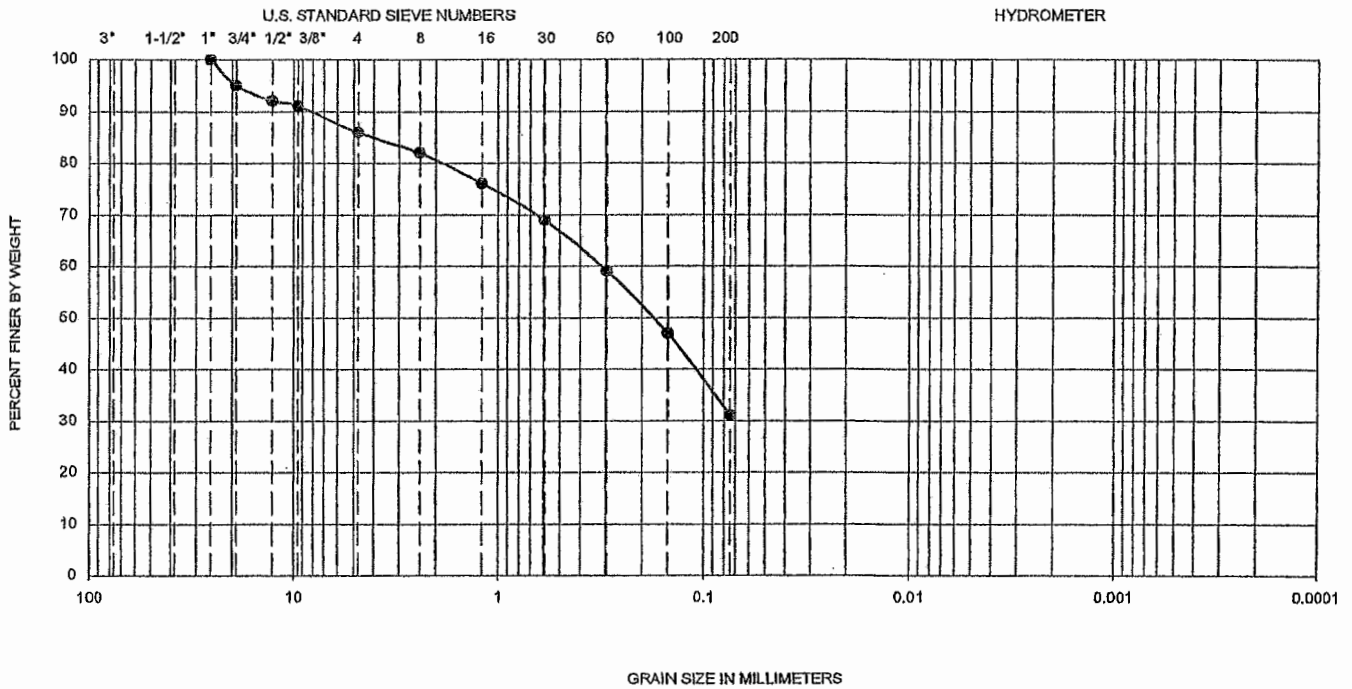


GRADATION TEST RESULTS
Pacific Highway Trunk Sewer
San Diego, California

PROJECT NO.	DATE
105147001	1/04

FIGURE
B-1

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



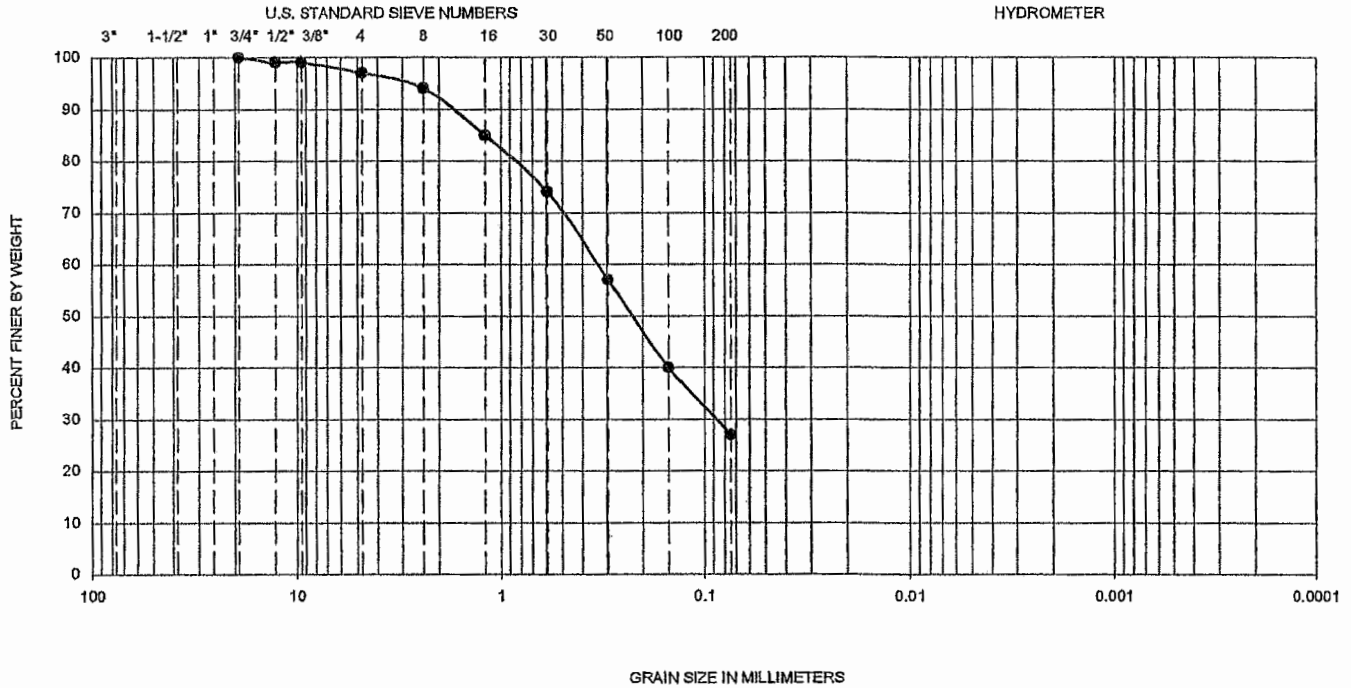
Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-3	25.0-26.5	--	--	--	--	--	--	--	--	31	SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422-63



GRADATION TEST RESULTS	
Pacific Highway Trunk Sewer San Diego County, California	
PROJECT NO.	DATE
105147001	1/04
FIGURE	
B-2	

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

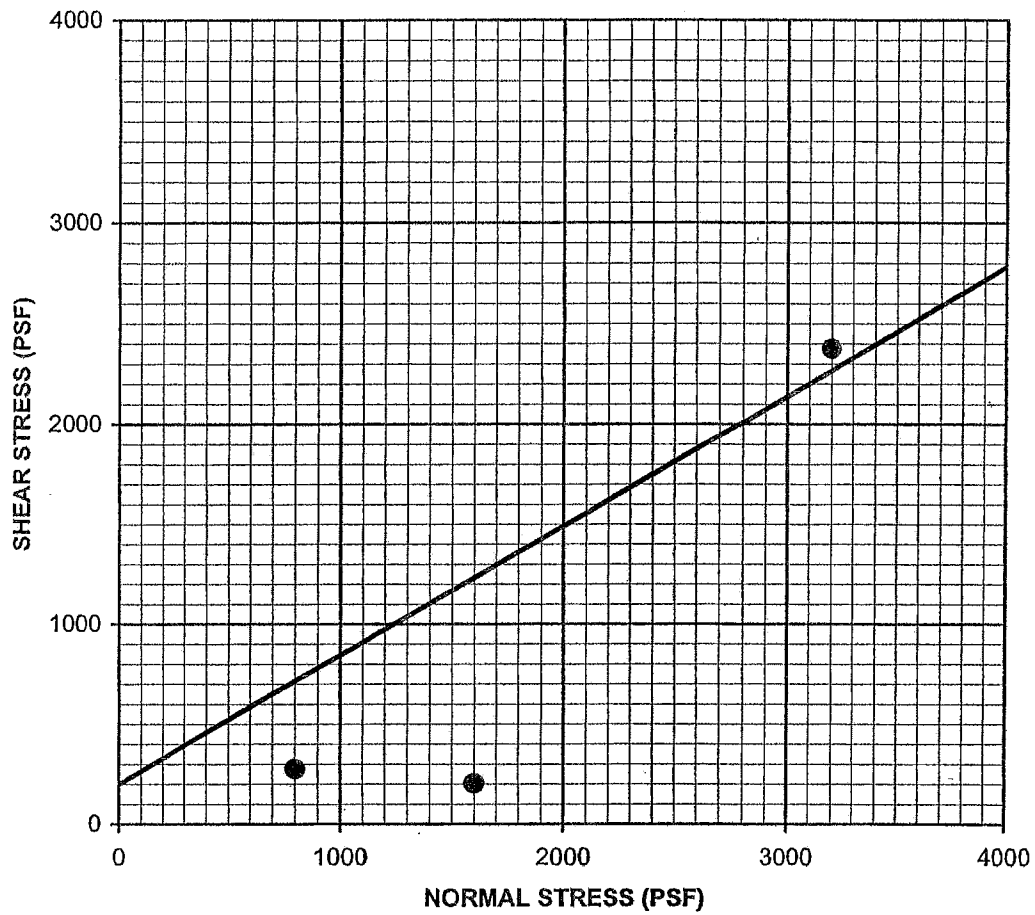


Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D ₁₀	D ₃₀	D ₆₀	C _u	C _c	Passing No. 200 (%)	U.S.C.S
●	B-6	20.0-21.5	--	--	--	--	--	--	--	--	27	SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422-63



