City of San Diego

CONTRACTOR'S NAME: _____
ADDRESS: _____
TELEPHONE NO.: _____ **FAX NO.:** _____
CITY CONTACT: Jericho Gallardo, **Address**: 600 B Street, Suite 800, MS. 908 A, San Diego, CA 92101
E-mail: JGallardo@sandiego.gov, **Ph.** 619-533-7523, **Fax**. 619-533-5176

NB/CG/RIR

CONTRACT DOCUMENTS

For

ALVARADO TRUNK SEWER PHASE III

VOLUME 1 OF 2

BID NO.:	**K-13-5243-DBB-3-B**
SAP NO. (WBS/IO/CC):	**B-00481**
CLIENT DEPARTMENT:	**2011**
COUNCIL DISTRICT:	**7**
PROJECT TYPE:	**JB**

THIS CONTRACT IS SUBJECT TO THE FOLLOWING:

- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.

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



Ram Amen — 7/9/2012

For City Engineer — Date — Seal:

((((((((((((((((((ATTENTION))))))))))))))))))

The 2010 edition of the City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK") now contains the following distinct Contract Documents:

1) ***Equal Opportunity Contracting Program Requirements*** - This Contract Document sets forth the standard requirements for the City's equal opportunity contracting program. When additional requirements by the funding source e.g., federal or state agencies are physically included in the contract documents or by reference and there is a discrepancy, the funding source requirements shall govern unless specified otherwise in the Special Provisions.

2) ***City Supplement*** – The City Supplement shall be used in conjunction with the Standard Specifications for Public Works Construction ("The GREENBOOK"), 2009 Edition. The specifications contained in City Supplement take precedence over the specifications contained in The GREENBOOK, 2009 Edition.

   Certain parts of the City Supplement have been highlighted in yellow for the convenience of the users only and shall not affect the interpretation of the Contract.

To obtain The GREENBOOK contact the publisher at: http://www.bnibooks.com

The WHITEBOOK is available only in electronic format under Engineering Documents and References at: http://www.sandiego.gov/engineering-cip/

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REQUIRED DOCUMENTS SCHEDULE

The Bidder's attention is directed to the City's Municipal Code §22.0807(e), (3)-(5) for important information regarding grounds for debarment for failure to submit required documentation.

The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City's web site at: http://www.sandiego.gov/eoc/forms/index.shtml

ITEM	WHEN	BY	WHAT
1.	BID DUE DATE/TIME	ALL BIDDERS	Proposal (Bid)
2.	BID DUE DATE/TIME	ALL BIDDERS	Bid Bond
3.	BID DUE DATE/TIME	ALL BIDDERS	Non-collusion Affidavit to be Executed By Bidder and Submitted with Bid under 23 USC 112 and PCC 7106
4.	BID DUE DATE/TIME	ALL BIDDERS	Contractors Certification of Pending Actions
5.	BID DUE DATE/TIME	ALL BIDDERS	Equal Benefits Ordinance Certification of Compliance
6.	BID DUE DATE/TIME	ALL BIDDERS	Form AA35 - List of Subcontractors
7.	BID DUE DATE/TIME	ALL BIDDERS	Form AA40 - Named Equipment/Material Supplier List
8.	WITHIN 3 WORKING DAYS OF BID OPENING WITH GOOD FAITH EFFORT DOCUMENTS	ALL BIDDERS	Form AA60 – List of Work Made Available
9.	WITHIN 3 WORKING DAYS OF BID OPENING WITH GOOD FAITH EFFORT DOCUMENTS	ALL BIDDERS	Proof of Valid DBE-MBE-WBE-DVBE Certification Status e.g., Certs.
10.	WITHIN 3 WORKING DAYS OF BID OPENING WITH GOOD FAITH EFFORT DOCUMENTS	ALL BIDDERS	SLBE-ELBE Good Faith Documentations
11.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Pre-Award Schedule
12.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Phased Funding Schedule Agreement
13.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Names of the principle individual owners of the Apparent Low Bidder - In the event the firm is employee owned or publicly held, then the fact should be stated and the names of the firm's principals and officers shall be provided.
14.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	If the Contractor is a Joint Venture, the following information must be submitted: o Joint Venture Agreement o Joint Venture License

REQUIRED DOCUMENTS SCHEDULE

ITEM	WHEN	BY	WHAT
15.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Form BB05 - Work Force Report
16.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contract Forms - Agreement
17.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contract Forms - Payment and Performance Bond
18.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Certificates of Insurance and Endorsements
19.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractor Certification - Drug-Free Workplace
20.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractor Certification - American with Disabilities Act
21.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractors Standards - Pledge of Compliance
22.	BY 5th OF EACH MONTH	CONTRACTOR	Form CC20 - Monthly Employment Report
23.	BY 5th OF EACH MONTH	CONTRACTOR	Form CC25 - Monthly Invoicing Report
24.	PRIOR TO ACCEPTANCE	CONTRACTOR	Form CC10 - Contract Change Order (CCO)
25.	PRIOR TO ACCEPTANCE	CONTRACTOR	Form CC15 - Final Summary Report
26.	PRIOR TO ACCEPTANCE	CONTRACTOR	Affidavit of Disposal

SPECIAL NOTICE
SMALL LOCAL BUSINESS ENTERPRISES (SLBE)
AND
EMERGING LOCAL BUSINESS ENTERPRISES (ELBE)
PROGRAM

1. INTRODUCTION. This contract is subject to the requirements of the SLBE Program as specified in the SLBE-ELBE section of the City's EOCP Requirements included in The WHITEBOOK.

1.1. The Bidders are required to review The WHITEBOOK and become familiar with the detailed specifications including the required documentation and the submittal schedule as related to SLBE-ELBE program.

2. AMENDMENTS TO THE CITY'S GENERAL EOCP REQUIREMENTS.

III. Equal Employment Opportunity Outreach Program (A). DELETE in its entirety and **SUBSTITUTE** with the following:

A. Competitive Bids. If a contract is competitively solicited, the Apparent Low Bidder shall submit a *Work Force Report (Form BB05)* or an Equal Employment Opportunity (EEO) Plan, 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. AMENDMENTS TO THE CITY'S EOCP SLBE-ELBE REQUIREMENTS.

VIII. Subcontracting Efforts Review and Evaluation (2b)). DELETE in its entirety and **SUBSTITUTE** with the following:

b) "Make information of forthcoming opportunities available to SLBE-ELBE firms and arrange time for contracts and establish delivery schedules, where requirements permit, in a way that encourages and facilitates participation by SLBE-ELBE firms in the competitive process. This includes posting solicitations for bids or proposals for a minimum of 10 Working Days before the Bid or Proposal due date."

VIII. Subcontracting Efforts Review and Evaluation (3) and (4). DELETE in its entirety and **SUBSTITUTE** with the following:

3. Good Faith Effort Documentation Requirements

If the stated SLBE-ELBE subcontractor participation percentages are not met, the Bidder shall submit, within 3 Working Days of the Bid opening, information necessary to establish adequate good faith efforts were taken to meet the contract subcontractor participation percentages. The required documentation includes the following:

A. SLBE-ELBE WRITTEN SOLICITATION REQUIREMENTS

Bidders must solicit SLBE-ELBE firms on the City's approved SLBE-ELBE list. Solicitations for subcontract/vendor work must comply with the following requirements:

1. The solicitation must be project specific, dated and include bid number and project name. ***Solicitations must be made to the SLBE-ELBE firms at least 10 business days prior to bid opening.***

1.1. Broadcast solicitation is acceptable.

2. Solicitation must state which items or portions of work the bidder is requesting subcontractor/vendor pricing.

2.1 It is the bidder's responsibility to demonstrate that enough work sufficient to meet the SLBE-ELBE participation percentage was made available to SLBE-ELBE firms. The bidder should make as many items of work available as possible to meet the SLBE-ELBE participation percentage, and at a minimum an amount of work equal to the SLBE-ELBE participation percentage. If necessary to reach the SLBE-ELBE participation percentage, the work should include those items normally performed by the bidder with its own forces, supplies and even items with a dollar value below 1/2 of 1% of the total bid. Bidders shall utilize Form AA60

to demonstrate compliance with this requirement and submit the completed form with Good Faith Effort documentation.

3. Solicitation must state that plans and specs are available at no cost to interested SLBE-ELBE firms and how to obtain them.

4. Solicitations must state that assistance is available from the bidder for SLBE-ELBE firms in obtaining necessary equipment, supplies, or materials.

5. Solicitations must state that assistance is available from the bidder for SLBE-ELBE firms in obtaining bonding, lines of credit or insurance.

6. Bidder must solicit ALL City of San Diego Certified SLBE-ELBE firms who have the NAICS code for the subcontractor/vendor work sought by the general contractor.

   6.1. Bidders are not required to contact SLBE-ELBE firms that are noted as "General Contractor Only – Does not provide services as a subcontractor" in the PRISM compliance database or on the listing provided on the City website.

7. Bidders must provide copies of ***ALL*** solicitations with one of the following forms of verification ***that the solicitations were sent****: a)* If mailed: provide copies of the metered envelopes or certified mail receipts b) If faxed: provide copies of the fax transmittal confirmation sheet(s) c) If emailed: provide copies of the email delivery confirmation sheet(s). No credit shall be given for error messages, busy, cancelled, undeliverable, etc.

   7.1. When utilizing broadcast method bidder must clearly identify SLBE-ELBE firm on verification documentation submitted with GFE.

B. SLBE-ELBE WRITTEN SOLICITATION FOLLOW UP REQUIREMENTS

Bidders must follow-up with all SLBE – ELBE firms that were notified of the

subcontracting/vendor opportunities to determine their level of interest and commitment to bid the project. When following up with the SLBE – ELBE firms, the bidder must do the following:

1. Follow up communications must start no less than 5 business days prior to bid opening.

2. Bidders must make at least three follow-up telephone calls to each SLBE – ELBE firm.

    2.1. Bidders are not required to make and/or may stop making follow-up telephone calls once the SLBE-ELBE firm has provided written verification accepting or declining to bid the project. Written verification from SLBE-ELBE firm must be project specific.

    2.2. Bidders must provide copy of written verification received from SLBE-ELBE firms with Good Faith Effort documentation.

    2.3. Submit a telephone log, as proof of telephone calls, with the following requirements: project name, name of person making the phone call, name of firm contacted, contact person's name, date of call, time of call, and details of conversation.

C. SUBCONTRACT AWARD SUMMARY

Bidders must act in good faith with interested SLBE-ELBE firms and may only reject bids for legitimate business reasons. The bidder must submit the following documentation:

1. A ***DETAILED*** summary sheet which includes bid item number, scope of work, subcontractor/vendor name, bid amount, certification type, subcontractor/vendor selection and reason for selection / non-selection of all the subcontractors/vendors that responded.

2. Copies of all subcontract/vendor bids received including bids for areas of work that were not included in the outreach and bids from both certified and non-certified subcontractors/vendors. If the Bidder decides to Self-Perform a scope of work, the Bidder ***MUST*** submit a detailed bid to show that the Bidder's price is competitive to the price of the subcontractors/vendors that responded to outreach efforts. All verbal bids ***MUST*** be substantiated by corresponding written bid from subcontractors/vendors.

D. OUTREACH ASSISTANCE REQUIREMENTS

Written notice of subcontractor/vendor opportunities must be forwarded to local organizations or groups to assist with outreach efforts. When contacting local organizations or groups, the Bidder ***must do*** the following:

1. Contact a minimum of 5 local organizations or groups to provide assistance in contacting, recruiting and using SLBE-ELBE firms by written notice. For a listing of organizations or groups offering assistance, please visit the City of San Diego Equal Opportunity Contracting home page at http://www.sandiego.gov/eoc/

2. Written notice must indicate the date of the notice and name of the local organization or group. ***Written notices must be forwarded to the organizations or groups at least 10 business days prior to bid opening.***

3. Written notice must state which items or portions of work the bidder is requesting subcontractor/vendor pricing.

3.1. It is the bidder's responsibility to demonstrate that enough work sufficient to meet the SLBE-ELBE participation percentage was made available to SLBE-ELBE firms. The bidder should make as many items of work available as possible to meet the SLBE-ELBE participation percentage, and at a minimum an amount of work equal to the SLBE-ELBE participation percentage. If necessary to reach the SLBE-ELBE participation percentage, the work should include those items normally performed by the bidder with its own forces, supplies and even items with a dollar value below 1/2 of 1% of the total bid. Bidders shall utilize Form AA60 to demonstrate compliance with this requirement and submit the completed form with Good Faith Effort documentation.

4. Written notice must state that plans and specs are available at no cost to interested SLBE-ELBE firms and how to obtain them.

5. Written notice must state that assistance is available from the bidder for SLBE-ELBE firms in obtaining necessary equipment, supplies, or materials.

6. Written notice must state that assistance is available from the bidder for SLBE-ELBE firms in obtaining bonding, lines of credit or insurance.

7. Bidders must provide copies of ***ALL*** notices with one of the following forms of verification that the notices were sent: a) If mailed: provide copies of the metered envelopes or certified mail receipts b) If faxed: provide copies of the fax transmittal confirmation sheet(s) c) If emailed: provide copies of the email delivery confirmation sheet(s). No credit shall be given for error messages, busy, cancelled, undeliverable, etc.

XI. Suppliers. Last paragraph, DELETE in its entirety and SUBSTITUTE with the following:

For the purpose of achieving the mandatory subcontractor participation percentage, the City will not account for the Field Orders, Additive or Deductive, and Allowance Bid Items (when shown by the City as Allowance – Type II in the Bid and Proposal forms) in the calculation. Allowance – Type I Bid Items are part of the Base Bid integral to the SOW.

4. SUBCONTRACTING PARTICIPATION PERCENTAGES. The Bidders are encouraged to take positive steps to diversify and expand their subcontractor solicitation base and to offer contracting opportunities to all certified Subcontractors including SLBEs, ELBEs, DBEs, MBEs, WBEs, DVBEs and OBEs.

4.1. 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 9.1%
2. ELBE participation 12.6%
3. Total mandatory participation 21.7%

4.2. For the purpose of achieving the mandatory subcontractor participation percentage, the City will not account for the Field Orders, Additive or Deductive, and Allowance Bid Items (when shown by the City as Allowance – Type II in the Bid and Proposal forms) in the calculation. Allowance – Type I Bid Items are part of the Base Bid integral to the SOW.

5. PRE-BID CONFERENCE. A Pre-Bid Conference is scheduled for this contract as specified in the Invitation to Bids. The purpose of this meeting is to inform Bidders of the submittal requirements and provisions relative to the SLBE Program. Bidders are strongly

encouraged to attend the Pre-Bid Conference to better understand the Good Faith Effort requirements of this contract.

6. **MANDATORY CONDITIONS.** Bid will be declared **non-responsive** if the Bidder fails the following mandatory conditions.

6.1. Bidder's inclusion of SLBE-ELBE certified subcontractors at the overall mandatory participation percentage identified in this document; **OR**

6.2. Bidder's submission of Good Faith Effort documentation demonstrating the Bidder made a good faith effort to outreach to and include SLBE-ELBE Subcontractors required in this document within 3 Working Days of the Bid opening if the overall mandatory participation percentage is not met.

7. **BID DISCOUNT.** This contract **is not** subject to the Bid Discount program as described in The WHITEBOOK, SLBE-ELBE Program Requirements, Section IV(2).

8. **RESOURCES.** The current list of certified SLBE-ELBE firms can be found on the EOC Department website at **http://www.sandiego.gov/eoc/**

CITY OF SAN DIEGO, CALIFORNIA

INVITATION TO BIDS

1. **RECEIPT AND OPENING OF BIDS:** Bid(s) will be received at the Public Works Contracting Group at **1200 THIRD AVENUE, SUITE 200, SAN DIEGO, CA 92101 UNTIL 2:00 PM ON JULY 23, 2012** for performing work on the following project (Project):

   ALVARADO TRUNK SEWER PHASE III

2. **DESCRIPTION OF WORK:** The Work involves furnishing all labor, materials, equipment, services, and other incidental works and appurtenances for the construction of the Project as described below:

   Installation of approximately 1,290 new linear feet (LF) of pipe as follows: 797 LF of open cut (66 LF 8-inches, 731 LF 15-inches) and 493 LF of tunneling. Abandonment of existing 8, 10 & 12-inch of approximately 2,291 linear feet of existing sewer occurring between Alvarado Canyon Road and San Diego State University (SDSU) and replacement of junction structure Manhole No. 1. Implementation of the proposed project would result in impacts related to abandonment of existing manholes, manhole replacement, jack-and-bore work areas (i.e. jacking pit areas and receiver pits), temporary access roads, and staging areas.

   - Bid No. **K-13-5243-DBB-3-B** and Plans numbered **31650-1-D** through **31650-15-D**; and **31650-T1-D** through **31650-T2**-D, inclusive.

3. **ENGINEER'S ESTIMATE:** The Engineer's estimate of the most probable price for this contract is **$3,420,000.00**.