GRADATION TEST RESULTS		
Pacific Highway Trunk Sewer San Diego, California		
PROJECT NO.	DATE	FIGURE B-3
105147001	1/04	



Description	Symbol	Boring Number	Depth (ft)	Shear Strength	Cohesion (psf)	Friction Angle (deg)	Soil Type
Fine Silty SAND	—●—	B-1	11.5-13.0	Peak	200	33	SM

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SHEAR STRENGTH TEST RESULTS

Pacific Highway Trunk Sewer
San Diego, California

PROJECT NO.

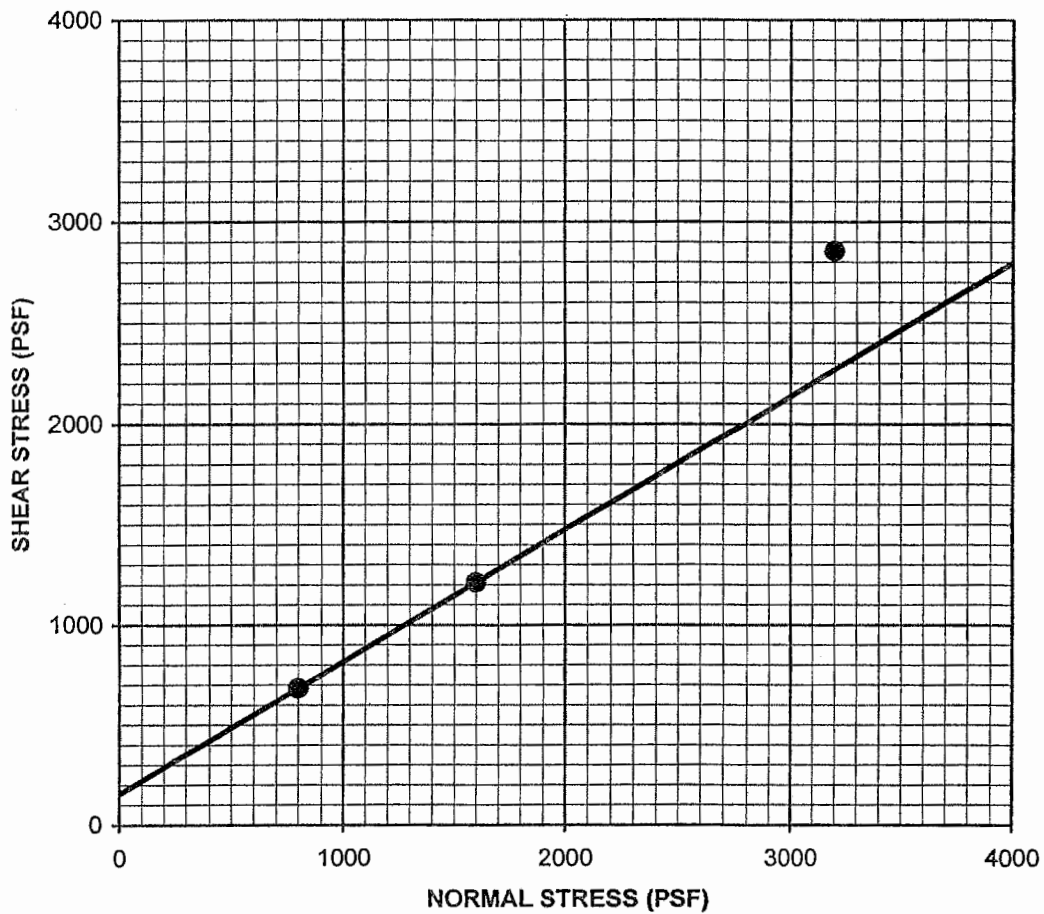
105147001

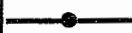
DATE

1/04

FIGURE

B-4



Description	Symbol	Boring Number	Depth (ft)	Shear Strength	Cohesion (psf)	Friction Angle (deg)	Soil Type
Silty SAND		B-4	15.0-16.0	Peak	155	33	SM

Ninyo & Moore

SHEAR STRENGTH TEST RESULTS

Pacific Highway Trunk Sewer
San Diego, California

PROJECT NO.

105147001

DATE

1/04

FIGURE

B-5

CORROSIVITY TEST RESULTS

SAMPLE LOCATION	SAMPLE DEPTH (FT)	pH *	RESISTIVITY * (ohm-cm)	WATER-SOLUBLE SULFATE CONTENT IN SOIL ** (%)	CHLORIDE CONTENT *** (ppm)
B-2	15.0-16.5	8.2	1,400	0.02	240

* PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 643

** PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 417

*** PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 422



CORROSIVITY TEST RESULTS

Pacific Highway Trunk Sewer
San Diego, California

PROJECT NO.

105147001

DATE

1/04

FIGURE

B-6

PERMEABILITY TEST RESULTS

SAMPLE LOCATION	SAMPLE DEPTH (FT)	INITIAL MOISTURE (%)	FINAL MOISTURE (%)	DRY DENSITY (PCF)	HEAD (FT)	PERMEABILITY (cm/sec)
B-2	25.0-26.5	38.5	47.0	74.8	6.9	2.90E-08
B-6	10.0-11.5	16.4	17.2	113.6	6.9	7.85E-06

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 5084



PERMEABILITY TEST RESULTS

Pacific Highway Trunk Sewer
San Diego, California

PROJECT NO.
105147001

DATE
1/04

FIGURE
B-7

APPENDIX C

TYPICAL EARTHWORK GUIDELINES

TYPICAL EARTHWORK GUIDELINES FOR PIPELINE PROJECTS

1. GENERAL

These Guidelines are presented as general procedures for earthwork construction. They are to be utilized in conjunction with the project plans. These Guidelines are considered a part of the geotechnical report, but are superseded by recommendations in the geotechnical report in the case of conflict. Evaluations performed by the consultant during the course of pipeline installation may result in new recommendations which could supersede these specifications and/or the recommendations of the geotechnical report. It is the responsibility of the contractor to read and understand these Guidelines as well as the geotechnical report and project plans.

- 1.1. The contractor shall not vary from these Guidelines without prior recommendations by the geotechnical consultant and the approval of the client or the client's authorized representative. Recommendations by the geotechnical consultant and/or client shall not be considered to preclude requirements for approval by the jurisdictional agency prior to the execution of any changes.
- 1.2. The contractor shall perform the earthwork operations in accordance with these specifications, and shall be responsible for the quality of the finished product notwithstanding the fact that earthwork will be observed and tested by the geotechnical consultant.
- 1.3. It is the responsibility of the contractor to notify the geotechnical consultant and the jurisdictional agencies, as needed, prior to the start of work at the site and at any time that earthwork resumes after interruption. Each step of the earthwork operations shall be observed and documented by the geotechnical consultant and, where needed, reviewed by the appropriate jurisdictional agency prior to proceeding with subsequent work.
- 1.4. If, during the earthwork operations, geotechnical conditions are encountered which were not anticipated or described in the geotechnical report, the geotechnical consultant shall be notified immediately and additional recommendations, if applicable, may be provided.
- 1.5. An as-built geotechnical report shall be prepared by the geotechnical consultant and signed by a registered engineer. The report documents the geotechnical consultants' observations, and field and laboratory test results, and provides conclusions regarding whether or not earthwork construction was performed in accordance with the geotechnical recommendations and the plans.

- 1.6. Definitions of terms utilized in the remainder of these specifications have been provided in Section 6.

2. OBLIGATIONS OF PARTIES

The parties involved in the projects earthwork activities shall be responsible as outlined in the following sections.

- 2.1. The client is ultimately responsible for each of the aspects of the project. The client or the client's authorized representative has a responsibility to review the findings and recommendations of the geotechnical consultant. The client shall authorize the contractor and/or other consultants to perform work and/or provide services. During earthwork the client or the client's authorized representative shall remain on site or remain reasonably accessible to the concerned parties to make the decisions that may be needed to maintain the flow of the project.
- 2.2. The contractor is responsible for the safety of the project and satisfactory completion of pipeline installation and other associated operations, including, but not limited to, earthwork in accordance with the project plans, specifications, and jurisdictional agency requirements. The contractor shall further remain accessible during non-working hours times, including at night and during days off.
- 2.3. The geotechnical consultant shall provide observation and testing services and shall make evaluations to advise the client on geotechnical matters. The geotechnical consultant shall report findings and recommendations to the client or the client's authorized representative.
- 2.4. Prior to proceeding with any earthwork operations, the geotechnical consultant shall be notified two working days in advance to schedule the needed observation and testing services.
 - 2.4.1. Prior to any significant expansion or reduction in the grading operation, the geotechnical consultant shall be provided with two working days notice to make appropriate adjustments in scheduling of on-site personnel.
 - 2.4.2. Between phases of earthwork operations, the geotechnical consultant shall be provided with two working days notice in advance of commencement of additional operations.

3. SITE PREPARATION

Site preparation shall be performed in accordance with the recommendations presented in the following sections.

- 3.1. The client, prior to any site preparation or earthwork, shall **arrange** and attend a pre-construction meeting between the contractor, the design engineer, the geotechnical consultant, and representatives of appropriate governing authorities, as well as any other involved parties. The parties shall be given two working days notice.
- 3.2. Demolition in the areas to be graded shall include removal of pavements, and other manmade surface and subsurface improvements. Demolition of utilities shall include capping or rerouting of pipelines at the project perimeter.
- 3.3. The debris generated during demolition operations shall be removed from areas to be graded and disposed of off site at a legal dump site. Demolition operations shall be performed under the observation of the geotechnical consultant.

4. TRENCH BACKFILL

The following sections provide recommendations for backfilling of trenches.

- 4.1. Trench backfill shall consist of granular soils (bedding) extending from the trench bottom to 1 or more feet above the pipe. On-site or imported fill which has been evaluated by the geotechnical consultant may be used above the granular backfill. The cover soils directly in contact with the pipe shall be classified as having a very low expansion potential, in accordance with UBC Standard 18-2, and shall contain no rocks or chunks of hard soil larger than 3/4-inch in diameter.
- 4.2. Trench backfill shall, unless otherwise recommended, be compacted by mechanical means to 90 percent or greater relative compaction as evaluated by ASTM D 1557-00. Backfill soils shall be placed in loose lifts 8-inches thick or thinner, moisture conditioned, and compacted in accordance with the recommendations of the geotechnical report and of these guidelines. The backfill shall be tested by the geotechnical consultant at vertical intervals of approximately 2 feet of backfill placed and at spacings along the trench of approximately 100 feet in the same lift.
- 4.3. Jetting of trench backfill materials is generally not a recommended method of densification, unless the on-site soils are sufficiently free-draining and provisions have been made for adequate dissipation of the water utilized in the jetting process.
- 4.4. If it is decided that jetting may be utilized, granular material with a sand equivalent greater than 30 shall be used for backfilling in the areas to be jetted. Jetting shall gener-

ally be considered for trenches 2 feet or narrower in width and 4 feet or shallower in depth. Following jetting operations, trench backfill shall be mechanically compacted to the specified compaction to finish grade.

- 4.5. Trench backfill which underlies the zone of influence of foundations shall be mechanically compacted to a relative compaction of 90 percent or greater as evaluated by ASTM D 1557-00. The zone of influence of the foundations is generally defined as the roughly triangular area within the limits of a 1:1 projection from the inner and outer edges of the foundation, projected down and out from both edges.
- 4.6. Trench backfill within slab areas shall be compacted by mechanical means to a relative compaction of 90 percent or greater as evaluated by ASTM D 1557-00. For minor interior trenches, density testing may be omitted or spot testing may be performed, as deemed appropriate by the geotechnical consultant.
- 4.7. When compacting soil in close proximity to utilities, care shall be taken by the contractor so that mechanical methods used to compact the soils do not damage the utilities.
- 4.8. Clean granular backfill and/or bedding materials are not recommended for use in slope areas unless provisions are made for a drainage system to mitigate the potential for buildup of seepage forces or piping of backfill materials.
- 4.9. The contractor shall exercise the specified safety precautions, in accordance with OSHA Trench Safety Regulations, while conducting trenching operations. Such precautions include shoring or laying back trench excavations at 1:1 or flatter, depending on material type, for trenches in excess of 5 feet in depth. The geotechnical consultant is not responsible for the safety of trench operations or stability of the trenches.

5. SITE PROTECTION

The site shall be protected as outlined in the following sections.

- 5.1. Protection of the site during the period of construction shall be the responsibility of the contractor unless other provisions are made in writing and agreed upon among the concerned parties. Completion of a portion of the project shall not be considered to preclude that portion or adjacent areas from the need for site protection, until such time as the project is finished as agreed upon by the geotechnical consultant, the client, and the regulatory agency.
- 5.2. The contractor is responsible for the stability of temporary excavations. Recommendations by the geotechnical consultant pertaining to temporary excavations are made in consideration of stability of the finished project and, therefore, shall not be considered to preclude the responsibilities of the contractor. Recommendations by the geotechni-

cal consultant shall also not be considered to preclude more restrictive requirements by the applicable regulatory agencies.

- 5.3. Precautions shall be taken during the performance of site clearing, excavation, and grading to protect the site from flooding, ponding, or inundation by surface runoff. Temporary provisions shall be made during the rainy season so that surface runoff is away from and off the working site. Where low areas cannot be avoided, pumps shall be provided to remove water as needed during periods of rainfall.
- 5.4. Following periods of rainfall, the contractor shall contact the geotechnical consultant and arrange a walk-over of the site in order to visually assess rain-related damage. The geotechnical consultant may also recommend excavation and testing in order to aid in the evaluation. At the request of the geotechnical consultant, the contractor shall make excavations in order to aid in evaluation of the extent of rain-related damage.
- 5.5. Rain- or irrigation-related damage shall be considered to include, but may not be limited to, erosion, silting, saturation, swelling, structural distress, and other adverse conditions noted by the geotechnical consultant. Soil adversely affected shall be classified as "Unsuitable Material" and shall be subject to overexcavation and replacement with compacted fill or to other remedial grading as recommended by the geotechnical consultant.

6. DEFINITIONS OF TERMS

ALLUVIUM:	Unconsolidated detrital deposits deposited by flowing water; includes sediments deposited in river beds, canyons, flood plains, lakes, fans at the foot of slopes, and in estuaries.
AS-GRADED (AS-BUILT):	The site conditions upon completion of grading.
BEDROCK:	Relatively undisturbed in-place rock, either at the surface or beneath surficial deposits of soil.
BORROW (IMPORT):	Any fill material hauled to the project site from off-site areas.
CIVIL ENGINEER:	The Registered Civil Engineer or consulting firm responsible for preparation of the grading plans and surveying, and evaluating as-graded topographic conditions.
CLIENT:	The developer or a project-responsible authorized representative. The client has the responsibility of reviewing the findings and recommendations made by the geotechnical consultant and authorizing the contractor and/or other consultants to perform work and/or provide services.
COLLUVIUM:	Generally loose deposits, usually found on the face or near the base of slopes and brought there chiefly by gravity through slow continuous downhill creep (see also Slope Wash).
COMPACTION:	The densification of a fill by mechanical means.
CONTRACTOR:	A person or company under contract or otherwise retained by the client to perform, excavation, pipeline installation, and other site improvements.
DEBRIS:	The products of clearing, grubbing, and/or demolition, or contaminated soil material unsuitable for reuse as compacted backfill, and/or any other material so designated by the geotechnical consultant.
ENGINEERED FILL:	A fill which the geotechnical consultant or the consultant's representative has observed and/or tested during placement, enabling the consultant to conclude that the fill has been placed in substantial compliance with the recommendations of the geotechnical consultant and the governing agency requirements.

- ENGINEERING GEOLOGIST:** A geologist registered by the state licensing agency who applies geologic knowledge and principles to the exploration and evaluation of naturally occurring rock and soil, as related to the design of civil works.
- EROSION:** The wearing away of the ground surface as a result of the movement of wind, water, and/or ice.
- EXCAVATION:** The mechanical removal of earth materials.
- EXISTING GRADE:** The ground surface configuration prior to grading; original grade.
- FILL:** Any deposit of soil, rock, soil-rock blends, or other similar materials placed by man.
- FINISH GRADE:** The as-graded ground surface elevation that conforms to the grading plan.
- GEOFABRIC:** An engineering textile utilized in geotechnical applications such as subgrade stabilization and filtering.
- GEO TECHNICAL CONSULTANT:** The geotechnical engineering and engineering geology consulting firm retained to provide technical services for the project. For the purpose of these specifications, observations by the geotechnical consultant include observations by the geotechnical engineer, engineering geologist and other persons employed by and responsible to the geotechnical consultant.
- GEO TECHNICAL ENGINEER:** A licensed civil engineer and geotechnical engineer, registered by the state licensing agency, who applies scientific methods, engineering principles, and professional experience to the acquisition, interpretation, and use of knowledge of materials of the earth's crust to the resolution of engineering problems. Geotechnical engineering encompasses many of the engineering aspects of soil mechanics, rock mechanics, geology, geophysics, hydrology, and related sciences.
- GRADING:** Any operation consisting of excavation, filling, or combinations thereof and associated operations.
- LANDSLIDE DEPOSITS:** Material, often porous and of low density, produced from instability of natural or manmade slopes.