4. **LOCATION OF WORK:** The location of Work is Citywide unless specified otherwise as follows:

   SDSU Parking Lot X and Canyon Crest Drive, San Diego

5. **CONTRACT TIME:** The Contract Time for completion of the Work shall be **188 Working Days**.

6. **SUPPLEMENTAL AGREEMENTS:** Supplemental agreements attached to this contract for the items of Work such as extended re-vegetation maintenance and monitoring and emulsion aggregate slurry shall be signed upon the request from the Engineer and prior to Acceptance. The signed agreements shall be accompanied by the evidence of separate bond (i.e., labor and materials) and insurance (i.e., Commercial General Liability Insurance, Commercial Automobile Liability Insurance, and Workers' Compensation Insurance) as specified in 2-4, "CONTRACT BONDS," 7-3, "LIABILITY INSURANCE," and 7-4 WORKERS' COMPENSATION INSURANCE. Bonds shall be in amount of the Contract Price for the Work included in the supplemental agreements.

7. **CONTRACTOR'S LICENSE CLASSIFICATION**: In accordance with the provisions of California Law, the Contractor shall possess valid appropriate license(s) at the time that the Bid is submitted. Failure to possess the specified license(s) shall render the Bid as **non-responsive** and shall act as a bar to award of the Contract to any Bidder not possessing required license(s) at the time of Bid.

   The City has determined the following licensing classification(s) for this contract:

Option	Classification(s)
1	CLASS A
2	CLASS C34
3	CLASS C42

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

8. **PRE-BID CONFERENCE:** There will be a Pre-Bid Conference to discuss the scope of the Project, bidding requirements, and Equal Opportunity Contracting Program requirements and reporting procedures in the Public Works Contracting Group, Conference Room at 1200 Third Avenue, Suite 200, San Diego, CA 92101 **at 10:00 A.M., on JULY 17, 2012.**

   All potential bidders are encouraged to attend.

   To request a copy of the agenda on an alternative format, or to request a sign language or oral interpreter for this meeting, call the Public Works Contracting Group at (619)236-6000 at least 5 Working Days prior to the Pre-Bid Conference to ensure availability.

9. **CITY PROJECT MANAGER CONTACT INFORMATION:**

   See the cover of the Contract Documents.

10. **REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

    1. STANDARD SPECIFICATIONS

Document No.	Filed	Description
PITS0504091	05-04-09	Standard Specifications for Public Works Construction (The GREENBOOK), 2009 Edition
PITS090110-1	09-01-10	City of San Diego Standard Specifications for Public Works Construction (The WHITEBOOK), 2010 Update *
AEC1231064	12-31-06	California Department of Transportation, Manual of Uniform Traffic Control Devices (MUTCD 2006)
769023	09-11-84	Standard Federal Equal Employment Opportunity Construction Contract Specifications and the Equal Opportunity Clause

    NOTE: The City of San Diego Supplement, 2010 Update now consolidates various City Public Works Construction Standard Specifications which in the past were included in the

Supplementary Special Provisions. The Bidders' attention is directed to this edition of the City Supplement for a close review to ensure no important information is missed for the preparation of the Bids.

2. STANDARD DRAWINGS

Document No.	Filed	Description
AEC1230163	12-31-06	City of San Diego Standard Drawings*
N/A	Varies	City Standard Drawings - Updates Approved For Use (when specified)*
AEC0925061	09-25-06	Caltrans 2006 U.S. Customary Unit Standard Plans

NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/engineering-cip.

11. **WAGE RATES**: Prevailing wages are not applicable to this project unless specified otherwise on the cover page of these specifications and when included in these specifications. See Funding Agency Provisions that follow this Invitation to Bid for more information.

12. **INSURANCE REQUIREMENTS:** Upon receipt of the City's Notice of Intent to Award letter, the Contractor will be asked to submit all certificates of insurance and endorsements to the City.

    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.

    You must ensure all required insurance certificates and endorsements are submitted accurately and on time. Failure to provide the requisite insurance documents by the date stated in the City's Notice of Intent to Award will result in delay of contract award and may result in annulment of the contract award or other more severe sanctions as provided in the City's Municipal Code §22.0807(e),(3)-(5).

13. **PHASED FUNDING:** The Apparent Low Bidder will be required to provide a Pre-award Schedule in accordance with sections 9-3 and 6-1 of the Supplementary Special Provisions (SSP) prior to award of Contract.

Tony Heinrichs
Director
Public Works Department

INSTRUCTIONS TO BIDDERS

1. **PREQUALIFICATION OF CONTRACTORS:** The contractor(s) who intend to submit Bid or Proposal in response to this invitation to bid, or RFP's for GRC or As-Needed Design-Build Task Orders valued over $50,000, must be pre-qualified for total amount proposed, inclusive of all alternate bid items or the specified Task Order limits prior to the date of Bid 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, will be deemed **non-responsive** and ineligible for award or a Task Order authorization. Complete information and prequalification questionnaires are available at:

   http://www.sandiego.gov/engineering-cip/services/consultcontract/prequal.shtml

   The completed questionnaire, financial statement, and bond letter or a copy of the contractor's SLBE-ELBE certification and bond letter, must be submitted no later than 2 weeks prior to the bid opening to the Public Works Department - Engineering & Capital Projects, Prequalification Program, 1010 Second Avenue, Suite 1200, San Diego, CA 92101. For additional information or the answer to questions about the prequalification program, please contact David Stucky at 619-533-3474 or dstucky@sandiego.gov.

2. **CONTRACTOR REGISTRATION:** Prospective bidder(s) as well as existing contractors and suppliers are required to register with the City's EOCP. Refer to 2-17, "CONTRACTOR REGISTRATION" for details.

3. **CITY'S RESPONSES AND ADDENDA:** The City at its option, may respond to any or all questions submitted in writing, via letter, or FAX in the form of an addendum. No oral comment 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 on the form provided for this purpose in the Bid.

4. **CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Invitation to 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 Invitation to Bid shall be the sole responsibility of each bidder. The Invitation to Bid creates or imposes no obligation upon the City to enter a contract.

5. **CONTRACT PRICING FORMAT:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth in the Bid Proposal Form(s), Volume 2 unless specified otherwise such as as-needed contracts e.g., GRC in the Contract Documents.

6. **SUBMITTAL OF "OR EQUAL" ITEMS:** See 4-1.6, "Trade Names or Equals."

7. **AWARD PROCESS:** The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award, including the submittal of acceptable insurance and surety bonds pursuant to San Diego Municipal Code § 22.3007. If the responsible Bid does not exceed the City's engineering estimate, the City will, in most cases, prepare contract documents for execution within 3 weeks of the date of the Bid opening and award the Contract within 5 Working Days of receipt of properly executed Contract, bond, and insurance documents.

This contract is deemed to be awarded, and effective, only upon the signing of the Contract by the Mayor or designee of the City.

8. **SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 2-3, "SUBCONTRACTS" which requires the Contractor to perform not less than the amount therein stipulated with its own forces. Failure to comply with these requirements may render the Bid **non-responsive** and ineligible for award.

9. **AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: http://www.sandiego.gov/engineering-cip/services/consultcontract/advertising.shtml. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Public Works Contracting Group.

10. **QUESTIONS:** Questions about the meaning or intent of the Contract Documents as related to the scope of Work and of technical nature shall be directed to the Project Manager prior to Bid opening. Interpretations or clarifications considered necessary by the Project Manager in response to such questions will be issued by Addenda, which will be uploaded to eBidboard (or mailed or delivered to all parties recorded by the City as having received the Contract Documents for Minor Construction contracts i.e., valued less than $500,000).

    The Director (or designee), Public Works Department is the officer responsible for opening, examining, and declaring of 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 and communications in these areas of responsibility e.g., i.e. Pre-qualification, EOCP information, bidding activities, bonds and insurance, etc. as related to this contract shall be addressed to the Public Works Contracting Group, Contract Administrator, 1200 Third Avenue, Suite 200, San Diego, California, 92101, Telephone No. (619) 236-6000.

    Questions received less than 14 days prior to the date for opening of Bids may not be answered. Only questions answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. It is the Bidder's responsibility to become informed of any addenda that have been issued and to include all such information in its Bid.

11. **ELIGIBLE BIDDERS:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than 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.

12. **SAN DIEGO BUSINESS TAX CERTIFICATE:** All Contractors, including 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, before the Contract can be executed.

13. **PROPOSAL FORMS:** Bid shall be made only upon the Bidding Documents i.e., Proposal form attached to and forming a part of the specifications. The signature of each person signing shall be in longhand.

The entire specifications for the bid package do not need to be submitted with the bid. Bidder shall complete and submit, only, all pages in the "Bidding Document" Section (see Volume 2) as their Bid per the schedule given under "Required Documents Schedule," (see Volume 1). Bidder is requested to retain for their reference other portions of the Contract Documents that are not required to be submitted with the Bid.

The City may require any Bidder to furnish a statement of experience, financial responsibility, technical ability, equipment, and references.

Bids and certain other specified forms and documents shall be enclosed in a sealed envelope and shall bear the title of the work and name of the Bidder and the appropriate State Contractors License designation which the Bidder holds.

Bids may be withdrawn by the Bidder prior to, but not after, the time fixed for opening of Bids.

14. BIDDERS' GUARANTEE OF GOOD FAITH (BID SECURITY):

With the exception of the contracts valued $5,000 or less, GRC and Design-Build contracts, and contracts subject to the Small and Local Business Program of $250,000 or less e.g., ELBE contracts, each Bidder shall accompany its Bid with either a cashier's check upon some responsible bank, or a check upon such bank properly certified or an approved corporate surety bond payable to the City of San Diego, for an amount of not less than 10% of the aggregate sum of the Bid, which check or bond, and the monies represented thereby shall be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into such contract and furnish the required final bonds.

The Bidder agrees that in case of Bidder's refusal or failure to execute this contract and give required final bonds, the money represented by a cashier's or certified check shall remain the property of the City, and if the Bidder shall fail to execute this contract, the Surety agrees that it will pay to the City damages which the City may suffer by reason of such failure, not exceeding the sum of 10% of the amount of the Bid.

A Bid received without the specified bid security will be rejected as being **non-responsive**.

15. AWARD OF CONTRACT OR REJECTION OF BIDS:

This contract may be awarded to the lowest responsible and reliable Bidder (for Design-Build contracts refer to the RFP for the selection and award information). Bidders shall complete the entire Bid schedule (e.g., schedule of prices). Incomplete price schedules will be rejected as being **non-responsive**.

The City reserves the right to reject any or all Bids, and to waive any informality or technicality in Bids received and any requirements of these specifications as to bidding procedure.
Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City from the Bidder within 3 Working Days, excluding Saturdays, Sundays, and state holidays, after the opening of Bids, of written notice which includes proof of honest, credible, clerical error of material nature, free from fraud or fraudulent intent, and of evidence that reasonable care was observed in the preparation of the Bid.

A non-selected Bidder may protest award of the Contract to the selected Bidder by submitting a written "Notice of Intent to Protest" including supporting documentation which shall be received by Public Works Contracting Group no later than 10 days after the City's announcement of the selected Bidder or no later than 10 days from the date that the City issues notice of designation of

a Bidder as non-responsible in accordance with San Diego Municipal Code Chapter 2, § 22.3029, "Protests of Contract Award."

The City of San Diego will not discriminate with regard to race, religious creed, color, national origin, ancestry, physical handicap, marital status, sex or age, in the award of contracts.

Each Bid package properly executed as required by these specifications shall constitute a firm offer, which may be accepted by the City within the time specified in the Invitation to Bids.

The City reserves the right to evaluate all Bids and determine the lowest Bidder (or winner for Design-Build contracts) on the basis of any proposed alternates, additive items or options, at its discretion.

16. **BID RESULTS:** The Bid opening by the City shall constitute the public announcement of the Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts). In the event that the Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts) is subsequently deemed non-responsive or non-responsible, a public announcement will be posted in the City's web page, with the name of the newly designated Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts).

    To obtain Bid results, either attend Bid opening, review the results on the City's web site, or provide a self-addressed, stamped envelope, referencing Bid number, and Bid tabulation will be mailed to you upon verification of extensions. Due to time constraints, Bid results cannot be given out over the telephone.

17. **THE CONTRACT:** 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 10 Working Days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.

    If the Bidder takes longer than 10 Working 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.

    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.

    For contracts that are not Design-Build, 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 10 Working 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.

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. 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.

18. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK: The Bidder shall examine carefully the Project Site, the Plans and Specifications, the GRC Unit Price Books if applicable, other materials as described in the Special Provisions, Section 2-7, and the proposal forms (e.g., Bidding Documents) therefore. The submission of a Bid or GRC Task Order Proposal 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.

19. DRUG-FREE WORKPLACE:

a) General:

City projects are subject to City of San Diego Resolution No. R-277952 adopted on May 20, 1991. Bidders shall become aware of the provisions of Council Policy 100-17 which was established by Resolution No. R-277952. The policy applies equally to the Contractor and Subcontractors. The elements of the policy are outlined below.

b) Definitions:

"Drug-free workplace" means a site for the performance of work done in connection with a contract let by City of San Diego for the construction, maintenance, or repair of any facility or public work by an entity at which employees of the entity are prohibited from engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in accordance with the requirements of this section.

"Employee" means the employee of a contractor directly engaged in the performance of work pursuant to a contract as described in Section 3, "City Contractor Requirements."

"Controlled substance" means a controlled substance in schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. Sec. 812).

"Contractor" means the department, division, or other unit of a person or organization responsible to the contractor for the performance of a portion of the work under the contract.

c) City Contractor Requirements:

Every person or organization awarded a contract or grant by the City of San Diego for the provision of services shall certify to the City that it will provide a drug-free workplace by doing all following:

a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's organization's workplace and specifying the actions that will be taken against employees for violations of the prohibition.

b. Establishing a drug-free awareness program to inform employees about all of the following:

i. The dangers of drug abuse in the workplace.
ii. The person's or organization's policy of maintaining a drug-free workplace.
iii. Any available drug counseling, rehabilitation, and employee assistance programs.
iv. The penalties that may be imposed upon employees for drug abuse violations.

c. Posting the statement required by subdivision (1) in a prominent place at contractor's main office. For projects large enough to necessitate a construction trailer at the job site, the required signage would also be posted at the Site.

The Contractor shall include in each subcontract agreement language which indicates the Subcontractor's agreement to abide by the provisions of subdivisions a) through c) above. The Contractors and Subcontractors shall be individually responsible for their own drug-free workplace programs.

Note: The requirements of a drug-free awareness program can be satisfied by periodic tailgate sessions covering the various aspects of drug-abuse education. Although an in-house employee assistance program is not required, contractors should be able to provide a listing of drug rehabilitation and counseling programs available in the community at large.

Questions about the City's Drug-free Workplace Policy shall be referred to the Contract Specialist, Public Works Contracting Group.

20. AMERICANS WITH DISABILITIES ACT:

a) General: City projects are subject to City of San Diego Resolution No. R-282153 adopted on June 14, 1993. The Bidders shall become aware of the provisions of Council Policy 100-04 which was established by Resolution No. R-282153. The policy applies equally to the Contractor and all Subcontractors. The elements of the policy are outlined below.

b) Definitions:

"Qualified individual with a disability" means an individual with a disability who satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

"Employee" means the employee of the Contractor directly engaged in the performance of Work.

c) The City Requirements: Every person or organization entering into a contractual agreement with or receiving a grant from the City of San Diego shall certify to the City of San Diego that it will comply with the ADA by adhering to all of the provisions of the ADA listed below.

i. The Contractor shall not discriminate against qualified persons with disabilities in any aspects of employment, including recruitment, hiring, promotions, conditions

and privileges of employment, training, compensation, benefits, discipline, layoffs, and termination of employment.

ii. No qualified individual with a disability may be excluded on the basis of disability, from participation in, or be denied the benefits of services, programs, or activities by the Contractor or Subcontractors providing services for the City.

iii. The Contractor shall post a statement addressing the requirements of the ADA in a prominent place at the worksite. The Contractor shall include in each subcontract agreement, language which indicates the Subcontractor's agreement to abide by the provisions of subdivisions (a) through (c) inclusive of Section 3. The Contractor and Subcontractors shall be individually responsible for their own ADA employment programs. Questions about the City's ADA Policy should be referred to the Contract Administrator.

21. CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE: This contract is subject to City of San Diego Municipal Code §22.3224 as amended 11/24/08 by ordinance O-19808. Bidders shall become aware that the requirements apply to Contractors and Subcontractors for contracts greater than $50,000 in value.

Upon award, amendment, renewal, or extension of this contract, the Contractors shall complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section.

The Contractors shall ensure that their Subcontractors whose subcontracts are greater than $50,000 in value complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section. Subcontractors may access the Pledge of Compliance at:

http://www.sandiego.gov/purchasing/pdf/contractor_standards_questionnaire.pdf.

The Contractors shall include in each subcontract agreement, language which requires Subcontractors to abide by the provisions of City of San Diego Municipal Code §22.3224. A sample provision is as follows:

> "**Compliance with San Diego Municipal Code §22.3224**: Subcontractor acknowledges that it is familiar with the requirements of San Diego Municipal Code §22.3224 ("Contractor Standards"), and agrees to comply with requirements of that section. The Subcontractor further agrees to complete the Pledge of Compliance, incorporated herein by reference."