- OPTIMUM MOISTURE:** The moisture content that is considered optimum relative to compaction operations.
- RELATIVE COMPACTION:** The degree of compaction (expressed as a percentage) of a material as compared to the dry density obtained from ASTM test method D 1557-91.
- SITE:** The particular parcel of land where earthwork is being performed.
- SLOPE WASH:** Soil and/or rock material that has been transported down a slope by gravity assisted by the action of water not confined to channels (see also Colluvium).
- SLOUGH:** Loose, uncompacted fill material generated during grading operations.
- SOIL:** Naturally occurring deposits of sand, silt, clay, etc., or combinations thereof.

APPENDIX K

ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION

Protecting AMI Devices in Meter Boxes and on Street Lights

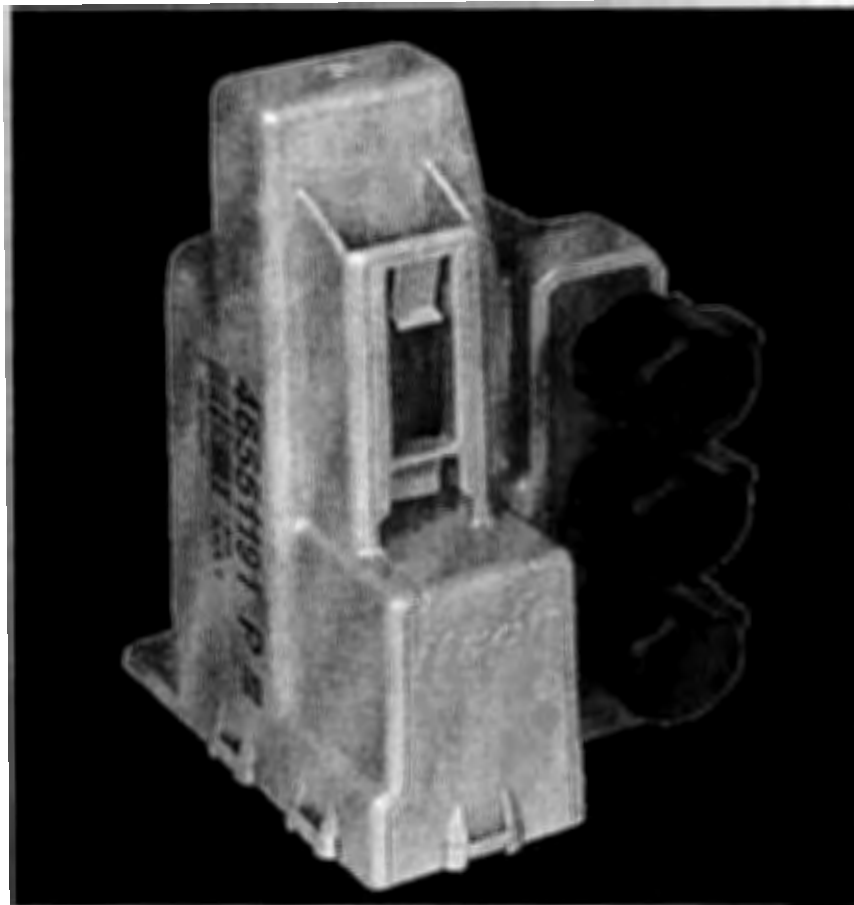
The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **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:

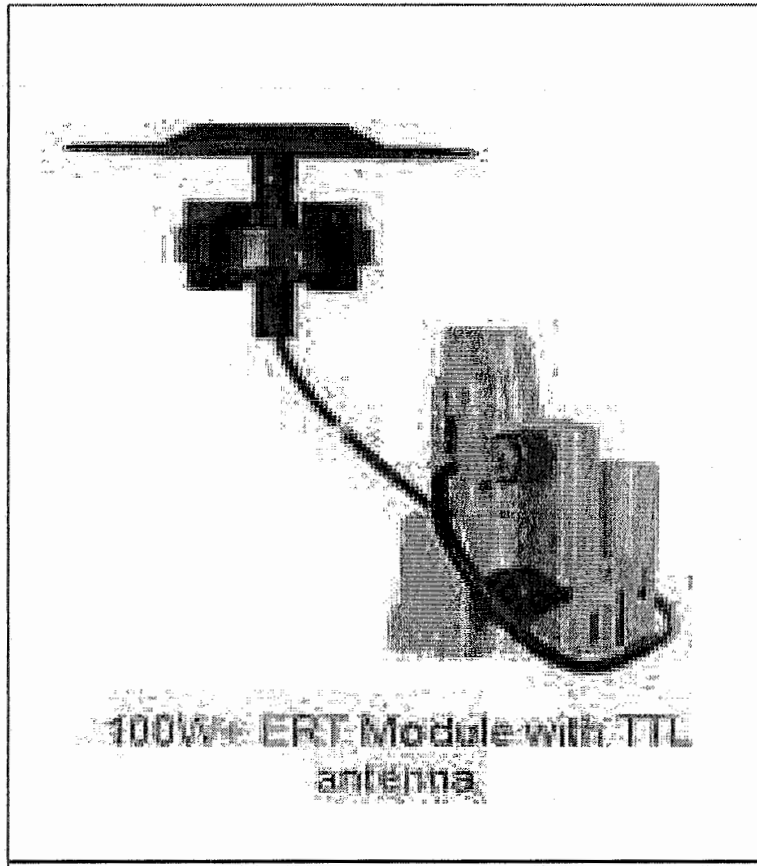
- A. Endpoints, see Photo 1:

Photo 1



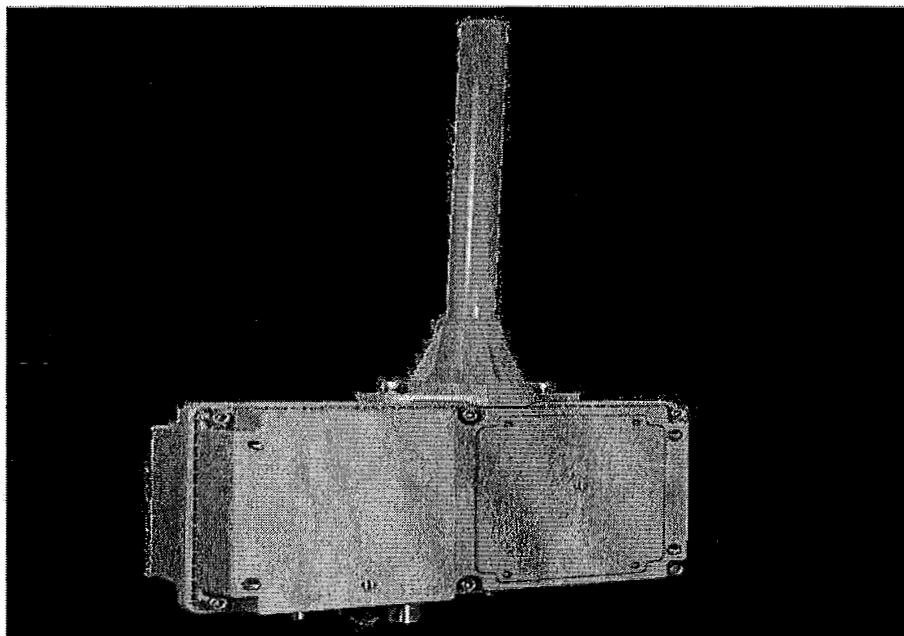
B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:

Photo 2



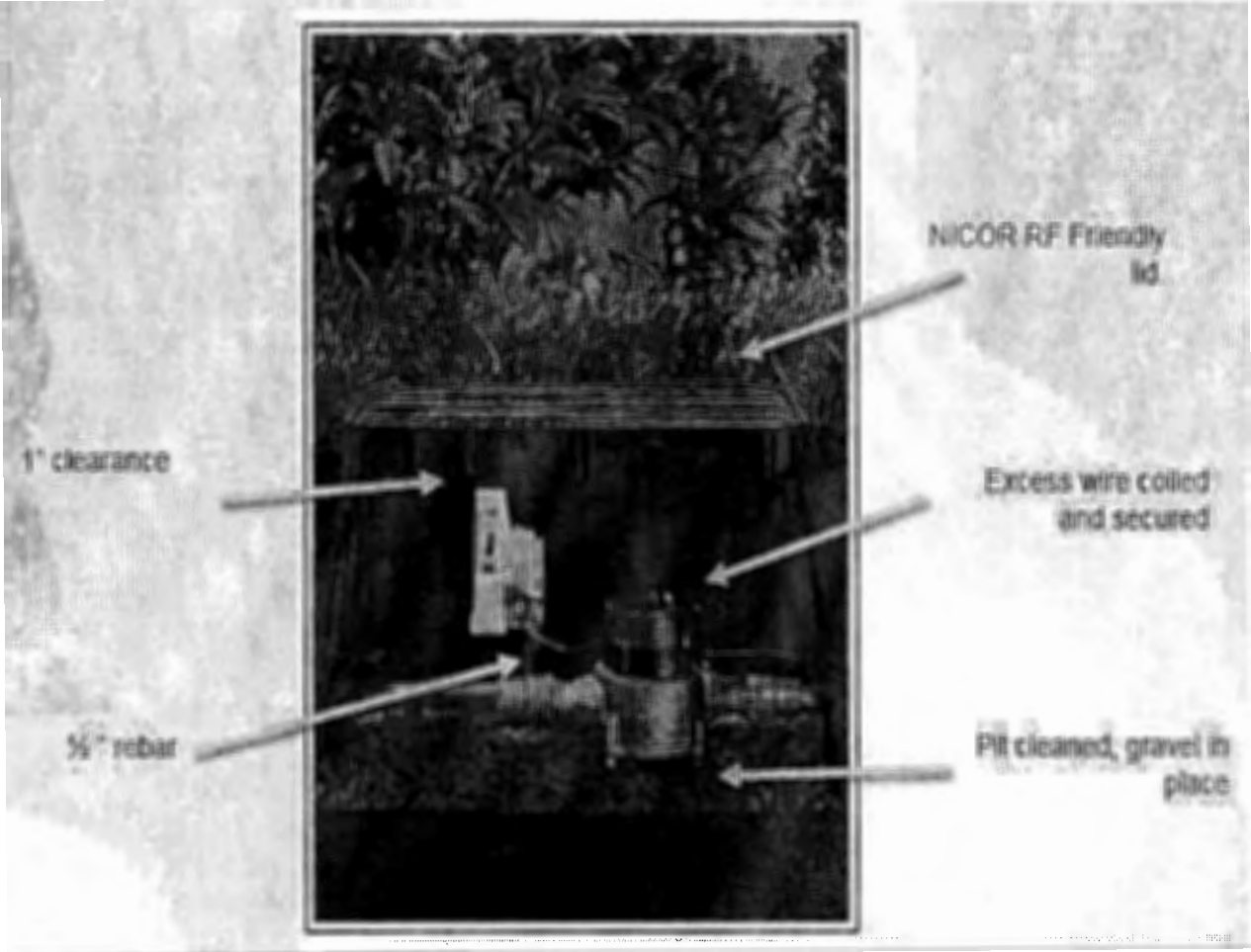
Network Devices, see Photo 3:

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

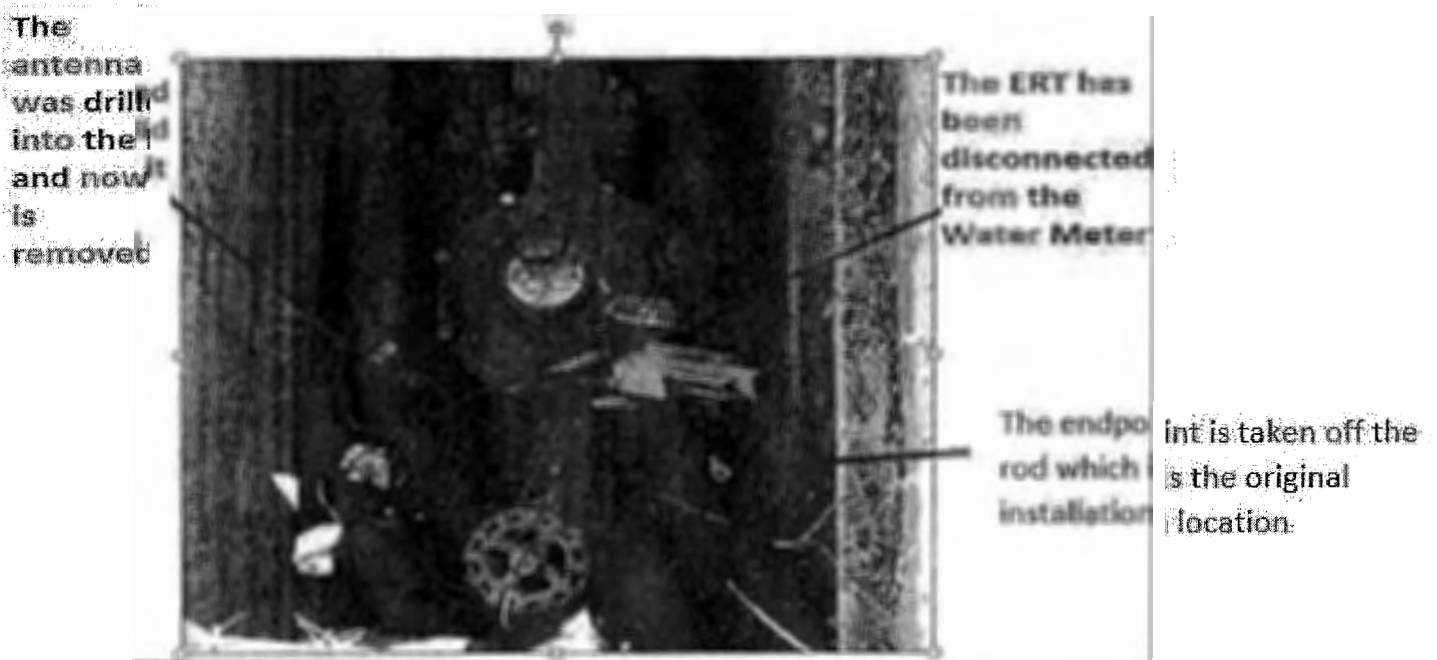
Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

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
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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 Burtech Pipeline Incorporated, herein called "Contractor" for construction of **Water and Sewer Group Job 954**; Bid No. **K-17-1501-DBB-3-A**; in the amount of Three Million Seven Hundred Fifty Six Thousand Eight Hundred Thirty Two Dollars and 50/100 (\$3,756,832.50), 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) Phased Funding Schedule Agreement.
 - (e) That certain documents entitled **Water and Sewer Group Job 954**, on file in the office of the Public Works Department as Document No. **B-10187, B-13203**, 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 **Water and Sewer Group Job 954**, Bid Number **K-17-1501-DBB-3-A**, 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 §22.3102 authorizing such execution.

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

Mara W. Elliot, City Attorney

By 1-25-17 Stephen Samara By Pedro Delara, Jr.

Print Name: Stephen Samara
Principal Contract Specialist
Public Works Department

Print Name: Pedro Delara, Jr.
Deputy City Attorney

Date: 1-25-17

Date: 1/27/17

CONTRACTOR

By [Signature]

Print Name: DOMINIC J. BURTECH

Title: PRESIDENT & CEO

Date: NOVEMBER 14, 2016

City of San Diego License No.: B1996002066

State Contractor's License No.: 718202

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000006324

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, "California Building Code, California Code of Regulations Title 24 and 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 and Pledge of Compliance"), 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.

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 _____.

Contractor

by

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

SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE (USE ONLY WHEN ADDITIVE ALTERNATES ARE REQUIRED)

***** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *****

TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY

SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION

ADDITIVE/ DEDUCTIVE ALTERNATE	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	WHERE CERTIFIED	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.