22. NOTICE OF LABOR COMPLIANCE PROGRAM APPROVAL: The City of San Diego received initial approval as a Labor Compliance Program on August 11, 2003. The Labor Compliance Program Manual is available at:

http://www.sandiego.gov/eoc/laborcompliance/#manual.

The limited exemption from prevailing wages pursuant to Labor Code §1771.5(a) does not apply to contracts under jurisdiction of the Labor Compliance Program. Inquiries, questions, or assistance about the Labor Compliance Program should be directed to: Equal Opportunity Contracting Program, 1200 Third Ave., Suite 200 MS56P, San Diego, CA 92101, Tel. 619-236-6000.

23. **PAYROLL RECORDS:** The Contractor's attention is directed to the City of San Diego Labor Compliance Program, Section IV, pages 4-7, and the State of California Labor Code §§ 1771.5(b) and 1776 (Stats. 1978, Ch. 1249). These require, in part, that the Contractor and Subcontractors maintain and furnish to the City, at a designated time, a certified copy of each weekly payroll containing a statement of compliance signed under penalty of perjury.

    The Contractor and Subcontractors shall submit weekly certified payrolls online via Prism® i.e., the City's web-based labor compliance program. Instructions on how to use the system will be provided to the Contractor after the award.

    The Contractor shall be responsible for the compliance with these provisions by Subcontractors. The City shall withhold contract payments when payroll records are delinquent or inadequate, or when it is established after investigation that underpayment has occurred.

24. **APPRENTICES ON PUBLIC WORKS:** The Contractor shall abide by the requirements of §§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.

25. **EQUAL BENEFITS:** This contract is subject to the City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of the San Diego Municipal Code (SDMC).

    In accordance with the EBO, Bidders shall certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the Contract (SDMC §22.4304(f)). Failure to maintain equal benefits is a material breach of the Contract (SDMC §22.4304(e)). The Contractor shall notify employees of their equal benefits policy at the time of hire and during open enrollment periods and shall post a copy of the following statement in an area frequented by employees:

    > "During the performance of a contract with the City of San Diego, this employer will provide equal benefits to its employees with spouses and its employees with domestic partners."

    The Contractor shall give the City access to documents and records sufficient for the City to verify the contractors are providing equal benefits and otherwise complying with EBO requirements.

    Full text of the EBO and the Rules Implementing the Equal Benefits Ordinance are posted on the City's website at www.sandiego.gov/purchasing/ or can be requested from the Equal Benefits Program at (619) 533-3948.

26. **LIMITED COMPETITION:** When designated as restricted competition on the cover page, this contract may only be bid by the Contractors on the approved SLBE-ELBE Construction Contractors List. For information regarding the SLBE-ELBE Construction Program and registration visit the City's web site: http://www.sandiego.gov.

27. **PRE-AWARD ACTIVITIES:**

    Pre-award Submittals - The Apparent Low Bidder (or winner in case of Design-Build contracts) shall provide the information required within the time specified in "Required Documents," of this bid package. Failure to provide the information within the time specified may result in the Bid being rejected as **non-responsive**.

If the Bid is rejected as non-responsive, the Apparent Low Bidder (or winner in case of Design-Build contracts) shall forfeit the Bid Security required under Invitation to Bids, of this bid package. The decision that the Apparent Low Bidder (or winner in case of Design-Build contracts) is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

Pre-award Schedule and Phased Funding - For phased funded contracts, One of the Pre-award Submittals is the Pre-award Schedule which is a cost loaded CPM schedule prepared in accordance with section 6-1.1, "Construction Schedule." The Apparent Low Bidder (or the apparent winner in case of Design-Build contracts) shall review subsection 6-1.4, "Phased Funding" and submit the required information as specified.

CONTRACT FORMS
AGREEMENT

CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and **Ortiz Corporation**, herein called "Contractor" for construction of **Alvarado Trunk Sewer Phase III**; Bid No.**K-13-5243-DBB-3-B**; in the amount of **Two Million Six Hundred Eighty-Six Thousand Three Hundred Seventy-Three Dollars and 00/100 ($2,686,373.00),** which is comprised of the Base Bid.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:

   (a) The attached Faithful Performance and Payment Bonds.
   (b) The attached Proposal included in the Bid documents by the Contractor.
   (c) That certain documents entitled **Alvarado Trunk Sewer Phase III**, on file in the office of the City Clerk as **Document No. B-00481**, as well as all matters referenced therein.

2. 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 **Alvarado Trunk Sewer Phase III**, Bid Number: **K-13-5243-DBB-3-B,** 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 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 FORMS (continued)
AGREEMENT

IN WITNESS WHEREOF, this agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to **Resolution No. R – 307302** authorizing such execution.

THE CITY OF SAN DIEGO

By Tony Heinrichs

Print Name: Tony Heinrichs
Mayor or designee

Date: 10/24/12

APPROVED AS TO FORM AND LEGALITY

Jan I. Goldsmith, City Attorney

By Pedro DeLara, Jr.

Print Name: Pedro DeLara Jr.
Deputy City Attorney

Date: 10/24/12

CONTRACTOR

By Marcelino E Ortiz

Print Name: MARCELINO E. ORTIZ

Title: PRESIDENT

Date: 08/20/2012

City of San Diego License No.: B1996008117

State Contractor's License No.: 602454

CONTRACT FORMS (continued)
PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND

Issued in Triplicate

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

Ortiz Corporation, a corporation, as principal, and International Fidelity 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 **Two Million Six Hundred Eighty-Six Thousand Three Hundred Seventy-Three Dollars and 00/100 ($2,686,373.00)**, for the faithful performance of the annexed contract, and in the sum of **Two Million Six Hundred Eighty-Six Thousand Three Hundred Seventy-Three Dollars and 00/100 ($2,686,373.00)**, for the benefit of laborers and materialmen designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract **Alvarado Trunk Sewer Phase III**, Bid Number: **K-13-5243-DBB-3-B**, 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 Chapter 3 of Division 5 of Title I of the Government Code of the State of California or under the provisions of Section 3082 et seq. of the Civil Code of the State of California.

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

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

Dated August 16, 2012

Approved as to Form and Legality

Jan I. Goldsmith, City Attorney

By _____
Deputy City Attorney

Approved:

By _____
Tony Heinrichs, Director of Public Works

Ortiz Corporation
Principal

By _____
Marcelino E. Ortiz, President
Printed Name of Person Signing for Principal

International Fidelity Insurance Company
Surety

By _____
Attorney-in-fact
Sioux Munyon
13400 Sabre Springs Parkway, #245
Local Address of Surety

San Diego CA 92128
Local Address (City, State) of Surety

858-513-1795
Local Telephone No. of Surety

Premium may be adjusted based on Final Contract amount

Premium $ 20,261.00

Bond No. 0595879

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of San Diego

On August 16, 2012 (Date) before me, Kimberely C. Miller, Notary Public (Here Insert Name and Title of the Officer),

personally appeared Sioux Munyon (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: _____ (Signature of Notary Public)

KIMBERLEY C. MILLER
COMM. #1847744
NOTARY PUBLIC • CALIFORNIA
SAN DIEGO COUNTY
Comm. Exp. JUNE 2, 2013
MGC1 MGC1

Place Notary Seal Above

OPTIONAL

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

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	RIGHT THUMBPRINT OF SIGNER	Signer's Name: _____	RIGHT THUMBPRINT OF SIGNER
☐ Corporate Officer — Title(s): _____	Top of thumb here	☐ Corporate Officer — Title(s): _____	Top of thumb here
☐ Individual		☐ Individual	
☐ Partner — ☐ Limited ☐ General		☐ Partner — ☐ Limited ☐ General	
☒ Attorney in Fact		☐ Attorney in Fact	
☐ Trustee		☐ Trustee	
☐ Guardian or Conservator		☐ Guardian or Conservator	
☐ Other: _____		☐ Other: _____	
Signer Is Representing: _____		Signer Is Representing: _____	

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Tel (973) 624-7200

POWER OF ATTORNEY

INTERNATIONAL FIDELITY INSURANCE COMPANY
ALLEGHENY CASUALTY COMPANY

ONE NEWARK CENTER, 20TH FLOOR NEWARK, NEW JERSEY 07102-5207

KNOW ALL MEN BY THESE PRESENTS: That **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and **ALLEGHENY CASUALTY COMPANY** a corporation organized and existing under the laws of the State of Pennsylvania, having their principal office in the City of Newark, New Jersey, do hereby constitute and appoint

SIOUX MUNYON

Lakeside, CA.

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY and is granted under and by authority of the following resolution adopted by the Board of Directors of INTERNATIONAL FIDELITY INSURANCE COMPANY at a meeting duly held on the 20th day of July, 2010 and by the Board of Directors of ALLEGHENY CASUALTY COMPANY at a meeting duly held on the 15th day of August, 2000:

"RESOLVED, that (1) the President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY have each executed and attested these presents on this 12th day of March, 2012.

INTERNATIONAL FIDELITY INSURANCE COMPANY CORPORATE SEAL 1904 NEW JERSEY

ALLEGHENY CASUALTY COMPANY 1936 PENNSYLVANIA

STATE OF NEW JERSEY
County of Essex

ROBERT W. MINSTER
Executive Vice President/Chief Operating Officer
(International Fidelity Insurance Company)
and President (Allegheny Casualty Company)

On this 12th day of March 2012, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

CATHY VAZQUEZ NOTARY PUBLIC STATE OF NEW JERSEY

A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Mar. 27, 2014

CERTIFICATION

I, the undersigned officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 16TH day of AUGUST, 2016

MARIA BRANCO, Assistant Secretary

CONTRACTOR CERTIFICATION

DRUG-FREE WORKPLACE

PROJECT TITLE: **ALVARADO TRUNK SEWER PHASE III**

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 INSTRUCTION TO BIDDERS, "Drug-Free Workplace", of the project specifications, and that;

ORTIZ CORPORATION

(Name under which business is conducted)

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.

Signed _____

Printed Name MARCELINO E. ORTIZ

Title PRESIDENT

CONTRACTOR CERTIFICATION

AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

PROJECT TITLE: ALVARADO TRUNK SEWER PHASE III

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 INSTRUCTION TO BIDDERS, "American With Disabilities Act", of the project specifications, and that;

ORTIZ CORPORATION

(Name under which business is conducted)

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.

Signed Marcelino E Ortiz

Printed Name MARCELINO E. ORTIZ

Title PRESIDENT

CONTRACTOR CERTIFICATION

CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE

PROJECT TITLE: ALVARADO TRUNK SEWER PHASE III

I declare under penalty of perjury that I am authorized to make this certification on behalf of ORTIZ CORPORATION, as Contractor, that I am familiar with the requirements of City of San Diego Municipal Code § 22.3224 regarding Contractor Standards as outlined in INSTRUCTION TO BIDDERS ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than $50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3224.

Dated this 20TH Day of AUGUST, 2012.

Signed Marcelino E Ortiz

Printed Name MARCELINO E. ORTIZ

Title PRESIDENT

AFFIDAVIT OF DISPOSAL

WHEREAS, on the _____ DAY OF _____, 2____, the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

ALVARADO TRUNK SEWER PHASE III
(Name of Project)

as particularly described in said contract and identified as **Bid No. K-13-5243-DBB-3-B**; SAP No. (WBS/CC/IO)**. B-00481** 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 _____, 2_____.

_____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

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. Particulars left blank in this sample, the total number of phases, and the amounts assigned to each phase will be filled with funding specific information as the result of the Pre-Award Schedule, and subsequent Schedules, required by these Bid Documents and approved by the City.

BID NUMBER: **K-13-5243-DBB-3-B**

CONTRACT OR TASK TITLE: **ALVARADO TRUNK SEWER PHASE III**

CONTRACTOR: _____

Funding Phase	**Phase Description**	**Phase Start**	**Phase Finish**	**Not-to-Exceed Amount**
1				$
	Additional phases to be added			
	to this form as necessary.			
Total				$

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.

OWNER: CITY OF SAN DIEGO

By: _____
Project Manager &
Public Works Department

Date: _____

CONTRACTOR: _____

By: _____

Date: _____

- END OF PHASED FUNDING SCHEDULE AGREEMENT -

SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

THESE SUPPLEMENTARY SPECIAL PROVISIONS CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (THE GREENBOOK) CURRENTLY ADOPTED BY THE CITY, INCLUDING ITS CURRENT SUPPLEMENT AMENDMENTS (CITY SUPPLEMENTS INCLUDED IN THE WHITEBOOK), EXCEPT FOR THE FOLLOWING:

STYLE OF SPECIFICATIONS

The City is gradually standardizing the style and language of the standard specifications for the public works construction. The new style and language follows the Federal guidelines for "Plain Language" to the extent possible.

The use of this new style does not change the meaning of a specification not yet using this style. Where used in the Contract Documents, statement or command type phrases (i.e., active voice and imperative mood) refer to and are directed at the Bidder or Contractor as applicable. The specifications are written to the Bidder before award and the Contractor after. Before award, interpret sentences written in the imperative mood as starting with "The Bidder must" and interpret "you" as "the Bidder" and "your" as "the Bidder's." After award, interpret sentences written in the imperative mood as starting with "The Contractor must" and interpret "you" as "the Contractor" and "your" as "the Contractor's." Similarly, interpret "we" and "us" as "the City" and "our" as "the City's."

PART 1 – GENERAL PROVISIONS

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

1-2 TERMS AND DEFINITIONS.

Agency – ADD the following:

Regulatory activities handled by the City of San Diego Developmental Services, Fire and Planning Departments, or any other City Department are not subject to the responsibilities of the City under this contract.

Certificate of Compliance – To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Certificate of Compliance – A written document signed and submitted by a supplier or manufacturer that certifies that the material or assembled material supplied to the Work site complies with the requirements of the Contract Documents.

Contract Documents – To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The Agreement, Addendum, Invitation to Bid, Instructions to Bidders, special notice page, funding agency provisions, Bid and documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award when attached as an exhibit to the Contract, Bonds, permits from jurisdictional regulatory agencies, Supplementary Special Provisions (SSP), City's EOCP Requirements, City Supplement, Plans, Standard Plans, Construction Documents, Reference Specifications listed in the Invitation to Bid or the RFP for Design-Build contracts, Request for Qualifications (RFQ), Statement of Qualifications (SOQ), Request for Proposals (RFP), modifications issued after the execution of the Contract e.g., Change Orders, Construction Manager At Risk's Guaranteed Maximum Price including written qualifications, assumptions and conditions thereto and Pre-construction Services Agreement.

Limited Notice To Proceed – A written notice given from the City to the Contractor that authorizes the Contractor to start a limited amount of work that is not Construction Work, such as finalizing subcontract agreements, ordering materials, mobilization, furnishing a field office, and any other preliminary work done prior to performing Construction Work.

Normal Working Hours. To the City Supplement, ADD the following:

The Normal Working Hours shall be 8:30 AM to 3:30 PM.

Notice of Completion (NOC) – ADD the following:

See California Civil Code section 3093.

Samples - Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be evaluated.

SECTION 2 - SCOPE AND CONTROL OF WORK

2-1.2.2 Joint Venture Contractors. To the City Supplement, last paragraph, DELETE in its entirety and SUBSTITUTE with the following:

The Joint Venture shall designate an on-site representative and an alternate in writing. The on-site representative and the alternate shall have the full authority to bind all Joint Venture partners.

The Joint Venture shall provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receipt by the Bidder of Contract forms.

2-3.1.2 Subcontractor List. ADD the following:

For Extra Work, the Contractor shall submit Form CC10, "CONTRACT CHANGE ORDER (CCO)" with each CCO proposal. Form CC10 is available for download from the EOCP site at: http://www.sandiego.gov/eoc/pdf/cc10.pdf

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

The Contractor shall perform, with its own organization, Contract work amounting to at least 50 percent of the base bid alone or base bid and any additive or deductive alternate(s) that together when added or deducted form the basis of determining the Apparent Low Bidder as specified. The self performance percentage requirement will be waived for contracts when a "B" License is required or allowed.

2-3.3 Status of Subcontractors. ADD the following:

With every request for payment, the Contractor shall submit to the Engineer a breakdown showing monthly and cumulative amounts of the Work performed under Change Order by the Contractor and the Subcontractors. The reporting format shall be approved by the Engineer.

With every request for payment and on the City provided form, the Contractor shall submit to the Engineer a breakdown showing monthly and cumulative amounts of the Work performed under Change Order by the Contractor and the Subcontractors. An electronic copy of the form may be downloaded from the following site: http://www.sandiego.gov/eoc/forms/index.shtml.

2-3.4 Subcontractor Requirements. To the City Supplement, ADD the following paragraph:

The Contractor shall ensure that all of its Subcontractors are licensed at the time of the execution of their subcontract agreements. In the event a Subcontractor is not properly licensed, the Contractor shall cease payment to Subcontractor for all work performed when the Subcontractor was improperly licensed. Any payment made by the Contractor to a Subcontractor for work performed when the Subcontractor was unlicensed shall be returned to the City.