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, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____	NONE LISTED						
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	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 B

SUBCONTRACTOR NAME, LOCATION, PHONE & EMAIL	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	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____	NONE LISTED						
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
- Certified Disadvantaged Business Enterprise
- Other Business Enterprise
- Certified Small Local Business Enterprise
- Woman-Owned Small Business
- Service-Disabled Veteran Owned Small Business

- MBE
- DBE
- OBE
- SLBE
- WoSB
- SDVOSB

- Certified Woman Business Enterprise
- Certified Disabled Veteran Business Enterprise
- Certified Emerging Local Business Enterprise
- Small Disadvantaged Business
- HUBZone Business

- WBE
- DVBE
- ELBE
- SDB
- HUBZone

⊙ As appropriate, Bidder shall indicate if Subcontractor is certified by:

- City of San Diego
- California Public Utilities Commission
- State of California's Department of General Services
- State of California

- CITY
- CPUC
- CADoGS
- CA

- State of California Department of Transportation
- City of Los Angeles
- U.S. Small Business Administration

- CALTRANS
- LA
- 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**

- C. EQUAL BENEFITS ORDINANCE - CERTIFICATION OF COMPLIANCE**

**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 BURTECH PIPELINE, INCORPORATED as Principal, and
NORTH AMERICAN SPECIALTY INSURANCE COMPANY 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

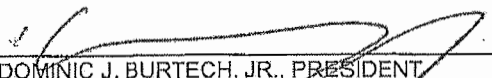
WATER & SEWER GROUP JOB 954

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 19TH day of OCTOBER,
2016

BURTECH PIPELINE, INCORPORATED (SEAL)
(Principal)

NORTH AMERICAN SPECIALTY
INSURANCE COMPANY (SEAL)
(Surety)

By: 
DOMINIC J. BURTECH, JR., PRESIDENT
(Signature)

By: 
MARK D. IATAROLA, ATTORNEY-IN-FACT
(Signature)

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

California Acknowledgment Form

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.

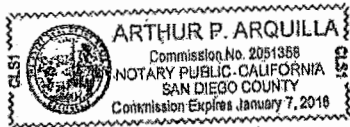
State of California
County of San Diego } ss.

On 10/24/16 before me, Arthur P. Arquilla, Notary Public
personally appeared Dominic Butsch (here insert name and title of the officer)

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.

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

Seal



WITNESS my hand and official seal.

Arthur P. Arquilla
Signature of Notary

Optional Information

To help prevent fraud, it is recommended that you provide information about the attached document below.
This is not required under California State notary public law.

Document Title: _____ # of Pages: _____

Notes

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.

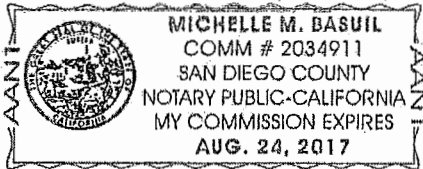
State of California)
County of SAN DIEGO)

On 10/19/2016 before me, MICHELLE M. BASUIL, NOTARY PUBLIC
Date Here Insert Name and Title of the Officer
personally appeared MARK D. IATAROLA
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.

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 *Michelle M. Basuil*
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended 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: MARK D. IATAROLA
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

Signer's Name: _____
 Corporate Officer — Title(s): _____
 Partner — Limited General
 Individual Attorney in Fact
 Trustee Guardian or Conservator
 Other: _____
Signer Is Representing: _____

NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY
WASHINGTON INTERNATIONAL INSURANCE COMPANY

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT North American Specialty Insurance Company, a corporation duly organized and existing under laws of the State of New Hampshire, and having its principal office in the City of Manchester, New Hampshire, and Washington International Insurance Company, a corporation organized and existing under the laws of the State of New Hampshire and having its principal office in the City of Schaumburg, Illinois, each does hereby make, constitute and appoint:

JOHN G. MALONEY, HELEN MALONEY, MICHELLE M. BASUIL,
and MARK D. IATAROLA

JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION (\$50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both North American Specialty Insurance Company and Washington International Insurance Company at meetings duly called and held on the 9th of May, 2012:

"RESOLVED, that any two of the Presidents, any Managing Director, any Senior Vice President, any Vice President, any Assistant Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Company when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."



By [Signature]
Steven P. Anderson, Senior Vice President of Washington International Insurance Company
& Senior Vice President of North American Specialty Insurance Company



By [Signature]
Michael A. Ito, Senior Vice President of Washington International Insurance Company
& Senior Vice President of North American Specialty Insurance Company

IN WITNESS WHEREOF, North American Specialty Insurance Company and Washington International Insurance Company have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers this 17th day of September, 2015.

North American Specialty Insurance Company
Washington International Insurance Company

State of Illinois
County of Cook ss:

On this 17th day of September, 2015, before me, a Notary Public personally appeared Steven P. Anderson, Senior Vice President of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company and Michael A. Ito, Senior Vice President of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.



[Signature]
M. Kenny, Notary Public

I, Jeffrey Goldberg, the duly elected Assistant Secretary of North American Specialty Insurance Company and Washington International Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said North American Specialty Insurance Company and Washington International Insurance Company, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 19th day of OCTOBER, 2016.

[Signature]
Jeffrey Goldberg, Vice President & Assistant Secretary of
Washington International Insurance Company & North American Specialty Insurance Company

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.

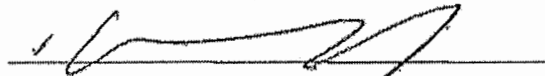
- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of 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
	NONE				

Contractor Name: BURTECH PIPELINE INCORPORATED

Certified By DOMINIC J. BURTECH Title PRESIDENT & CEO

Name



Signature

Date 10/20/2016

USE ADDITIONAL FORMS AS NECESSARY

**EQUAL BENEFITS ORDINANCE
CERTIFICATION OF COMPLIANCE**



For additional information, contact:
CITY OF SAN DIEGO

EQUAL BENEFITS PROGRAM
202 C Street, MS 9A, San Diego, CA 92101

COMPANY INFORMATION	
Company Name: BURTECH PIPELINE INCORPORATED	Contact Name: DOMINIC J. BURTECH
Company Address: 102 2ND STREET, ENCINITAS, CA 92024	Contact Phone: (760) 634-2822
	Contact Email: pipemaster7@cox.net

CONTRACT INFORMATION	
Contract Title: WATER AND SEWER GROUP JOB 954	Start Date: JAN. 2017
Contract Number (if no number, state location): K-17-1501-DBB-3-A	End Date: OCT. 2017

SUMMARY OF EQUAL BENEFITS ORDINANCE REQUIREMENTS

The Equal Benefits Ordinance [EBO] requires the City to enter into contracts only with contractors who certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the contract. To comply:

- Contractor shall offer equal benefits to employees with spouses and employees with domestic partners.
 - Benefits include health, dental, vision insurance; pension/401(k) plans; bereavement, family, parental leave; discounts, child care; travel/relocation expenses; employee assistance programs; credit union membership; or any other benefit.
 - Any benefit not offer an employee with a spouse, is not required to be offered to an employee with a domestic partner.
- Contractor shall post notice of firm's equal benefits policy in the workplace and notify employees at time of hire and during open enrollment periods.
- Contractor shall allow City access to records, when requested, to confirm compliance with EBO requirements.
- Contractor shall submit *EBO Certification of Compliance*, signed under penalty of perjury, prior to award of contract.

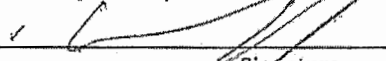
NOTE: This summary is provided for convenience. Full text of the EBO and Rules Implementing the EBO are available at www.sandiego.gov/administration.

CONTRACTOR EQUAL BENEFITS ORDINANCE CERTIFICATION

Please indicate your firm's compliance status with the EBO. The City may request supporting documentation.

- I affirm compliance with the EBO because my firm (*contractor must select one reason*):
- Provides equal benefits to spouses and domestic partners.
 - Provides no benefits to spouses or domestic partners.
 - Has no employees.
 - Has collective bargaining agreement(s) in place prior to January 1, 2011, that has not been renewed or expired.
- I request the City's approval to pay affected employees a cash equivalent in lieu of equal benefits and verify my firm made a reasonable effort but is not able to provide equal benefits upon contract award. I agree to notify employees of the availability of a cash equivalent for benefits available to spouses but not domestic partners and to continue to make every reasonable effort to extend all available benefits to domestic partners.

It is unlawful for any contractor to knowingly submit any false information to the City regarding equal benefits or cash equivalent associated with the execution, award, amendment, or administration of any contract. [San Diego Municipal Code §22.4307(a)] Under penalty of perjury under laws of the State of California, I certify the above information is true and correct. I further certify that my firm understands the requirements of the Equal Benefits Ordinance and will provide and maintain equal benefits for the duration of the contract or pay a cash equivalent if authorized by the City.