Where the Contract Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, it is the Contractor's responsibility to ensure the Subcontractor or Supplier employed for such work is approved by the manufacturer.

2-5.2 Precedence of Contract Documents. To the Cit Supplement, DELETE in its entirety and SUBSTITUTE with the following:

2-5.2 Precedence of Contract Documents. If there is a conflict between any of the Contract Documents, the document highest in the order of precedence shall control. The order of precedence, from highest to lowest, shall be as follows:

1) Permits (i.e., issued by jurisdictional regulatory agencies)
2) Change Orders and Supplemental Agreements; whichever occurs last
3) Contract and Agreement
4) Addenda
5) Bid (e.g., price Proposal for Design-Build contracts)
6) Request for Proposal (RFP)
7) Invitation to Bid
8) Instruction to Bidders
9) Request for Qualifications (RFQ)
10) Special Provisions (i.e., City's EOCP Requirements, City Supplement, and Supplementary Special Provisions (SSP))
11) Plans
12) Construction Documents (for Design-Build contracts)
13) Standard Drawings
14) Reference Specifications (e.g., GREENBOOK)
15) Technical Proposal (for Design-Build contracts)
16) Statement of Qualifications (SOQ)

When additional requirements by the funding sources are physically or by reference incorporated in the Contract Documents, the funding source's requirements shall govern **unless specified otherwise**.

Figured dimensions shall take precedence over scaled dimensions. Detailed drawings shall take precedence over general drawings.

2-5.3.1 General. DELETE in its entirety and SUBSTITUTE with the following:

When required by the Contract Documents or when requested by the Engineer, the Contractor shall provide the submittals as specified in 2-5.3.2, 2-5.3.3, and 2-5.3.4 to the Engineer. Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed before the required submittals have been reviewed and accepted by the Engineer. The payment for the submittals shall be included in the various Bid items. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals.

The Contractor shall allow a minimum of 20 working days for review of submittals unless otherwise specified in the Special Provisions. Each submittal shall be accompanied by a letter of transmittal.

2-5.4.1 General. ADD the following:

Source Identification e.g., RFI numbers and Change Order numbers as required to identify the source of the change to the Contract Documents shall be noted.

2-5.4.2 Asset Specific Red-lines (d). ADD the following:

- Dimensional changes to the drawings.
- Revisions to details shown on drawings.
- Depths of foundations below first floor.
- Locations and depths of underground utilities.
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing.
- Locations of concealed internal utilities.
- Changes made by Change Order.
- Details not on original Plans.

2-6 WORK TO BE DONE. ADD the following:

In accordance with the provisions of California Law, the Contractor shall possess or require the Subcontractor(s) to posses valid appropriate license(s) for the Work being performed.

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

In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests of subsurface conditions at the site of the work:

1. Geotechnical Investigation, Alvarado Trunk Sewer Phase 3, prepared by Group Delta Consutlants Inc., dated February 3, 2003.

The report listed above is available for review by contacting the City Project Manager.

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

The Contractor shall notify the Engineer or the owner on a Private Contract, at least 7 days before starting the Work to allow for the preservation of survey markers, survey monuments, lot stakes (tagged), and benchmarks. The Engineer or the owner on a Private Contract, will, at its cost, file a Corner Record Form referencing survey monuments subject to disturbance in the Office of the County Surveyor prior to the start of construction and also prior to the completion of construction for the replacement of survey monuments. The Contractor shall not disturb or permanently cover survey markers, survey monuments, lot stakes (tagged), or benchmarks without the consent of the Engineer or the owner on a Private Contract. The Contractor shall bear the expense of uncovering and replacing any that may be disturbed without permission. Replacement shall be done only under the direction of the Engineer by a Registered Land Surveyor or a Registered Civil Engineer authorized to practice land surveying within the State of California. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument cover to the new grade within 7 days of finished paving unless otherwise specified in the Special Provisions.

2-10 AUTHORITY OF BOARD AND ENGINEER. ADD the following:

Regulating agencies of the City, such as Developmental Services, Fire and Planning Departments, enforce Legal Requirements and standards. These enforcement activities are not subject to the responsibilities of the Engineer under this Agreement.

2-11 INSPECTION. ADD the following:

The City may utilize field inspectors to assist the Engineer during construction in observing performance of the Contractor. The inspector is for the purpose of assisting the Engineer and shall not be confused with an inspector with a City regulatory agency or with a Special Inspector.

Code compliance testing (including all Geotechnical requirements) and inspections required by codes or ordinances, or by a plan approval authority, shall be the responsibility of and shall be paid by the Contractor, unless otherwise provided in the Contract Documents.

The Contractor's quality control testing and inspections shall be the sole responsibility of the Contractor and paid by the Contractor included in the Bid price.

ADD: 2-17 CONTRACTOR REGISTRATION.

The Contractor, Subcontractors, and Suppliers shall register with the City's EOCP via Prism® i.e., the City's web-based contract compliance portal at: https://pro.prismcompliance.com/contractor/plugins/pages/contractormenu.aspx.

The Contractor shall ensure that proposed Subcontractors and Suppliers have completed the registration prior to Notice of Intent to Award. If the Contractor fails to have its Subcontractors and Suppliers registered after the NTP has been issued, the City will withhold a minimum of 10% in addition to the Retention from all invoices submitted until the Contractor and all listed Subcontractors and Suppliers are properly registered in PRISM.

SECTION 3 – CHANGES IN WORK

3-3.2.2 Basis for Establishing Costs (a) Labor, City Supplement, first and second paragraphs, DELETE in entirety and SUBSTITUTE with the following:

The City reserves the right to request financial records of salaries for an employee, wages, bonuses and deductions to substantiate the actual cost of labor certified by a California licensed Certified Public Accountant. The Contractor shall use the City provided form i.e., "PUBLIC WORKS PAYROLL REPORTING FORM" which is available at http://www.sandiego.gov/eoc/pdf/payrollreport.pdf to list the labor rates of its personnel and Subcontractors who work on this Project. An initial submittal shall be made prior to NTP.

The payment for payroll records shall be included in the various Bid item unless a separate Bid item has been provided.

SECTION 4 - CONTROL OF MATERIALS

4-1.3.1 General. First paragraph, ADD the following:

Other standard items or materials typically accepted by Certificate of Compliance shall not require inspection at the source unless specified in the Special Provisions. For a list of these items or materials, the Contractor may refer to the Contract Documents.

4-1.5 Certificates of Compliance. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

4-1.5 Certificates of Compliance. DELETE in its entirety and SUBSTITUTE with the following:

Certificates of Compliance shall be furnished to the Engineer prior to the use of any material or assembled material for which these Specifications so require or if so required by the Engineer.

The Engineer may waive the materials testing requirements of the Specifications and accept a Certificate of Compliance. Manufacturing test data may be required by the Engineer to be included with the submittal.

Materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The submission of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents, and any material not conforming to the requirements will be subject to rejection whether in place or not.

When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the City shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

4-1.6 Trade Names or Equals. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

ADD the following:

Whenever materials or equipment are indicated in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. Unless stated otherwise, materials or equipment of other Suppliers may be accepted if sufficient information is submitted to the Engineer for review to determine whether the material or equipment proposed is equivalent or equal to that named.

a) The Contractor shall submit its list of proposed substitutions for "an equal" ("or equal") item(s) **no later than 5 Working Days after the determination of the Apparent Low Bidder** and on a City form when provided by the City.
b) The request for substitution shall include the following information:
    i. Whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents to adopt the design to the proposed substitute.
    ii. Whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
    iii. All variations of the proposed substitute from the items originally specified will be identified.
    iv. Available maintenance, repair, and replacement service requirements. The manufacturer shall have a local service agency within 50 miles of the site which maintains properly trained personnel and adequate spare parts and is able to respond and complete repairs within 24 hours.
    v. Certification that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, and be similar and of equal substance to that indicated, and be suited to the same use as that specified.
c) There is no guaranteed time frame for the City's review of the substitution requests.
d) The burden of proof as to the type, function, and quality of any such substitute product, material or equipment shall be upon the Contractor. The Engineer may require at the Contractor's expense additional data about the proposed substitute.
e) If the Engineer takes no exceptions to the proposed substitution, it shall not relieve the Contractor from responsibility for the efficiency, sufficiency, quality, and performance of the substitute material or equipment, in the same manner and degree as the material and equipment specified by name.
f) The lack of action(s) on the Engineer's side within the Contractor's requested time shall not constitute acceptance of the substitution.

g) Acceptance by the Engineer of a substitute item shall not relieve the Contractor of the responsibility for full compliance with the Contract Documents.
h) For the substitution review process or to have materials listed on the AML, refer to the AML standard review process.
i) The Bid submittal shall be based on the material and equipment specified by name in the Contract. If the proposal is rejected by the Engineer, the Contractor shall not be entitled to either an extension in Contract Time, increase in the Contract Price, or both.
j) As applicable, no Shop Drawing or Working Drawing submittals shall be made for a substitute item nor shall any substitute item be ordered, installed, or utilized without the Engineer's prior written.
k) The Contractor shall reimburse the City for the charges of the Engineer for evaluating each proposed substitute.
l) For Design-Build contracts, one copy of all designer reviewed submittals shall be provided to the Engineer.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

6-1.2 Commencement of Work. To the GREENBOOK and the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The Contractor shall notify SDG&E at least 10 Working Days prior to excavating within 10' of SDG&E Underground High Voltage Transmission Power Lines (i.e., 69 KV and higher).

Unless specified otherwise, construction shall start within 5 Working Days after NTP and be diligently prosecuted to completion within the Contract Time. The Contractor shall not start any construction activity at the Site until the Pre-construction Meeting is held and the NTP has been issued by the Engineer.

Upon the Contractor's written request, the City may delay the NTP as follows:

a) Up to 5 Working Days from the Pre-construction Meeting, or

b) Up to 40 Working Days from the Limited NTP for the preparation, submittal, obtaining approval for and filing of the PRDs in accordance with 801, "STORM WATER POLLUTION CONTROL," or

c) Up to 60 Working Days from the Limited NTP for the preparation, submittal, and approval of the TCP on "D-sheets" when specified in 7-10.2, "Traffic Control."

For areas that do not require engineered TCP on D-sheets, the Contractor may at any time after the Pre-construction Meeting obtain a TCP Permit via Working Drawings or the City's over the counter process and start the Work. If the Contractor decides to commence the construction work before the completion of the D-sheet TCPs, the Contractor shall forfeit the 60 Working Days specified here. The D-sheet TCP shall be done concurrently and no additional time will be granted.

For paving Work, the Contractor shall coordinate the Work to facilitate the installation and protection of the new curb ramps and associated concrete work prior to commencing the asphalt overlay operations. The Work at a specific location shall not commence until all layouts and measurements are agreed upon by both the Contractor and the Engineer.

6-1.4 Phased Funding. ADD the following:

This contract is subject to Phased Funding.

ADD: 6-1.8 Pre-construction Meeting. Within 20 Working Days from the Limited NTP the Engineer will schedule a mandatory pre-construction meeting (Pre-construction Meeting) with the Contractor. The agenda will include items such as NTP, design services and submittal and review

process for Design-Build contracts, critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, payment requests and processing, environmental and community concerns, coordination with the involved utility firms, the level of record project documents required and emergency telephone numbers for all representatives involved in the course of construction.

6-7.4 Project Phasing. Add the following:

Phase 1: The Contractor shall complete the Sewer Main Installation beginning from STA 15+24.75 to 22+24.00 (Sheet C-1 & C-2) and STA 0+00.00 to 0+51.00 (Sheet C-2) as the first portion of work within 66 working days. Work shall be completed during the day between the hours of 8:30 am to 3:30 pm.

Phase 2: The Contractor shall complete the Sewer Main Installation beginning from STA 10+33.09 to STA 15+24.75 (Sheet C-1) parallel to Canyon Crest Drive including the installation of Manhole No. 2 and Manhole No. 3 within 44 working days. The work shall not commence before Dec. 16, 2012. Work shall be completed at night between the hours 8:00 pm. to 5:00 am., while maintaining traffic access at all time and during the hours of operation.

Phase 3: The Contractor shall complete the Sewer Main Installation beginning from STA 10+00 to 10+33.09 (Sheet C-1) crossing Canyon Crest Drive including the installation of Manhole No. 1 within 22 working days. The work shall not commence before May 20, 2013 and must finish no later than Jun. 30, 2013. Work shall be completed at night between the hours 8:00 pm. to 5:00am.

ADD: 6-8.1 Completion. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

6-8.1 Completion. The Contractor shall submit a written assertion that the Work has been completed. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Engineer will set forth in writing the date the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect and maintain the Work.

6-8.2 Acceptance. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

6-8.2 Acceptance. Acceptance will occur after all of the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, the Contractor has fully performed the Contract, the Engineer will accept the Contractor's performance of the Contract.

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

6-8.3 Warranty. Unless specified otherwise, the Work shall be warranted by the Contractor against defective workmanship and materials for a period of 1 year.

a) The warranty period shall start on the date of completion of the Work as determined by the Engineer.

b) The Contractor shall provide an unconditional warranty on all installed fiber optic cable for a minimum period of 2 years.

c) The warranty period for the following items of the Work shall be 3 years:

1. Work under Section 500 (requires Long Term Warranty Contract (LTWC))
2. DWT Construction (requires manufacturer's warranty)
3. LED signal modules (requires manufacturer's warranty)

4. Private sewer pumps including the alarm panel and all other accessories. The Contractor shall provide the City and property owner a copy of the warranty. (requires manufacturer's warranty)

d) The Contractor shall involve the manufacturer in the installation and startup as needed to secure any extended warranty required.

e) The warranty period for specific items covered under manufacturers' or suppliers' warranties shall commence on the date they are placed into service at the direction of or as approved by the Engineer in writing.

f) All warranties express or implied, from Subcontractors or Suppliers, of any tier, for the work performed and materials furnished shall be assigned, in writing, to the City, and such warranties shall be delivered to the Engineer prior to acceptance of the Contractor's performance of the Contract.

g) The Contractor shall replace or repair defective Work in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repairs within the time specified in the notice, the City may perform the replacement or repairs at the Contractor's expense. If the Contractor fails to reimburse the City for the actual costs, the Contractor's Surety shall be liable for the cost thereof.

h) Nothing in this warranty is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than set forth in this section or the Contract Documents.

i) These specifications are not intended to constitute a period of limitations or waiver of any other rights or remedies City may have regarding the Contractor's other obligations under the Contract Documents or federal or state law.

j) The Contractor shall respond and initiate corrective action within 24 hours of notice of nonconforming Work that poses an imminent threat to person or property.

Nothing in this warranty is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than set forth in this section or the Contract Documents. The Contractor shall provide the Engineer with all manufacturers' warranties upon Substantial Completion.

These specifications are not intended to constitute a period of limitations or waiver of any other rights or remedies City may have regarding the Contractor's other obligations under the Contract Documents or federal or state law.

The Contractor shall respond and initiate corrective action within 24 hours of notice of nonconforming Work that poses an imminent threat to person or property.

6-9 LIQUIDATED DAMAGES. To the City Supplement

MODIFY to increase the daily value from $250 to $3,000 for contracts with a value of over $100,000.

Add the following:

Time is of essence, failure to complete the sewer main replacement and installation which are portions of the job as verified by the Resident Engineer (RE) within the time allowed as specified in Section 6-7 will result in damages being sustained by the City. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in

excess of the time specified for completion of the Work, as adjusted in accordance with 6-7, the Contractor shall pay the City, or have withheld from monies due it, $3,000 per day. Such sums are liquidated damages and shall not be construed as a penalty, and such items may be deducted from payments due the Contractor if such delay occurs.

Execution of the Contract shall constitute agreement by the City and Contractor that $3,000 per day is the minimum value of the costs and actual costs and actual damage caused by the failure of the Contractor to complete the work within the allotted time.

The daily value in this section may be increased by the actual amounts of governmental fine (e.g., EPA and DHS) imposed upon the City due to the Contractor's failure to complete the Work within time allowed. If known in advance, the fine amounts will be listed in the Special Provisions. Liquidated Damages will be withheld until a final ruling is made by the regulatory body on fines assessed.

Failure to complete the work crossing Canyon Crest Drive, STA 10+00 to STA 10+33.09 (Sheet C-1), within the specified time period in Section 6-7 will result in damages being sustained by the City and increase the daily value to $10,000 per day for this portion of work only.

ADD: 6-12 NIGHT WORK. Night work shall be completed between the hours of 8:00 pm. to 5:00 am, except during SDSU campus scheduled events. The campus anticipates there maybe 50-60 events requiring large load outs via Canyon Crest Drive near the 11:00 pm start time and at least 20 events will require a later load out exiting through Canyon Crest Drive, until around 2-3:00 am. Following are some of the projected events:

Date	Event	Event Start Time	Campus Clear
Sept. 7, 2012	Viejas Promise Keepers	5:00 pm & 7:00 pm	12:00 am
Sept. 8, 2012	Viejas Promise Keepers	5:00 pm & 7:00 pm	12:00 am
Sept. 30, 2012	OAT The Shins	7:30 pm	12:00 am
Oct.02, 2012	OAT Further	7:00 pm	12:00 am
TBD	SDSU Basketball Schedule	Varies	Varies

The Contractor may be required to schedule their start time for these and other events to begin after the campus is clear from event traffic. The Contractor will coordinate their work so as not to interfere with campus activity and should be prepared to adjust work times to accommodate 50-60 events.

In the event of an emergency situation during street closure at Canyon Crest Drive, the Contractor shall have a standby trench plate cover next to the construction site, accessible by heavy equipment to cover trench opening without delay when needed to facilitate access to emergency vehicles (police, ambulance and fire trucks).

The Contractor shall submit and receive approval for a project operations plan defining the "Emergency plan and detailed procedure" for Sheet C-1 (from STA 10+00 to STA 10+33.09).

The emergency plan shall detail emergency procedures and include the ability to enable drivable emergency vehicle access across trench-cover plates to access the University via Canyon Crest Drive within 5 minutes of notice. Meeting this stipulation will require the ability to cover the north-south trench with trench plates via a crane system available at a moment's notice. Therefore, a crane shall be rigged, manned and have the plates available to meet this time requirement at all times the north-south trench is open.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

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

The insurance provisions herein must not be construed to limit your indemnity obligations contained in this contract.

ADD: 7-3.1 Policies and Procedures.

a) You must procure the insurance described below, at your 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.

b) Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.

c) You must 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 this contract, e.g., your indemnity obligations, will is not deemed limited to the insurance coverage required by this contract.

d) Payment for insurance is included in the various items of Work as bid by you, and 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.

e) Policies of insurance must provide that the City and San Diego State University are 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 this contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of this contract may be treated by the City as a material breach of contract.

ADD: 7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance.

a) Commercial General Liability Insurance must 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.

b) The policy must 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).

c) There must be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You must maintain the same or equivalent insurance for at least 10 years following completion of the Work.

d) All costs of defense must be outside the policy limits. Policy coverage must be in liability limits of not less than the following:

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

7-3.2.2 Commercial Automobile Liability Insurance.

a) You must 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").

b) All costs of defense must be outside the limits of the policy.

7-3.2.3 Contractors Pollution Liability Insurance.

a) You must procure and maintain at your expense or require 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.

b) All costs of defense must be outside the limits of the policy. Any such insurance provided by Subcontractor instead of you must be approved separately in writing by the City.

c) For approval of a substitution of Subcontractor's insurance, you must 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 must not exceed $25,000 per claim.

d) Contractual liability must include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There must be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability.

e) Occurrence based policies must be procured before the Work commences and must be maintained for the Contract Time. Claims Made policies must be procured before the Work commences, must be maintained for the Contract Time, and must include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Work without advancing the retroactive date.

f) Except as provided for under California law, the policy or policies must 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.

7-3.2.6 Railroad Protective Liability Insurance.

For the items of the Work that requires permit from the Railroad, exclusions relating to performance of operations within the vicinity of any railroad, bridge, trestle, roadbed, tunnel, underpass, or cross shall be deleted from all policies to which they may apply.

Alternatively, the Contractor may provide separate Railroad Protective Liability insurance providing coverage, including endorsements, equivalent to that required for the Commercial general Liability, Automobile Liability, and Workman's Compensation described in these specifications.

The Contractor shall obtain Certificate of Insurance for the Railroad permit. MTS shall be named the certificate holder. The Certificate of Insurance shall include the following as additional insureds:

a) Metropolitan Transit System (MTS)
b) San Diego Trolley, Inc. (SDTI)
c) San Diego and Arizona Eastern (SD&AE) Railway
d) San Diego and Imperial Valley (SD&IV) Railroad
e) San Diego Transit Corporation (SDTC), their directors, officers, agents and employees as additional insureds as their interests may appear.

ADD: 7-3.3 Rating Requirements.

Except for the State Compensation Insurance Fund, all insurance required by this contract as described herein must 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 Eligible Surplus Lines Insurers (LESLI list).

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

ADD: 7-3.4 Evidence of Insurance.

Furnish to the City and San Diego State University 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 must 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.

ADD: 7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance

7-3.5.1.1 Additional Insured.

a) You must 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.
b) To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy must be endorsed to include the City and San Diego State University and its respective elected officials, officers, employees, agents, and representatives as additional insured.

1. The additional insured coverage for projects for which the Engineer's Estimate is $1,000,000 or more must 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.

2. The additional insured coverage for projects for which the Engineer's Estimate is less than $1,000,000 must 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 must 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 must provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives must be in excess of the Contractor's insurance and must not contribute to it.

7-3.5.1.3 Project General Aggregate Limit.

The policy or policies must 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 must reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit must 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 must be endorsed to include the City and San Diego State University 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.

7-3.5.3.1Additional Insured.

a) 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 must 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.

b) 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 is 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 must 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 must 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 must be in excess of your insurance and must not contribute to it.

7-3.5.3.3 Severability of Interest.

For Contractors Pollution Liability Insurance, the policy or policies must provide that your insurance must 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 must provide cross-liability coverage.

ADD: 7-3.6 Deductibles and Self-Insured Retentions.

You are responsible for the payment of all deductibles and self-insured retentions. Disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.

ADD: 7-3.7 Reservation of Rights.

We reserve 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. We 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.

ADD: 7-3.8 Notice of Changes to Insurance.

You must notify the City 30 days prior to any material change to the policies of insurance provided under this contract.

ADD: 7-3.9 Excess Insurance.

Policies providing excess coverage must 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.

a) In accordance with the provisions of §3700 of the California Labor Code, you must provide at its expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City and San Diego State University and its respective 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.

b) Limits for this insurance must be not less than the following:

Workers' Compensation	Statutory Employers Liability
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

c) By signing and returning this contract you certify that you are aware of the provisions of §3700 of the Labor Code which require 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 will 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 must 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.

7-5 PERMITS. DELETE the first paragraph in its entirety and SUBSTITUTE the following:

The City will obtain, at no cost to the Contractor; the following permits:

a) Site Development Permit

b) Tunnel Classification Permit

To the City Supplement, DELETE item e) in its entirety.

7-8.6 Water Pollution Control. ADD the following:

a) The Project is subject to the Storm Water Pollution control requirements listed on the Plans or as specified in these specifications.
b) For contracts subject to Construction General Permit (CGP), the Contractor's QSD shall verify the City's assessment prior to submittal through SMARTS.
c) The Contractor's attention is directed to Section 801, "WATER POLLUTION CONTROL" of these specifications for more information.

Based on a preliminary assessment by the City, this contract is subject to WPCP.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. ADD the following:

In any emergency affecting the safety of persons or property, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in Contract Price or Contract Time resulting from emergency work shall be determined as provided in SECTION 3, "CHANGES IN WORK."

7-10.1 Traffic and Access. To the City Supplement, DELETE the agency notification listing in its entirety and SUBSTITUTE with the following:

The Contractor shall notify Metropolitan Transit System (MTS), a minimum of 5 Working Days prior to excavation, construction, or traffic control affecting bus stops. The Contractor shall notify the remaining agencies a minimum of two 2 Working Days prior to construction activities affecting the agencies:

Fire Department Dispatch	(Street or alley closure)	(858) 573-1300
Police Department Traffic	(Street or alley closure)	(858) 495-7800
Street Division/Electrical	(Traffic signals)	(619) 527-7500
U.S. Navy	(32nd Street Naval Station)	(619) 556-1319
Underground Service Alert	(Any excavation)	(800) 422-4133
MTS	(Street Closure and Bus Stops)	(619) 238-0100 Ext 6451

7-10.1.3 Railroad Requirements. The term "Railroad" shall mean the San Diego Metropolitan Transit System (MTS) and the San Diego Arizona & Eastern Railroad (SDA&E).

a) The Contractor shall obtain a Right of Entry Permit from Railroad prior to entering or constructing on property owned, operated, occupied, or controlled by the Railroad including airspace, for any purpose. The Contractor shall abide by the terms of the Right of Entry Permit and arranging and paying for inspection as required by the Railroad. The terms of the

Right of Entry Permit shall govern if there are any conflicts with the Plans and Specifications. Instructions to obtain access to railroad facilities are available from MTS.

b) Flagging will be required anytime the Work is performed within 15' of the centerline of the track including airspace or as deemed necessary by MTS. A Flagperson / Right-of-Way Work Request form shall be submitted to SDTI a minimum of 2 Working Days prior to anticipated work.

c) A pre-construction meeting will be required with SDTI prior to work commencing within the right-of-way. A written notice of planned start of work shall be submitted to MTS a minimum of 5 Working Days prior to the Work starting in the right-of-way. All work will be stopped and the Contractor will not be allowed in the right-of-way without proper notification.

d) The Contractor shall adhere to construction and safety standards required by MTS of their contractors when working within the right-of-way.

e) A written notice shall be submitted to MTS when the Work is completed within the right-of-way. Any additional work required to replace or repair the railroad facilities in good working order will be the Contractor's responsibility prior to relief from maintenance within the permit area.

f) Sleeves under Railroad tracks and across Railroad right-of-way shall not be less than 5½' (1.7m) from the base of the rail to the top of the casing at its closest point. On portions where casing is not directly beneath the tracks, the depth from ground surface to the top of the casing shall not be less than 3' (1 m).

g) The Contractor agrees to coordinate on a daily basis a reasonable access to all MTS and SD&AE facilities with contract operators, SDTI, and SD&IV. Trolley operations are generally from the hours of 4:00 a.m. to 2:00 a.m. the following day. SD&IV freight trains operate during non-Trolley hours.

h) The Contractor agrees to restore all facilities, improvements, landscaping, etc., to their original condition by the completion of the Work or as shown on Plans.

i) The Contractor agrees that no work by the Contractor or the Subcontractors will interfere with railroad and trolley operations.

j) The Contractor shall notify SDTI and SD&IV a minimum of 2 Working Days prior to the start of the Work on subject property and within 1 Working Day after completion of the Work.

k) The Contractor shall not store equipment, tools, and materials within 15' from the centerline of any operable track.

l) The Contractor shall remove all of the Contractor's tools, equipment, and materials from railroad premises promptly upon completion of the Work, restoring railroad premises to the same state and condition as when the Contractor entered thereon.

m) No vehicular crossing over tracks shall be installed or used by The Contractor without prior written permission of Railroad.

n) The Contractor shall perform all work in accordance with applicable California Public Utilities Commission and regulations and MTS LRT Design Criteria.

o) The Contractor shall maintain safe pedestrian access to all trolley platforms and bus stops at all times. A minimum five-foot-wide accessible pedestrian path through the construction site shall be maintained at all times. The construction boundary shall consist of a top and bottom rail constructed of ¾" plastic pipe, OSHA plastic mesh, or approved equal. Yellow caution tape is not acceptable.

p) The Contractor shall not use or store hazardous substances, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("CERCLA") or petroleum or oil as defined by applicable environmental laws on the Railroad right-of-way.

q) Any contractors or subcontractors performing work on the Railroad right-of-way, or entering the right-of-way on behalf of the Contractor, shall be deemed agents of the Contractor.

r) The Contractor's on-site supervision shall retain or maintain a fully executed copy of the Right of Entry Permit at all times while on the Railroad right-of-way.

Additional information may be obtained at: **http://www.sdmts.com/Business/Permits.asp**

7-10.1.5 Payment. Payment for traffic and access as specified in these specifications and the railroad liability insurance, permits, plan review, inspection, flagging, and fees shall be included in the various Bid items **unless a Bid item has been provided**.

7-10.2.6 Traffic Control Signs and Notices for Resurfacing and Slurry Sealing. To the first paragraph of the City Supplement ADD the following:

For each street segment in addition to resurfacing and slurry sealing, the Contractor shall be posted "NO PARKING" for any required preparatory work such as, but not limited to, damaged asphalt pavement replacement (mill & pave), crack seal, and tree trimming.

7-10.6 Traffic Plate Bridging. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Transverse or longitudinal cuts, voids, trenches, holes, and excavations in the right-of-way that cannot be properly completed within 1 Working Day shall be protected by adequately designed barricades and structural steel plates [plates] that will support legal vehicle loads in such a way as to preserve unobstructed traffic flow.

The Contractor shall secure approval, in advance, from authorities concerning the use of any bridging proposed on the Work.

Plates shall conform to the following:

a) The trench shall be adequately shored to support the bridging and traffic loads.
b) Plates shall be designed for HS 20-44 truck loading in accordance with Caltrans Bridge Design Specifications Manual.
c) For the minimum thickness of plates refer to Table 7-10.6(A):

Table 7-10.6(A) - Trench Width / Minimum Plate Thickness

Trench Width	Minimum Plate Thickness
10" (0.25 m)	1/2" (13 mm)
1'-11" (0.58 m)	3/4" (19 mm)
2'-7" (0.80 m)	7/8" (22 mm)
3'-5" (1.04 m)	1" (25 mm)
5'-3" (1.6 m)	1 1/4" (32 mm)

For spans greater than 5’-3" (1.6 m), a structural design shall be prepared by a California Registered Civil Engineer and approved by the Engineer.

d) Plates shall have a skid-resistant surface with a nominal Coefficient Of Friction (COF) of 0.35 as determined by California Test Method 342.
e) Plates shall extend a minimum of 12” (300 mm) beyond the edges of the trench.
f) Plates shall provide complete coverage to prevent any person, bicycle, motorcycle or motor vehicle from being endangered due to plate movement causing separations or gaps.
g) Plates shall be secured against movement or displacement by using adjustable cleats, shims, welding, or other devices, and shall be installed in a manner that will minimize noise as traffic drives over them. Plates shall be installed using either Method (1) or (2):
    i. Method 1 [For speeds greater than 45 mph (70 Km/hr)]: The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.
    ii. Method 2 [For Speeds less than 45 mph (70 Km/hr)]: Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" (50 mm) into the pavement. Subsequent plates are butted to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope 8.5 % with a minimum 12" (305 mm) taper to cover all edges of the plates.

    Alternative installation method may be submitted in accordance with 2-5.3, “Submittals” for the Engineer’s approval.
h) The Contractor shall be responsible for maintenance of the plates, shoring, and asphalt concrete ramps or any other approved device used to secure the plates. The Contractor shall immediately mobilize necessary personnel and equipment after being notified by the Engineer, the City's station 38, or a member of the public of a repair needed e.g., plate movement, noise, anchors, and asphalt ramps. Failure to respond to the emergency request within 2 hours will be grounds for the City to perform necessary repairs that will be invoiced at actual cost including overhead or $500 per incident, whichever is greater. Failure by the Contractor to comply may result in automatic grounds suspension of permit, Contract, or both.
i) When plates are removed, any damage to the pavement shall be repaired with fine graded asphalt concrete mix or slurry seal satisfactory to the Engineer.

Payment for traffic plate bridging shall be included in the various Bid items unless a Bid Item has been provided for steel plate bridging.

7-15 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The Contractor shall defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees, from and against all claims asserted, or liability established for damages or injuries to any person or property resulting from the Contractor’s action or failure to take the necessary measures to prevent such damages and injuries.

The Contractor shall be responsible for payment of any fines resulting from citations issued to the City by either the federal, state, or local environmental and safety enforcement agencies due to the Contractor’s failure to abide by applicable safety, health, and environmental standards.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

8-2 FIELD OFFICE FACILITIES. To the City Supplement, DELETE this section in its entirety.

PART 2 - CONSTRUCTION MATERIALS

SECTION 201 – CONCRETE, MORTAR AND RELATED MATERIALS

201-7.3 Non-Shrink Grout. ADD the following:

Non-shrink grout shall be a prepackaged, inorganic, non-gas-liberating, non-metallic, cement based grout requiring only the addition of water. Manufacturer's instructions shall be printed on each bag or other container in which the materials are packaged. The specific formulation for each class of non-shrink grout indicated herein shall be that recommended by the manufacturer for the particular application.

Class A non-shrink grouts shall have a minimum 28 day compressive strength of 5000 psi; shall have no shrinkage (0.0 percent) and maximum 4.0 percent expansion in the plastic state when tested in accordance with ASTM C 827; and shall have no shrinkage (0.0 percent) and a maximum of 0.2 percent expansion in the hardened state when tested in accordance with CRD C 621.

Class B non-shrink grouts shall have a minimum 28 day compressive strength of 5000 psi and shall meet the requirements of CRD C 621.

Application:

a) Class A non-shrink grout shall be used for the repair of all holes and defects in concrete members which are water bearing or in contact with soil or other fill material, grouting under all equipment base plates, and at all locations where grout is specified in the contract documents; except, for those applications for Class B non-shrink grout and epoxy grout indicated herein. Class A non-shrink grout may be used in place of Class B non-shrink grout for all applications.

b) Class B non-shrink grout shall be used for the repair of all holes and defects in concrete members which are not water-bearing and not in contract with soil or other fill material, grouting under all base plates for structural steel members, and grouting railing post in place.

ADD: 201-7.4 Cement Grout.