DOMINIC J. BURTECH / President & CEO		10/26/2016
Name/Title of Signatory	Signature	Date

FOR OFFICIAL CITY USE ONLY		
Receipt Date:	EBO Analyst:	<input type="checkbox"/> Approved <input type="checkbox"/> Not Approved – Reason:

(Rev 02/15/2011)

Bid Results for Project Water and Sewer Group Job 954 (K-17-1501-DBB-3-A)

Issued on 09/21/2016

Bid Due on October 26, 2016 2:00 PM (Pacific)

Exported on 10/27/2016

Vendor ID	Company Name	Address	City	Zip Code	Contact	Phone	Fax	Email	Vendor Type
289090	Burtech Pipeline Incorporated	102 Second Street	Encinitas	92024	Buddy Aquino	760-634-2822	760-634-2415	buddy@burtechpipeline.com	PQUAL,CADIR,Local

Responsee	Responsee Title	Responsee Phone	Responsee Email
Buddy Aquino	Chief Estimator	760-634-2822	buddy@burtechpipeline.com

Bid Format	Submitted Date	Delivery Method	Responsive	Status	Confirmation #	Ranking
Electronic	October 26, 2016 1:43:36 PM (Pacific)			Submitted	91575	0

Attachments		
File Title	File Name	File Type
Contractor's Certification of Pending Action	Contractor's Certification of Pending Action.pdf	General Attachments
Equal Benefits Ordinance	Equal Benefits Ordinance.pdf	General Attachments
Subcontractor Additive-Deductive Bid Bond	K-17-1501-DBB-3-A Subcontractor Additive Deductive.pdf Bid Bond.pdf	General Attachments Bid Bond

Line Items								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Reference	Unit Price	Line Total
1	Base Bid	524126	Bonds (Payment and Performance)	LS	1	2-4.1	\$29,766.30	\$29,766.30
2	Base Bid	238990	Video Recording of Existing Conditions	LS	1	7-9.1.1	\$2,000.00	\$2,000.00
3	Base Bid	237310	Traffic Control	LS	1	7-10.2.6	\$82,000.00	\$82,000.00
4	Base Bid	237310	Flashing Arrow Boards	EA	2	7-10.2.6	\$10,000.00	\$20,000.00
5	Base Bid	237310	Portable Changeable Message Signs (PCMS) (EOC Type I)	AL	1	7-10.2.6	\$5,000.00	\$5,000.00
6	Base Bid	541820	Exclusive Community Liaison Services	LS	1	7-16.4	\$25,000.00	\$25,000.00
7	Base Bid	237110	Mobilization	LS	1	9-3.4.1	\$65,000.00	\$65,000.00
8	Base Bid		Field Orders (EOC Type II)	AL	1	9-3.5	\$160,000.00	\$160,000.00
9	Base Bid	238910	Removal and Disposal of Railroad Tracks	LF	15	300-1.4	\$25.00	\$375.00
10	Base Bid	237310	Additional Pavement Removal & Disposal	CY	70	300-1.4	\$20.00	\$1,400.00
11	Base Bid	237310	Traffic Detector Loop Replacement	EA	51	302-1.12	\$600.00	\$30,600.00
12	Base Bid	237310	Asphalt Pavement Repair	SF	2500	302-3.2	\$4.50	\$11,250.00
13	Base Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type III and Striping	SF	187220	302-4.12.4	\$0.55	\$102,971.00
14	Base Bid	237310	Rubber Polymer Modified Slurry (RPMS) Type I over Type III and Striping	SF	20060	302-4.12.4	\$0.72	\$14,443.20
15	Base Bid	237310	Concrete Pavement	CY	20	302-6.8	\$450.00	\$9,000.00
16	Base Bid	237310	Crack Seal	LB	250	302-14.5	\$31.00	\$7,750.00
17	Base Bid	237310	Contractor Date Stamp and Impressions	EA	6	303-5.9	\$250.00	\$1,500.00
18	Base Bid	237310	Median Curb & Gutter Type B-2	LF	50	303-5.9	\$65.00	\$3,250.00
19	Base Bid	237310	Remove and Replace Existing Sidewalk	SF	350	303-5.9	\$15.00	\$5,250.00
20	Base Bid	237310	Additional Curb and Gutter Removal and Replacement	LF	100	303-5.9	\$65.00	\$6,500.00
21	Base Bid	237310	Additional Sidewalk Removal and Replacement	SF	650	303-5.9	\$15.00	\$9,750.00
22	Base Bid	237310	Curb Ramp Type A with Stainless Steel Detectable Warning Tiles	EA	5	303-5.10.2	\$4,800.00	\$24,000.00
23	Base Bid	237310	Curb Ramp Type B with Stainless Steel Detectable Warning Tiles	EA	1	303-5.10.2	\$4,800.00	\$4,800.00
24	Base Bid	237310	Curb Ramp Type D with Stainless Steel Detectable Warning Tiles	EA	2	303-5.10.2	\$4,800.00	\$9,600.00
25	Base Bid	237110	Trench Shoring	LS	1	306-1.1.6	\$20,000.00	\$20,000.00
26	Base Bid	237110	Additional Bedding	CY	40	306-1.2.1.1	\$10.00	\$400.00
27	Base Bid	237310	Temporary Resurfacing	TON	500	306-1.5.1	\$125.00	\$62,500.00
28	Base Bid	237110	Imported Backfill	TON	380	306-1.6	\$1.00	\$380.00

Bid Results for Project Water and Sewer Group Job 954 (K-17-1501-DBB-3-A)

Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Reference	Unit Price	Line Total
29	Base Bid	237110	16-Inch Water Main	LF	3820	306-1.6	\$216.50	\$827,030.00
30	Base Bid	237110	12-Inch Water Main	LF	655	306-1.6	\$268.50	\$175,867.50
31	Base Bid	237110	16-Inch Water Main, Class 305	LF	80	306-1.6	\$221.00	\$17,680.00
32	Base Bid	237110	Thrust Blocks and Anchor Blocks for 16 Inch and Larger Water Mains	EA	34	306-1.6	\$1,200.00	\$40,800.00
33	Base Bid	237110	2-Inch Fire Service Connection & Assembly	EA	1	306-1.6	\$6,700.00	\$6,700.00
34	Base Bid	237110	4-Inch Fire Service Connection & Assembly	EA	1	306-1.6	\$11,500.00	\$11,500.00
35	Base Bid	237110	6-Inch Fire Service Connection & Assembly	EA	4	306-1.6	\$11,500.00	\$46,000.00
36	Base Bid	237110	8-Inch Fire Service Connection & Assembly	EA	2	306-1.6	\$9,500.00	\$19,000.00
37	Base Bid	237110	6-Inch Fire Hydrant Assembly & Marker	EA	14	306-1.6	\$13,100.00	\$183,400.00
38	Base Bid	237110	16-Inch Butterfly Valve Class 250B	EA	14	306-1.6	\$4,800.00	\$67,200.00
39	Base Bid	237110	12-Inch Gate Valve	EA	6	306-1.6	\$3,500.00	\$21,000.00
40	Base Bid	237110	8-Inch Gate Valve	EA	2	306-1.6	\$2,000.00	\$4,000.00
41	Base Bid	237110	4-Inch Gate Valve	EA	2	306-1.6	\$1,600.00	\$3,200.00
42	Base Bid	237110	8-Inch Sewer Main	LF	500	306-1.6	\$149.00	\$74,500.00
43	Base Bid	237110	8-Inch Sewer Main, Spectral Strength SDR-26	LF	800	306-1.6	\$227.00	\$181,600.00
44	Base Bid	237110	Manholes (4' x 3'), PVC Lined	EA	6	306-1.8.6	\$21,000.00	\$126,000.00
45	Base Bid	237110	Connection to Existing Manhole and Rechanneling	EA	1	306-1.8.6	\$2,500.00	\$2,500.00
46	Base Bid	237110	6-Inch Sewer Lateral & Cleanout (Street)	EA	5	306-1.9.1	\$8,550.00	\$42,750.00
47	Base Bid	237110	4-Inch Sewer Lateral & Cleanout (Street)	EA	1	306-1.9.1	\$7,329.00	\$7,329.00
48	Base Bid	237110	Abandon Existing Manhole Outside of Trench	EA	6	306-5.3	\$2,000.00	\$12,000.00
49	Base Bid	237110	Abandon and Fill Existing 8-Inch Sewer Main Outside of Trench Limit	LF	1264	306-5.3	\$12.00	\$15,168.00
50	Base Bid	237110	Removal or Abandonment of Existing Water Facilities	LF	3700	306-5.3	\$3.00	\$11,100.00
51	Base Bid	237110	Removal of Abandoned Water Meter Box	EA	3	306-5.3	\$500.00	\$1,500.00
52	Base Bid	237110	Video Inspecting pipelines and culverts for Acceptance	LF	1300	306-9.7	\$1.50	\$1,950.00
53	Base Bid	237110	Cleaning and video inspecting pipelines and culverts	LF	2564	306-9.7	\$1.00	\$2,564.00
54	Base Bid	237110	Abandon Water Services (Stiff)	EA	5	306-13	\$300.00	\$1,500.00
55	Base Bid	237110	6-Inch Water Service	EA	1	306-14.1	\$4,800.00	\$4,800.00
56	Base Bid	237110	4-Inch Water Service	EA	4	306-14.1	\$10,250.00	\$41,000.00
57	Base Bid	237110	2-Inch Water Service	EA	12	306-14.1	\$9,750.00	\$117,000.00
58	Base Bid	237110	1-Inch Water Service	EA	12	306-14.1	\$8,555.00	\$102,660.00
59	Base Bid	237110	Water Meter Boxes	EA	5	306-15	\$800.00	\$4,000.00
60	Base Bid	237110	2-Inch Blow-off Valve Assembly	EA	1	306-18	\$4,000.00	\$4,000.00
61	Base Bid	541370	Survey Monuments	EA	5	309-4	\$1,000.00	\$5,000.00
62	Base Bid	237310	Continental Crosswalks	SF	3360	314-4.4.6	\$3.75	\$12,600.00
63	Base Bid	541330	Water Pollution Control Program Development	LS	1	701-13.9.5	\$575.00	\$575.00
64	Base Bid	237990	Water Pollution Control Program Implementation	LS	1	701-13.9.5	\$2,500.00	\$2,500.00
65	Base Bid	238910	Preparation of Waste Management Form	LS	1	702-9	\$5,000.00	\$5,000.00
66	Base Bid	238910	Site Storage and Handling of construction and demolition Waste	TON	100	702-9	\$1.00	\$100.00
67	Base Bid	238910	Disposal of construction and demolition Waste	TON	100	702-9	\$1.00	\$100.00
68	Base Bid	238990	Monitoring of Contaminated Soil	HR	100	703-20	\$110.00	\$11,000.00
69	Base Bid	238990	Preparation of Hazardous Waste Management Plan and Reporting	LS	1	703-20	\$5,200.00	\$5,200.00