Cement grout shall be composed of one part cement, three parts sand, and the minimum amount of water necessary to obtain the desired consistency. Where needed to match the color of adjacent concrete, white Portland cement shall be blended with regular cement as needed. The minimum compressive strength at 28 days shall be 4000 psi. Cement grout shall be as indicated in SSPWC subsection 201-1, 201-4 and 201-5.

ADD: 201-7.5 Epoxy Grout.

Epoxy grout shall be a pourable, non-shrink, 100 percent solids system. The epoxy grout system shall have three components; resin, hardener, and specially blended aggregate, all premeasured and prepackaged. The resin component shall not contain any non-reactive diluents. Resins containing butyl glycidyl ether (BGE) or other highly volatile and hazardous reactive diluents are not acceptable. Variation of component ratios is not permitted unless specifically recommended by the manufacturer. Manufacturer's instructions shall be printed on each container in which the materials are packaged.

The chemical formulation of the epoxy grout shall be that recommended by the manufacturer for the particular application.

The mixed epoxy grout system shall have a minimum working life of 45 minutes at 75°F.

The epoxy grout shall develop a compressive strength of 5000 psi in 24 hours and 10,000 psi in seven days when tested in accordance with ASTM C 579, Method B. There shall be no shrinkage (0.0 percent) and a maximum 4.0 percent expansion when tested in accordance with ASTM C 827.

The epoxy grout shall exhibit a minimum effective bearing area of 95 percent. This shall be determined by a test consisting of filling a 2-inch diameter by 4-inch high metal cylinder mold covered with a glass plate coated with a release agent. A weight shall be placed on the glass plate. At 24 hours after casting, the weight and plate shall be removed and the area in plan of all voids measured. The surface of the grout shall be probed with a sharp instrument to locate all voids.

The peak exotherm of a 2-inch diameter by 4-inch high cylinder shall not exceed 95 degrees F when tested with 75 degree F material at laboratory temperature. The epoxy grout shall exhibit a maximum thermal coefficient of 30×10^{-6} inches/inch/degree F when tested according to ASTM C 531 OR ASTM D 696.

Epoxy grout shall be used to embed all anchor bolts and reinforcing steel required to be set in grout, and for all other applications required in the Contract Documents.

ADD: 201-7.6 Topping Grout and Concrete Fill.

Grout for topping of slabs and concrete fill for built-up surfaces of tank, channel, and basin bottoms shall be composed of cement, fin aggregate, coarse aggregate, water, and admixtures proportioned and mixed as indicated herein. All materials and procedures specified for concrete in SSPWC 201-1, 201-4 and 201-5 shall apply except as indicated otherwise herein.

Topping grout and concrete fill shall contain a minimum of 564 pound of cement per cubic yard with a maximum water cement ration of 0.45. Where concrete fill is thicker than 3 inches, sitework concrete as indicated SSPWC Section 201 may be used when accepted by the Construction Manager.

Coarse aggregate shall be graded as follows:

U.S. STANDARD SIEVE SIZE	PERCENT BY WEIGHT PASSING
½”	100
3/8”	90-100
No. 4	20-55
No. 8	5-30
No. 16	0-10
No. 30	0

Final mix design shall be as determined by trial mix design under supervision of the approved testing laboratory.

Minimum compressive strength of topping grout and concrete fill at the end of 28 days shall be 3000 psi. The slump for topping grout and concrete fill shall be adjusted to match placement and finishing conditions but shall not exceed 4 inches.

ADD: 201-7.7 Grout Testing.

Compression test specimens will be taken during construction form the first placement of each type of grout, and at intervals thereafter as selected by the Construction Manager to insure continued

compliance with these specifications. The specimens will be made by the Construction Manager or its representative.

Compression tests and fabrication of specimens for cement grout and non-shrink grout will be performed as specified in ASTM C 109 at intervals during construction as selected by the Construction Manager. A set of three specimens will be made for testing at 7 days, 28 days, and each additional time period as appropriate.

Compression test and fabrication of specimens for epoxy will be performed as specified in ASTM C 579, Method B, at intervals during construction as selected by the Construction Manager. A set of three specimens will be made for testing at 7 days, and each earlier time period as appropriate.

All grout, already placed, which fails to meet the requirements of these specifications, is subject to removal and replacement at the cost of the Contractor.

The cost of all laboratory tests on grout will be borne by the City, but the Contractor shall assist the Construction Manager in obtaining specimens for testing. However, the Contractor shall be charged for the cost of any additional tests and investigation on work performed which does not meet the specifications. The Contractor shall supply all materials necessary for fabricating the test specimens.

SECTION 207 – PIPE

207-17.1 General. ADD the following:

All House Connection Sewer Laterals shall use acceptable stainless steel shielded couplings manufactured by Mission, Fernco or approved equal.

ADD: 207-17.2.3 Pipe Manufacturer. Pipe, fittings, couplings, and joints as manufactured or distributed by J-M Manufacturing Company shall not be used on this contract.

ADD: 207-28 Steel Casing.

a) General

Steel casings shall be in accordance with SSPWC Section 306-23 subject to the following requirements. The casing shall be of the diameter indicated and shall be furnished completed with welded joint ends and pressure grout couplings as indicated. The Contractor may select a greater diameter or thickness for the method of work and loadings involved, site conditions, and possible interferences at no additional cost to the City.

b) Materials

Steel Casing: The steel casing pipe shall be in accordance with ASTM A283, Grade C, unless otherwise indicated. The minimum diameter shall be as indicated. The Contractor shall provide 2-inch grout connections regularly spaced at 5 feet on center alternating at 30 degrees from plumb each side of the vertical centerline. Casing section joints shall be butt welded; lap welded, or welded using butt straps in the field. Each end of casing for butt welding shall be prepared by providing ¼ - inch by 45-degre chamfer on the outside edges.

Exterior Grout: Grout for filling voids exterior to the steel casing shall consist of one part Portland cement, three parts sand and the minimum amount of water necessary to obtain the desired consistency; and all grout mixtures shall contain 2 percent of bentonite by weight of the cement. Portland cement, water and sand shall conform to the applicable requirements of Section 201-1, except that sand to be used shall be of such fineness that 100 percent will pass a Standard No. 8 sieve and at least 45 percent, by weight, will pass a Standard No. 40 sieve. Bentonite shall be a commercial-processed powdered bentonite, Wyoming type.

Grout Connections: The Contract shall provide grout connections on the interior of the steel casing pipe as specified above. Longitudinal spacing between the grout connections may be decreased to provide more frequent grouting, but in no case shall the spacings indicated be exceeded.

Casing Spacers: Pipe casing spacers shall be bolt-on type bands. The bands shall be 12 inch wide and shall be made of two sections of 12 gauge steel coated with fusion bonded epoxy. The thickness of fusion bonded coating shall be at least 10 mils. The bands shall be lined with a 0.09 inch thick PVC ribbed liner having a hardness of Durometer "A" 85-90. The runners shall be made of at least 2-inch wide fiberglass reinforced plastic. Bolts, studs, nuts and washers shall be cadmium plated.

Annular Sand: Sand for filling the annular space between the carrier pipe and the steel casing shall consist of natural or manufacture granular material or a combination thereof, free from deleterious amounts of organic material, mica, loam, clay and other substances not suitable for the intended purpose. Sand to be used shall be of such fineness that 100 percent will pass a Standard No. 30 sieve.

End Seals: End seals shall be made of synthetic rubber. Banding straps shall be made of stainless steel.

PART 3 - CONSTRUCTION METHODS

SECTION 302 – ROADWAY SURFACING

302-1.9 Traffic Signal Loop Detectors. To the City Supplement, DELETE the second paragraph and SUBSTITUTE with the following:

Traffic detector loops shall be reinstalled prior to resurfacing of the related street within 15 days from completion of all preparatory work including milling, cutting and grinding. The Contractor shall contact the City of San Diego's Street Division, Traffic Signal Maintenance at 619-527-8052 north of Interstate 8 or 619-527-8053 south of Interstate 8 to request loop layout.

302-4.1 Material. DELETE in its entirety and SUBSTITUTE with the following:

Material shall be Rubberized Emulsion-Aggregate Slurry (REAS) in accordance with 600-3.2 "Materials."

302-5.2 Pavement Restoration Adjacent to Trench. Pavement restoration adjacent to trench shall include the replacement of existing pavement adjacent to the proposed trench and outside the trench limits, that was previously broken or displaced.

Prior to the commencement of the Work, the Contractor shall meet with the Engineer and determine the limits of the pavement to be replaced. If the Contractor does not meet with the Engineer before removing the pavement, all replacement outside the limits of the proposed trench resurfacing shall be at the Contractor's expense.

Existing pavement shall be removed in accordance with Section 300-1.3.2. Prior to pavement restoration, existing subgrade shall be prepared in accordance with 301-1, "SUBGRADE PREPARATION." If any existing unsuitable subgrade as determined by the Engineer is encountered, it shall be replaced with imported backfill in accordance with 306-1.3.7, "Imported Backfill" prior to preparation.

302-5.2.1 Measurement and Payment. Payment for pavement restoration adjacent to trench will be made on a square foot basis as shown in the Bid in accordance with 302-6.8, "Measurement and Payment" for concrete streets or 302-5.9 "Measurement and Payment." Unless Bid includes separate Bid item(s), the following shall be included in the payment for pavement restoration adjacent to trench:

a) saw-cutting existing edges,
b) removal and disposal of existing pavement,
c) subgrade preparation including imported backfill material,
d) form work,
e) placement, curing, and protection of new pavement, and
f) placing full depth AC per CSDSD SDG-107-Type "A".

302-6.1 General. To the City Supplement, Last paragraph, DELETE in its entirety and SUBSTITUTE with the following:

Prior to placing concrete, existing subgrade shall be prepared in accordance with 301-1, "SUBGRADE PREPARATION."

If any existing unsuitable subgrade, as determined by the Engineer, is encountered it shall be replaced in accordance with 300-2.2, "Unsuitable Material."

302-6.8 Measurement and payment. To the City Supplement, DELETE in its entirety.

302-13.4 Application. To the City Supplement, DELETE the second paragraph and SUBSTITUTE with the following:

Sealant shall be applied from the bottom of the crack up to the surface in a manner which does not result in sealant bridging or pockets of entrapped air. The sealant shall be applied to a slightly overfilled condition and then leveled with a squeegee. The width of sealant remaining on the surface shall not exceed 1.5" on either side of the crack. Any debris blown onto adjacent gutters, sidewalks, parkways, medians, intersections or other areas shall be removed prior to the end of the Working Day.

302-13.5 Payment. To the City supplement DELETE in its entirety and REPLACE with the following:

Payment for Crack Sealing including weed spray, cleaning, and sealing shall be included in the Bid item for Crack Seal unit price per pound. Payment for the weight of crack seal shall be obtained from daily Certified Weighmaster Certificates. The Contractor shall also present daily Weighmaster Certificates for the amount of such material remaining unused at the completion of the work at no cost to the Agency. Payment will be determined by deducting the amount of the unused material from the total amount of material delivered.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-1.3 Forms. ADD the following:

The variation from established grade or lines shall not exceed ¼ -inch in 10 feet and there shall be no offsets or visible waviness in the finished surface. All other tolerances shall be within the tolerances of ACI 117.

Forms to confine the concrete and shape it to the required lines shall be used wherever necessary. The Contractor shall assume full responsibility for the adequate design of all forms, and any forms which are unsafe or inadequate in any respect shall promptly be removed from the WORK and replaced at the Contractor's expense. A sufficient number of forms of each kind shall be provided to

permit the required rate of progress to be maintained. The design and inspection of concrete forms, false work, and shoring shall comply with applicable local, state and Federal regulations. Plumb and string lines shall be installed before concrete placement and shall be maintained during placement. Such lines shall be used by Contractor's personnel and by the ENGINEER and shall be in sufficient number and properly installed. During concrete placement, the Contractor shall continually monitor plumb and string line form positions and immediately correct deficiencies.

The forms shall be tight so as to prevent the loss of water, cement and fines during placing and vibrating of the concrete. Specifically, the bottom of wall forms that rest on concrete footings or slabs shall be provided with a gasket to prevent loss of fines and paste during placement and vibration of concrete. Such gasket may be a 1 – to 1-1/2-inch diameter polyethylene rod held in position to the underside of the wall form. Adequate clean-out holes shall be provided at the bottom of each lift of forms. The size, number, and location of such clean-outs shall be as acceptable to the City.

All vertical surfaces of concrete members shall be formed, except where placement of the concrete against the ground is shown. Not less than 1-inch of concrete shall be added to the thickness of the concrete member as shown where concrete is permitted to be placed against trimmed ground in lieu of forms. Such permission will be granted only for members of comparatively limited height and where the character of the ground is such that it can be timed to the required lines and will stand securely without caving or sloughing until the concrete has been placed.

When a second lift is placed on hardened concrete, special precautions shall be taken in the way of the number, location, and tightening of ties at the top of the old lift and bottom of the new to prevent any unsatisfactory affect whatsoever on the concrete. Pipe stubs and anchor bolts shall be set in the forms where required.

The form surfaces shall be treated with a non-staining mineral oil or other lubricant compatible with the waterproofing membrane material and acceptable to the City. Any excess lubricant shall be satisfactorily removed before placing the concrete. Where field oiling of forms is required, the Contractor shall perform the oiling at least two weeks in advance of their use. Care shall be exercised to keep oil off the surfaces of steel reinforcement and other metal items to be embedded in concrete.

ADD: 303-1.3.1 Form Ties.

Embedded Ties: Holes left by the removal of form tie cones shall be reamed with suitable toothed reamers so as to leave the surface of the holes clean and rough before being filled with mortar as indicated in Section 201. Wire ties for holding forms will not be permitted. No form-tying device or part thereof, other than metal, shall be left embedded in the concrete. Ties shall not be removed in such manner as to leave a hole extending through the interior of the concrete members. The use of snap-ties which cause spalling of the concrete upon form stripping or tie removal will not be permitted. If steel panel forms are used, rubber grommets shall be provided where the ties pass through the form in order to prevent loss of cement paste. Where metal rods extending through the concrete are used to support or to strengthen forms, the rods shall remain embedded and shall terminate not less than 1-inch back from the formed face or faces of the concrete.

Removable Ties: Where taper ties are approved for use, the larger end of the taper tie shall be on the west side of walls in water retaining structures. After the taper tie is removed, the hole shall be thoroughly cleaned and roughened for bond. A precast neoprene or polyurethane tapered plug shall be located at the wall centerline. The hole shall be completely filled with non-shrink grout for water bearing and below-grade walls. The hole shall be completely filled with non-shrink or regular cement grout for above-grade walls which are dry on both sides. Exposed faces of walls shall have the outer 2 inches of the exposed face filled with a cement grout which shall match the color and texture of the surrounding wall surface.

ADD: 303-1.3.2 Reuse of Forms.

Forms may be reused only if in good condition and only if acceptable to the CITY. Light sanding between uses will be required wherever necessary to obtain uniform surface texture on all exposed concrete surfaces. Exposed concrete surfaces are defined as surfaces which are permanently exposed to view. In the case of forms for the inside wall surfaces of hydraulic/water retaining structures, unused tie rod holes in forms shall be covered with metal caps or shall be filled by other methods acceptable to the CITY.

303-1.4.1 General. ADD the following:

Careful procedures for the removal of forms shall be strictly followed, and this work shall be done with care so as to avoid injury to the concrete. No heavy loading on green concrete will be permitted. In the case of above-ground floor slabs, forms shall remain in place until test cylinders attain a minimum compressive strength of 75 percent of the 28-day strength specified; provided, that no forms shall be disturbed or removed under a individual panel or unit before the concrete in the adjacent panel or unit has attained 75 percent of the specified 28-day strength and has been in place for a minimum of 7 days. The time required to establish said strength shall be as determined by the City who will make several test cylinders for this purpose from concrete used in the first group of roof panels placed. If the time so determined is more than the 7-day minimum, then that time shall be used as the minimum length of time. Forms for all vertical walls and columns shall remain in place at least 2 days after the concrete has been placed. Forms for all parts of the WORK not specifically mentioned herein shall remain in place for periods of time as determined by the CITY.

303-1.8.2 Grouting. ADD the following:

a) Prepackage Grouts:

All mixing, surface preparation, handling placing, consolidation, curing, and other means of execution for prepackaged grouts shall be done according to the instructions and recommendations of the manufacturer.

b) Base Plate Grouting:

For base plates, the original concrete shall be blocked out or finished off a sufficient distance below the plate to provide for a one-inch thickness of grout or a thickness as indicated.

After the base plate has been set in position at the proper elevation by steel wedges or double nuts on the anchor bolts, the space between the bottom of the plate and the original pour of concrete shall be filled with non-shrink-type grout. The mixture shall be of a trowel able consistency and tamped or rodded solidly into the space between the plate and the base concrete. A backing board or stop shall be provided at the back side of the space to be filled with grout. Where this method of placement is not practical or where required by the CITY, alternate grouting methods shall be submitted for acceptance.

c) Topping Grout:

All mechanical, electrical, and finish work shall be completed prior to placement of topping or concrete fill. The base slab shall be given a roughened textured surface by sandblasting or hydroblasting exposing the aggregates to ensure bonding to the base slab.

The minimum thickness of grout topping and concrete fill shall be one inch. Where the finished surface of concrete fill is to form an intersecting angle of less than 45 degrees with the concrete surface it is to be placed against, a key shall be formed in the concrete

surface at the intersection point. The key shall be a minimum of 3-1/2-inches wide by 1-1/2-inches deep.

The base slab shall be thoroughly cleaned and wetted prior to placing topping and fill. No topping concrete shall be placed until the slab is complete free from standing pools or ponds of water. A thin coat of neat Type II cement grout shall be broomed into the surface of the slab just before topping of fill placement. The topping and fill shall be compacted by rolling or tamping, brought to established grade, and floated. Grouted fill for tank and basin bottoms where scraping mechanisms are to be installed shall be screeded by blades attached to the revolving mechanism of the equipment in accordance with the procedures outlined by the equipment manufacturer after the grout is brought to the established grade.

Topping grout placed on sloping slabs shall proceed uniformly from the bottom of the slab to the top, for the full width of the placement.

The surface shall be tested with a straight edge to detect high and low spots which shall be immediately eliminated. When the topping and fill has hardened sufficiently, it shall be steel troweled to a smooth surface free from pinholes and other imperfections. An approved type of mechanical trowel may be used as an assist in this operation, but the last pass over the surface shall be by hand-troweling. During finishing, no water, dry cement or mixture of dry cement and sand shall be applied to the surface.

303-5.10.2 Payment. To the City Supplement, 2nd paragraph, DELETE in its entirety and SUBSTITUTE the following: Additional concrete sidewalk and curb quantities ***beyond the 15'-0"*** will be paid for in accordance with the Contract unit price for additional curb and additional sidewalk.

SECTION 306 – UNDERGROUND CONDUIT CONSTRUCTION

306-1.3.6 Mechanical Compaction Requirements. ADD the following:

The relative compaction of fill, backfill, and base material shall be in accordance with SSPWC, Section 300, with the following exceptions:

a)	Subgrade where trench has been overexcavated	95%
b)	One foot layer of crushed aggregate backfill in overexcavated trench. Where trench is overexcavated more than 2 feet, minimum of 2 layers shall be compacted.	95%
c)	Pipe zone for flexible and rigid pipe	90%
d)	Fill beneath structures, including water containing structures	95%
e)	Backfill on underground structure roof	90

306-1.4.8 Televising Sewer Mains and Storm Drains. To the City Supplement, DELETE in their entirety and SUBSTITUTE with the following:

ADD: 306-1.4.8 Televising Sewer Mains, Sewer Laterals, and Storm Drains.

306-1.4.8.1 General. To the SSP, DELETE in its entirety and SUBSTITUTE with the following:

1. Work under this section shall consist of investigation of pipelines by use of digital closed circuit color video recording to determine condition of lines following cleaning, rehabilitation, and installation of gravity pipelines and water lines (when required). The Contractor shall provide the video records with compressed audio in digital file format on digital video discs (DVD').

2. The Contractor in coordination with the Engineer shall video record pipelines to:

    1. Locate existing laterals

    2. Confirm no flow in existing mains prior to abandonment, and

    3. Assess the conditions of the existing pipe segments and laterals after the cleaning process and prior to the commencing rehab work, and

    4. Accept the newly installed or rehabilitated pipelines

306-1.4.8.2 Submittals. The Contractor shall make several submittals during construction as follows:

a) The Contractor shall provide an initial submittal at the start of televising work demonstrating the typical video and audio quality to be provided for acceptance by the Engineer. This submittal shall note any proposed changes to the specification listed below regarding video format, data processing, compression or other conditions for review and approval by the Engineer.

b) Final Televising, Post-Rehabilitation Videos and Red-lines – New sewer mains shall be inspected by CCTV and recorded on DVD not less than 22 working days after completion of permanent trench restoration and finished grading, but prior to final resurfacing. The Contractor shall review the DVD for any discrepancies or deficiencies in the installation of the pipe or liner. The Contractor shall notify the the Engineer at least 30 Working Days in advance of the anticipated date that Acceptance will be requested. If the specified advance notice is not given, Acceptance and bond release may be delayed.

c) Ten Working Days shall be allowed for the Engineer to review each individual video disc of each and every reach documented on that particular videodisc. In the event that any deficiencies are discovered by the Engineer or City, either by the Contractor's televising or the City's re-televising, 5 Working Days shall be allowed for City to judge whether the deficiencies or sags are repairable, in place. If the judgment is made that the deficiencies are non-repairable in place, the affected portion(s) shall be reconstructed at no cost to the City. The Contractor shall not be entitled to Contract Time extension due to delays resulting from correcting deficiencies or sags as determined by televised inspections.

    i. The City reserves the right to re-televise any new sewer main after the placement of permanent trench restoration and before final acceptance to determine the existence and extent of any foreign material or obstructions such as cement grout, wood, rocks, sand, concrete, or pipe fragments, and any structural deficiencies, or sags precipitated by the permanent trench restoration operations or other items of Work.

    Post-rehabilitation videos shall be submitted within 30 days of completion of the Work. The final video recording shall clearly show the condition of the liner with ends sealed at the manholes, service lateral and connection seals. The submittal of this final video recording shall also include MS Access database and marked up Field Book pages or Plans as attachments. Failure to deliver the submittal(s) within the time identified or if a total of more than 20 segments are submitted in a single video may result in one or more of the following:

        1. A delay of the review and approval of the submittal(s).

        2. Delay in progress payments.

        3. Require the Contractor to re-televise the sewer main segments.

306-1.4.8.3 Video Operator Qualifications. The video operator shall have at least 1 year of experience with a project of a similar nature within the last 3 years.

306-1.4.8.4 Equipment for Televising. Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside periphery of the sewer pipe or storm drain for all conditions encountered during the work. The equipment shall be capable of televising the entire length from manhole to manhole in one direction. When televising storm drains/sewer mains the camera shall be capable of scanning the joints for 360 degrees.

If necessary, the Contractor shall provide a self-propelled camera, capable of extended videotaping lengths and operation in remotely accessed areas without direct vehicular access. The system used to move the camera through the pipe shall not obstruct the camera's view. The remote-reading footage counter device which measures the distance traveled by the camera in the pipe shall be displayed on the television monitor and shall be accurate to plus or minus 1' (0.3 meters) in 1000' (300 meters) (+0.3m:300 meters). The Contractor shall calibrate the measuring device each day with a known distance to the satisfaction of the Engineer prior to starting the inspection and videotaping process.

306-1.4.8.5 Televising Procedures.

a) The Engineer shall be notified a minimum of 2 Working Days in advance of televising. The entire televising inspection process shall be done in the presence of the Engineer.

b) The Contractor shall clean the sewer mains prior to televising as necessary to adequately perform the video recording operations.

c) The camera shall be moved through the sewer at a uniform rate, stopping when necessary to ensure proper documentation of the condition of the sewer line but in no case shall the television camera be pulled at a speed greater than 30' (9 meter) per minute. The camera shall be moved by means of power cable winches or self propelled tractors at each manhole, and rotating the camera head at each lateral connection, defect, or both to allow for adequate evaluation. The importance of accurate distance measurements is emphasized. Measurement for location of defects shall be above ground by means of a measuring device. Footages shown on the DVD(s) shall coincide with horizontal lengths from stationing as shown on the plans. Footage measurements shall begin at the centerline of the upstream manhole or storm drain access point, unless permission is given by the Engineer to do otherwise. Both pre and post video inspections shall be submitted to the Engineer.

d) Televising shall be done in one direction for the entire length between manholes. Each section shall be isolated from the remainder of the storm drain or sewer line with the upstream sewage flow bypassed as required. Sufficient water shall be supplied to the isolated section to cause drainage reaching the downstream manhole prior to televising. If existing flows are high, pre-construction video inspection can be done with partial flow. Depth of the flow shall not exceed:

   i. 6" - 10"(150 mm. - 250 mm) pipes - 20% of the pipe diameter.

   ii. 12" - 24" (0.3 meters - 0.6 meters) pipes - 25% of the pipe diameter.

   iii. 27" (0.7 meters) and up pipe - 30% of the pipe diameter.

e) The Contractor shall televise the pipeline with maximum flow diverted from the pipeline. In the event that the existing flow is interfering with the video operation, a bypass shall be performed by the Contractor to lower the flow volume sufficiently to allow for a clear video picture.

f) Obstructions may be encountered during the course of the internal inspection that prevents the travel of the camera. If an obstruction is not passable, the Contractor shall withdraw the equipment and begin internal inspection from the opposite end of the sewer reach. Should an additional obstruction be encountered after employment of the equipment from the opposite end of the sewer and no means are available for moving the television camera past the obstruction, the Contractor shall notify the Engineer, and the inspection shall be cancelled or postponed until the obstruction is removed. The Contractor shall remove the obstruction by excavation, repair or any other means approved by the Engineer, at no additional cost to the City.

   After the obstruction has been removed, the Contractor shall continue with the CCTV inspection. A reverse setup, if necessary, shall be performed by the Contractor at no additional cost to the City. Should the camera get stuck in the sewer, the Contractor shall be responsible for all costs involved in extracting it. Costs related to difficulties encountered during internal television inspection are incidental to the Contract and claims, therefore, will not be considered.

g) Defects such as offset joints, cracks in the pipe, and inflow shall be pointed out, quantified verbally, and projected on CCTV video disc. The Contractor shall use the standard owner's video disc introduction, abbreviations, log sheet forms, and severity code with legend when recording the line segment information. The Contractor shall notify the Engineer of any additional damage found and obtain prior approval from the Engineer for additional point repairs.

h) Original DVD shall be submitted to and shall become the property of the City. DVD's will be reviewed by the Engineer for focus, lighting, sound, clarity of view, and technical quality. Videos recorded while a camera has flipped over in the process of traveling and the viewing of laterals, obstructions or defects that are blocked by cables, skids or other equipment will not be accepted. Sharp focus, proper lighting, and clear distortion-free viewing during the camera operations shall be maintained. Failure to maintain these conditions will result in the rejection of the video disc by the Engineer. Video recordings, if unacceptable to the Engineer, shall be repeated at no additional cost to the City.

i) The City reserves the right to re-televise any reach of the pipeline following the cleaning, pipe installation and rehabilitation activities, but before Acceptance, to determine the existence and extent of any foreign material or obstructions such as cement grout, wood, rocks, sand, concrete, or pieces of pipe, and any structural deficiencies, or sags preventing the completion of the Work.

j) Final CCTV. The Contractor shall clean the line with high pressure water jetting equipment and a sewer ball prior to performing mandrel, air test or both, or as specified by the Engineer. For the final video inspection, the City will require a dry pipe. During the post-video inspection, the camera shall stop at each lateral connection, focus on the bottom of the opening and then make one slow clockwise observation around the perimeter of the lateral which clearly shows the quality of the connection. If the Contractor fails to properly show and document any of the lateral openings, the Contractor will be required to re-televise that section of pipeline at no additional cost to the City.

k) The Contractor shall not be entitled to any additional contract time due to delays resulting from the need to correct any deficiencies, either repairable or non-repairable, in place, as determined by televised inspections.

306-1.4.8.6 DVD and Final Report Requirements. The Contractor shall provide all video with audio in digital file format on DVD's. Audio and written documentation shall accompany all DVD(s) submitted to the Engineer.

a) DVD Requirements

i. One file shall be provided for each manhole to manhole pipe segment or for each manhole to manhole inspection video.

ii. The filename shall incorporate the unique facility identifier provided by the City and the date of the inspection. The facility identifier numbers will be manhole numbers, with adjacent manhole numbers identifying pipe sections. The facility identifier number(s) shall be compatible with the data input features of the reporting software i.e., number of available input digits, fields, or both.

iii. DVD recordings shall be in color and in MPEG2 format. The minimum video bit rate shall be 4.7 Mega bits per second (Mbps) and minimum audio bit rate shall be 128 Kilo bits per second (Kbps). Out-of-focus video recording or low quality and blurred pictures due to steam or smudged camera lens, or portions thereof, shall be cause for rejection of the video recording.

iv. The camera source image capture shall provide a high resolution image with a minimum of 640x480 pixels capture. The video shall be at 30 frames per second.

v. The video will be captured and compressed so as to reduce file size as much as possible while still meeting the needs of the City. The compression shall be in accordance with MPEG2 format. The video files shall be highly compressed, resulting in an anticipated average file size of maximum 10 MB per minute of video.

vi. The compression shall not significantly degrade the still frame quality of the video or audio signal from the original source video, as judged in a side by side viewing under normal viewing conditions.

vii. During post-installation CCTV inspections, the Contractor shall utilize one of the following video camera systems: a rotating-lens camera (articulating head) or a pan and tilt camera.

viii. The Contractor shall use a dual recording system and submit post video inspection discs to the inspector, subsequent to recording.

ix. The Contractor shall ensure visibility and lighting with minimum glare and without any dark or shadowy regions appearing on the final video disc.

x. The Contractor shall pan and tilt the camera and pause for at least 15 seconds at each lateral connection to adequately show and document that the saddle has been installed properly for new installations and that the lateral opening has been reestablished for rehabilitation and lining in accordance with 500.1.1.7.a, "Miscellaneous."

xi. The television camera shall produce a continuously-monitored high-quality picture, capable of discerning all major and minor structural defects in the pipeline. The post-installation CCTV inspection will document all defects which may affect the integrity or the strength of the pipeline, such as cracks, roughness, fins, or folds. The Contractor shall repair or replace all defects, at no additional cost to the City, which in the opinion of the Engineer may affect the hydraulic

condition of the pipe liner.

xii. Each DVD submittal shall include the following:

Visuals

1. Adequate view of the upstream and downstream manholes or storm drain access points. The direction of the survey upstream or downstream.
2. A pause at and zoom in on the lateral connections for at least 15 seconds for identification of the condition of the connection.
3. A pause at and zoom in on the indentified defects sufficient for identification of the type of problem.
4. Identified fault conditions or defects, see Appendix for Standardized City Condition and Defect Codes.
5. Each pipe section shall be identified by FSN, manhole numbers and the street name. If shown on the Plans, station numbers and sheet numbers shall also be identified.
6. A continuous read-out of the camera distance from the starting manhole to the end point at all times.
7. Pipe size.
8. Pipe or liner material, see Appendix for Material Description and Code.

Audio

1. Date of CCTV inspection.
2. Confirmation of each section to be CCTV inspected i.e., narrative of manholes, storm access points or station numbers, or FSN's and direction upstream or downstream.
3. Description of pipe size lined on post and final videos, material liner type for post and final videos and pipe joint length.
4. Description and location of each defect.
5. Description and location of each service connection.
6. Include brief but informative comments on data of significance, including, but not limited to, the locations of unusual conditions, type and size of connection, collapsed section, the presence of scale and corrosion, and other discernible features.

Written Documentation

1. Date of CCTV inspection.
2. Printed labels on DVD number, location information, date of inspection, and other descriptive information.
3. Location, size, material, and length of pipe.

4. Direction of flow and measurement "From" manhole or storm drain access point or station number "To" manhole or storm drain access point or station number or FSN.
5. File numbers itemizing individual segments.
6. Sketch showing the street and cross streets where the CCTV inspection was made.
7. Description and location of each defect or deficiency and a list of all proposed repairs.
8. Description and location of each connection.
9. A menu which lists files for each pipe section to be inspected and the date of the inspection.

b. Final CCTV inspection reports

i. The Contractor shall provide reports of final inspection results of pipeline televising and conditional assessments utilizing a MS Access database reporting software.

ii. This information shall be in tabular form, and include but not be limited to the following information: pipeline run from upstream to downstream manhole, location of defects in feet from upstream manhole, description of the defect, and other pertinent information. The reports shall also show all service lateral connection locations. The inspection reports shall incorporate and utilize a standardized City's rating system to be provided for comprehensive evaluation of pipeline, manhole condition, or both, i.e., a standardized listing of facility condition and defect codes**.** Pipe condition and fault information tied to pipe location shall also be recorded in the Report.

iii. The file naming convention for video files consists of 32 characters, including the extension. The structure includes the following: "(field book page start)-(manhole ID start)-(field book page end)-(manhole ID end)-(hhddmmyy).wmv" where the field book pages and manholes IDs are 4 characters in length and hhddmmyy signifies the hour, day, month and year of the inspection, respectively. An example filename may be "F18S-0045-F18S-0046-14150604.wmv".

iv. See Appendix for televising inspection pipe database structure, table formats and standardized city condition, defect codes and digital video filename. Final reports shall follow these requirements.

306-1.4.8.7 Tolerances.

a) For underground sewer or storm drain conduit installations, the maximum operational tolerance for sag shall be 1/2". When televised inspection is used to check for sag, a calibrated 1/4" diameter steel bar, mounted in front of the camera, shall be used to measure the depth of sag.

b) For rehab work, tolerances shall be in accordance with 500-1.4.9, "DEFECT TOLERANCES".

c) If the Engineer determines that the deficiencies or sags are non-repairable in place, the affected portion(s) shall be reconstructed in accordance with 6-8, "COMPLETION, ACCEPTANCE, AND WARRANTY."