Bid Results for Project Water and Sewer Group Job 954 (K-17-1501-DBB-3-A)

Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Reference	Unit Price	Line Total
70	Base Bid	238990	Testing, Sampling, Site Storage, and Handling of Soils Containing RCRA Hazardous Waste	TON	250	703-20	\$45.00	\$11,250.00
71	Base Bid	238990	Loading, Transportation and Disposal of soils containing RCRA Hazardous Waste	TON	250	703-20	\$200.00	\$50,000.00
72	Base Bid	238990	Testing, Sampling, Site Storage and Handling of Petroleum Contaminated Soil	TON	50	703-20	\$45.00	\$2,250.00
73	Base Bid	238990	Loading, Transportation, and Disposal of Petroleum Contaminated Soil	TON	50	703-20	\$150.00	\$7,500.00
74	Base Bid	238990	Testing, Sampling Site Storage and Handling of Soils Containing Non-RCRA Hazardous Waste	TON	250	703-20	\$45.00	\$11,250.00
75	Base Bid	238990	Loading, Transportation, and Disposal of Soils Containing Non-RCRA Hazardous Waste	TON	250	703-20	\$200.00	\$50,000.00
76	Base Bid	238990	Testing, Sampling, Site Storage, Handling, Transportation and Recycling/Disposal of Universal Waste	TON	50	703-20	\$218.00	\$10,900.00
77	Base Bid	238990	Testing, Sampling, Site Storage, Handling, Transportation and Recycling/Disposal of Regulated Waste	TON	50	703-20	\$300.00	\$15,000.00
78	Base Bid	238990	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water	GAL	100000	703-20	\$2.00	\$200,000.00
79	Base Bid	238990	Testing, Sampling, Site Storage, Handling, Transportation, and Disposal of Non-RCRA Hazardous Waste Contamination from the Treatment of Contaminated Ground Water	GAL	100000	703-20	\$2.00	\$200,000.00
80	Base Bid	238990	Dewatering Permit and Discharge Fees (EOC Type I)	AL	1	705-2.7	\$25,000.00	\$25,000.00
81	Base Bid	238990	Equipment Set Up for Hazardous Dewatering (EOC Type I)	AL	1	705-2.7	\$10,000.00	\$10,000.00
82	Base Bid	238990	Dewatering Hazardous Contaminated Water	LS	1	705-2.7	\$75,000.00	\$75,000.00
83	Base Bid	238990	Dewatering Non-Hazardous Contaminated Water	LS	1	705-2.7	\$75,000.00	\$75,000.00
84	Base Bid	541690	Suspension of Work - Resources	DAYS	5	707-1	\$300.00	\$1,500.00
85	Base Bid	541690	Archeological and Native American Monitoring Program	LF	4750	707-2	\$7.65	\$36,337.50
86	Base Bid	541690	Paleontological Monitoring Program	LF	890	707-3	\$4.65	\$4,138.50
87	Base Bid	541690	Archeological and Native American Mitigation and Curation (EOC Type I)	AL	1	707-4	\$10,000.00	\$10,000.00
88	Base Bid	541690	Paleontological Mitigation and Excavation	CY	890	707-5	\$1.00	\$890.00
89	Base Bid	237110	Handling and Disposal of Non-friable Asbestos Material	LF	165	708-6	\$15.00	\$2,475.00
90	Base Bid	237110	High-lining Removed by the Contractor	LF	655	600-1.2.1.3	\$1.50	\$982.50
91	Base Bid	237110	Pavement Restoration for City Forces Final Connection	SF	300	600-1.3.1.5	\$30.00	\$9,000.00
92	Base Bid	237110	Contractor Furnished Materials for City Forces Connection and Cut-in Work for Mains 16-Inch and Larger	LS	1	600-1.3.1.5	\$3,500.00	\$3,500.00
93	Base Bid	237110	Sewage Bypass and Pumping Plan (Diversion Plan)	LS	1	704-4	\$1,000.00	\$1,000.00
94	Base Bid	237110	16-Inch Connections to The Existing System by Contractor	EA	1	600-1.3.2.10	\$10,000.00	\$10,000.00
							Subtotal	\$3,756,892.50

Bld Results for Project Water and Sewer Group Job 954 (K-17-1501-DBB-3-A)

Alternate A								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Reference	Unit Price	Line Total
95	Alternate Items A	237110	High-lining Installation by the Contractor	LF	655	600-1.2.2.10	\$30.00	\$19,650.00
96	Alternate Items A	237110	High-lining Removed by the Contractor (deduct base bid item 90)	LF	-655	600-1.2.1.3	\$1.50	(\$982.50)
							Subtotal	\$18,667.50

Alternate B								
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Reference	Unit Price	Line Total
97	Alternate Items B	237110	8-Inch through 12-Inch Connections to The Existing System by Contractor	EA	1	600-1.3.2.10	\$10,000.00	\$10,000.00
98	Alternate Items B	237110	16-Inch Cut-in Tee by Contractor	EA	1	600-1.3.2.10	\$12,000.00	\$12,000.00
99	Alternate Items B	237110	16-Inch Connections to The Existing System by Contractor	EA	1	600-1.3.2.10	\$12,000.00	\$12,000.00
100	Alternate Items B	237110	Contractor Furnished Materials for City Forces Connection and Cut-in Work for Mains 16-inch and Larger. (deduct base bid item 92)	LS	-1	600-1.3.1.5	\$3,500.00	(\$3,500.00)
101	Alternate Items B	237110	Cut and Plug of The Existing System by Contractor	EA	8	600-1.4.9	\$6,000.00	\$48,000.00
102	Alternate Items B	237110	Pavement Restoration for City Forces Final Connection (deduct base bid item 91)	SF	-300	600-1.3.1.5	\$30.00	(\$9,000.00)
							Subtotal	\$69,500.00
							Total + Alternates	\$3,845,000.00

Subcontractors								
Name	Description	License Num	Amount	Type	Address	Address 2	City	Zip Code
Soclar's Contracting	Items 68-79 for Contaminated, Haz Waste Related Scopes	793838	\$670,250.00	CAU,MALE,SLBE	7437 Lowell Ct.		La Mesa	91942
Hanson Electric, Inc.	Item 11 Traffic Detector Loops Replacement	1006273	\$20,400.00	CAU,MALE,SLBE,DVBE,CADIR	P.O. Box 1230		Lakeside	92040
McGrath Consulting	Bid Item 63 - Water Pollution Control Program Development	11MH0281	\$500.00	ELBE,SDB	PO BOX 2488		El Cajon	92021
Pavement Coatings Co.	Items 13 & 14 RPMS Slurry Sealing	303609	\$84,349.60	PQUAL	10240 San Sevaline Way		Jurupa Valley	91752
LSI Road Marking	Items 13 & 14 Striping Only and Item 62 Continental Crosswalks	775886	\$31,775.89		P.O. Box 2426		El Cajon	92021
YBS CONCRETE INC.	Items 17 - 24 for Concrete Curb Ramps and PCC Flatworks	885270	\$57,500.00	CADIR,ELBE,IAT,MALE	821 KUHN DR. STE 204		CHULA VISTA	91914
Red Tail Monitoring & Research, Inc.	Bid Items 85-88 Archeological, Paleontological and Native American Monitoring & Mitigation	14RT1235	\$45,209.90	MALE,NAT,SLBE	P.O. Box 507 (mailing)	25 Eple Hill Road (physical)	Santa Ysabel	92070

Self-Performance
76.35%