306-1.4.8.8 Payment. The payment for cleaning and televising sewer mains or laterals and storm drains shall be included in the unit price Bid items for cleaning and televising sewer mains and storm drains, televising sewer mains for final acceptance, or lateral launch videos. If a Bid item has not been provided, the payment shall be included in the payment for the proposed pipe.

306-1.6 Basis of Payment for Open Trench Installations. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Second paragraph, DELETE in its entirety and SUBSTITUTE with the following:

The unit price bid for pipe and conduit in place shall be considered full compensation for all wyes, tees, bends, monolithic catch basin connections, and specials shown on the Plans; the removal or restoration of interfering portions of existing sewers, storm drains, and existing improvements as shown on Plans; the closing or removing of abandoned conduit and structures; the excavations of the trench; the control of ground and surface waters; the preparation of subgrade; placing, joining and testing pipe; backfilling the trench; permanent resurfacing; disposal of excess excavation; temporary resurfacing when not a Bid item; and all other work necessary to install the pipe or conduit, complete in place.

Third paragraph, after the word "backfill" ADD: "disposal of all excess excavation,"

306-1.7 House Connection Sewer (Laterals) and Cleanouts. To the City Supplement, 2nd paragraph, DELETE in its entirety and SUBSTITUTE with the following:

Laterals shall be replaced and shall include a cleanout at property line. Lateral connections at the property line shall be made with stainless steel shielded couplings. The Plans show the approximate location of the laterals. Connections at the main shall be made using a "wye" cut-in. Saddle connections shall not be permitted.

306-2.1 General. ADD the following:

The type of jacking operation and method shall be the Contractor's option and shall be subject to approval by the Engineer. The Engineer's approval of the jacking operation and method shall not relieve the Contractor of the responsibility for damage, of any nature, which might occur as a result of the method used.

Prior to choosing a jacking method, the Contractor may request the "Geotechnical Investigation Alvarado Trunk Sewer Phase 3" report prepared by Group Delta Consultants, Inc. dated February 3, 2003 from the Engineer. Where tunneling is shown on the plans, the Contractor shall make the necessary additional investigations in order to satisfy itself that the proposed sewer installation method will successfully complete the sewer installation to the lines and grades indicated on the Plans. If the Contractors install the pipe off line or grade, it shall be removed and replaced to the correct location at no additional cost to the City. Unless provided as a bid item, no additional compensation will be made to the Contractor for the cost of any necessary additional investigations. If the Contractor's trenchless installation equipment fails, becomes lodged, or otherwise irretrievable by trenchless means, the Contractor shall be responsible for open cut retrieval including labor (including overtime), materials equipment, tools, supplies, traffic control plans, and traffic control, saw-cutting, excavation, backfill, compaction, testing, pavement restoration, incidentals, and utility coordination and relocations necessary to retrieve its equipment. The Contractor shall consult the project geologist and the project biologist and, obtain the Engineer's approval prior to any open trench operation. If the Engineer determines that the trenchless installation failure is due to the Contractor's negligence, the cost for open cut retrieval shall be borne by the Contractor, and no

additional compensation will be made. If it is determined that the equipment is irretrievable and the Engineer determines that the trenchless installation failure is due to the Contractor's negligence, the City will not compensate the Contractor for the loss of equipment. Care shall be exercised by the Jacking Contractor to maintain line and grade during jacking operations. Checks shall be performed each eight feet (8') of advance, and if tolerances are exceeded, operations shall cease and the Engineer shall be notified of corrective measures to be implemented prior to proceeding. The jacking tunnel shield shall precede the first pipe and be able to thrust independently of the pit jacking equipment. Excavation shall be performed entirely within the jacking shield and no excavation in advance thereof shall be permitted. Excavation ahead of the shield shall not be more than 0.10 feet greater than the outside dimension of the pipe. Sluicing or jetting with water ahead of the pipe will not be permitted.

306-2.3.1 Jacking Steel Casing.

a) Installation of Steel Casing

Jacking Head: A steel jacking head shall be fitted to the lead section of the casing in such a manner that it extends around the entire outer surface of the steel casing and projects at least 18 inches beyond the driving end of the casing. The jacking head shall not protrude more than ½ -inch outside of the outer casing surface. The head shall be securely anchored to prevent any wobble or alignment variation during the boring or jacking operations. To minimize voids outside the casing, excavation shall be carried out entirely within the jacking head and not I advance of the head. Excavated materials shall be removed from the casing as the boring or jacking operation progresses and no accumulation of excavated materials within the casing shall be permitted.

Jacking Pitt: The excavations for the boring or jacking operations shall be adequately shored to safeguard existing substructures and surface improvements and to ensure against ground movement in the vicinity of the jack supports. Heavy guide timber, structural steel, or concrete cradles of sufficient length shall be provided to assure accurate control of boring or jacking alignment. The Contractor shall provide adequate space within the excavation to permit the insertion of the lengths of casing to be bored or jacked. Timbers and structural steel sections shall be anchored to ensure action of the jacks in line with the axis of the casing. A bearing block, consisting of timber or structural steel framework shall be constructed between the jacks and the end of the casing to provide uniform end bearing over the perimeter of the casing and distribute the jacking pressure evenly.

Monitoring Ground Surface Movement: The Contractor shall monitor the ground surface movement of all structures, roadways parking lots and any other areas of concern within twenty-five (25) feet on both sides of the microtunneling alignment at a maximum spacing of one hundred (100) feet along the alignment as required by the ENGINEER. The Contractor shall submit a Surface Monitoring Plan (SMP) to the ENGINEER for prior approval. The SMP shall comply with all applicable permit stipulations and requirements.

Exterior Grouting: Immediately after completion of the boring or jacking operations, the Contractor shall inject grout through the grout connections in such a manner as to completely fill all voids outside the casing pipe resulting from the boring or jacking operations. Grout pressure shall be controlled so as to avoid deformation of the steel casing and avoid movement of the surrounding ground. After completion of the grouting operations, the Contractor shall close the grout connections with galvanized steel threaded plugs.

b) Installation of Carrier Pipe

Installation of Pipe: The end seals shall be pulled on (in case of pull-on type of seals) and the casing spacers shall be installed over the carrier pipe at the proper location, in accordance

with the casing spacers' manufacturer's instructions. Carrier pipe spans between casing spacers shall not exceed 5-feet. Care shall be taken not to damage the carrier pipe or the inner coating of casing pipe while installing the carrier pipe. The position of the runners in the casing shall be as per manufacturer's recommendations. The clearance between the carrier pipe and casing shall be as indicated and shall be uniform throughout the casing length.

End Seals: After the carrier pipe has been tested, the end seals shall be strapped by stainless bands in accordance with manufacturer's instructions.

Placing Annular Sand: The Contractor shall furnish the necessary sand, equipment, hoses, valves, and fittings for the operation. Sand shall be conveyed by air through a hose and deposited by air pressure to fill the annular space between the casing pipe and the carrier pipe. Sand shall be free of lumps to flow unimpeded and completely fill all voids. Sand placement shall be considered completed when no more sand can be blown into the annular space. The Contractor shall protect and preserve the interior surfaces of the steel casing and the exterior surfaces of the carrier pipe from damage.

Closing of Pits: After jacking equipment and excavated materials from the boring or jacking operations have been removed from the jacking pit, the Contractor shall prepare the bottom of the jacking pit as a pipe foundation. The Contractor shall remove all loose and disturbed materials below pipe grade to undisturbed earth and recompact the material in accordance with Section 306-1.3.6.

306-2.5 Tolerance. DELETE entire paragraph and REPLACE with the following:

The Contractor shall control the application of the jacking pressure and excavation of materials ahead of the casing as it advances to prevent the casing from becoming earthbound or deviating from the required line and grade. The Contractor shall restrict the excavation of the materials to the least clearance necessary to prevent binding in order to avoid loss of ground and consequent settlement or possible damage to overlying structures. Allowable grade deviations in horizontal and vertical alignment shall be no greater than 0.25 feet per 100 feet in any direction over the length of the jacking or boring to a maximum total resultant deviation of 0.5 feet. Allowable grade deviations for the carrier pipe shall be 0.20 feet in any point on the alignment. Adjustments in vertical alignment for the carrier pipe shall be made by selection of the pipe casing spacer dimensions.

ADD: 306-13.2 Pipe Separations. Pipe installation shall be in compliance with the State's health standards for separation and the following:

a) The Contractor shall notify the Engineer immediately if sewer and water pipes, whether existing or proposed, are found to be closer than 4' horizontally or 1' vertically.

b) When a proposed water main is installed above an existing sewer main, no connection joints shall be within 8' outside the sewer main crossing on both sides.

c) When a proposed water main is installed below an existing sewer main, no connection joints shall be within 10' of the sewer main crossing on both sides.

d) When a proposed sewer main is installed above an existing water main, no connection joints shall be within 10' outside the water main crossing on both sides.

e) When a proposed sewer main is installed below an existing water main, no connection joints shall be within 4' outside the water main crossing on both sides.

f) Dimensions shall be measured from outside pipe wall to outside pipe wall.

g) If 1' vertical separation cannot be maintained between proposed and existing utilities, 6" – 11" sand cushion per 200-1.5, "Sand" and 1" neoprene pad shall be installed as shown on

Plans. The neoprene pad shall be 1" thick and wide enough to extend a minimum of 6" horizontally beyond the outside pipe wall. Neoprene pads shall have hardness between 50-70 durometers, as manufactured by Hoffmeyer Company, Industrial Rubber Supply, or approved equal. The neoprene pad shall be installed immediately below or on top of the existing utility. The sand cushion shall be placed between the neoprene pad and the proposed pipe.

ADD: 306-13.3 Utility Crossings. To the City Supplements, DELETE in its entirety.

ADD: 306-18.1 Installation of Precast Junction Vault Assembly.

Precast Junction Vault Assembly includes providing a precast junction vault, precast manhole sections and cast iron cover and frame, and cast-in-place reinforced concrete base, complete and in place.

Cast-in-place Concrete Base: The base shall be constructed with a proper groove compatible with the precast vault and meeting the recommendations of the vault manufacturer. The cast-in-place joint shall provide a sufficiently level base with a smooth and even surface free of defects or spalling that may interfere with a proper joint seal. The formwork and resultant concrete for the flow channels shall be equal to the quality of a trowelled finish. Irregularities such as holes, fins, or offsets shall be corrected by grinding or patched by an epoxy mortar.

Precast Concrete Vault Installation: The precast concrete vault shall not be placed until the cast-in-place base or other materials have attained the required strength. Precast sections shall be placed so that they are plumb, square and are installed in accordance with the manufacturer's recommendations.

At the vault/base joint the vault shall be placed a suitable joint sealant. Follow manufacturer's recommendations for installation of the joint sealant. Concrete or other surfaces that are to adhere to mortar shall be free from dust, loose aggregates, oil, grease and other contaminants.

Precast Concrete Manhole Section Installation: The precast concrete manhole sections shall be placed so that they are plumb, square and are installed in accordance with the manufacturer's recommendations. Seal the joints between each precast manhole section with a suitable joint sealant.

Manhole cover and frame shall be secured to the grade ring with cement mortar fillet. Concrete or other surfaces that are to adhere to mortar shall be free from dust, loose aggregates, oil, grease and other contaminants.

SECTION 800 – REVEGETATION, MAINTENANCE AND MONITORING

800-1.1 Terms and Responsibilities. For the purpose of these specifications the following definitions and descriptions of the responsibilities shall apply:

Revegetation Contractor - To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The planting and plant establishment work shall be performed by a qualified Revegetation Contractor to implement the Revegetation Plan. Revegetation Contractor shall possess a landscape Contractor's and pesticide/herbicide license. The Revegetation Contractor shall demonstrate knowledge of native vegetation and invasive weed identification as a part of the Bid. The Revegetation Contractor shall implement the Revegetation Plan in accordance with recommendations provided by the Project Biologist and Engineer.

800-1.7.1 General. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

800-1.7.1 General. The City will retain a qualified Project Biologist to perform biological monitoring work for this contract. The Contractor shall coordinate its activities and Schedule with the activities and schedule of the Biologist Monitor.

800-2.1 General. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

800-2.1 General. When required in the Contract Documents, a licensed Revegetation Contractor shall be retained to perform landscape and revegetation work. The Contractor shall submit copies of the Revegetation Contractor's landscape contractor license and pesticide/herbicide license or a subcontractor holding a pesticide/herbicide license as noted in section 800-1.1 within 5 days of the Bid opening and show references for at least 3 successful native habitat revegetation projects of similar size and complexity in Southern California and provide a current reference for each. The submittals shall be sent to the City Project Manager.

800-2.15 Payment. To the City Supplement, DELETE part e) in its entirety and SUBSTITUTE with the following:

e) Maintenance Program: Payment for the maintenance work required during the extended period beyond the PEP (PEP) and in accordance with the Revegetation Maintenance Contract including site observations, and bond (s) shall be included in the lump sum Bid item for Maintenance Program (i.e., 25 months unless otherwise noted).

SECTION 804 – SEWAGE SPILL PREVENTION

804-1 GENERAL. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The Contractor shall observe and comply with the City's policy of zero spills. **The Contractor shall be liable for all damages and fines associated with sewage spills caused by improper support or damage to the existing sewer facilities.**

The Contractor shall designate a person responsible for the development and enforcement of the Sewage Spill Response Plan, and for ensuring sewer spills are minimized to the maximum extent possible. The Contractor shall provide a status of all bypass related work at biweekly progress meetings as requested by the City.

804-2 SEWAGE SPILL PREVENTION AND RESPONSE PLAN. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

a) Prior to the start of construction, the Contractor shall develop and submit to the Engineer, for review and approval, a written Sewage Spill Prevention and Response Plan. The plan shall include sewage spill response plan, spill containment and cleanup plan, staging area, and sewage bypass and pumping plan.

b) The Sewage Spill Prevention and Response Plan shall be developed to respond to any construction related sewage spill(s). The plan shall include:

    1. Identifying all nearby environmentally-sensitive areas such as waterways, channels, catch basins and entrances to existing underground storm drains.

    2. Making arrangements for an emergency response unit, stationed at or near the Site, comprised of emergency response equipment and trained personnel to be immediately dispatched in the event of a sewage spill(s). This includes field biologists, archaeologists, or both if in an environmentally-sensitive area such as a canyon.

    3. Developing an emergency notification procedure that includes an emergency response team with telephone numbers and arrangements for backup personnel and equipment. The emergency response unit shall be able to dispatch to the Site 24 hours a day 7 days a week including weekends and holidays. The Contractor shall designate primary and secondary representatives, their respective phone numbers, pager numbers, and mobile

phone numbers. These Contractor's representatives shall be accessible and available at all times to respond immediately to any sewer spill event.

4. Identifying any property owners who may be affected e.g., the City Park and Recreation Department.

c) At the pre-construction meeting the Contractor will be provided with a list of the City representatives to contact in case of sewage spill(s). In case of a sewage spill(s), the Contractor shall immediately call the Sewage Spill Hotline number at (619) 527-5481 and shall act immediately without instructions from the City, to control the spill and take all appropriate steps to contain it in accordance with the Sewage Spill Prevention and Response Plan and 804-2.1, "Sewage Bypass and Pumping Plan." The Contractor shall immediately notify the City representatives of the spill and shall report Project name, location, Contractor name, Project Engineer, and Engineer names.

d) The Contractor shall, within 3 Working Days from the occurrence of the spill, submit to the Engineer a written report describing the following information related to the spill: the location; the nature and estimated volume; the date and time; the duration; the cause; the type of remedial and/or clean up measures taken (including erosion control measures) and the date and time of implementation; the corrective and/or preventive actions taken to avoid further spills; equipment used in spill response; and the environmentally-sensitive habitat such as a water body, if any, impacted and results of any necessary monitoring. The Contractor shall provide a list of who from the City was notified, date and time of notification, date and time the Contractor was notified of the spill, date and time the Contractor arrived on Site.

e) The Engineer may institute further corrective actions, as deemed necessary, to fully comply with existing laws, ordinances, codes, order or other pertinent regulations. In addition to any penalties provided by federal, state, and local laws, the Contractor shall be responsible for all costs incurred for the corrective actions including mitigation measures (habitat restoration, etc.) and obtaining after-the-fact permits if necessary, in environmentally sensitive areas. These permits include but are not limited to those from the City Planning Department Development Services, California Coastal Commission, U.S. Army Corps of Engineers and the California Department of Fish and Game.

f) It shall be the Contractor's responsibility to assure that all field forces, including Subcontractors, know and obey all safety and emergency procedures, including the Sewage Spill Prevention and Response Plan applicable to the work, to be maintained and followed at the Site. If in an environmentally sensitive area, such as canyon, stream, or lagoon, impacts shall be minimized. Crews shall be aware at the start of the job of any sensitive environmental habitats, breeding season restrictions, etc.

g) The Contractor shall prevent spills when working on sewer lines, such as when making temporary connection, when connecting new lines into the sewer system, ensuring no laterals are connected to mains being abandoned, ensuring diversions are appropriately installed, and diversions are completely removed when finished so there are no blockages. The Contractor shall not trap debris and discharge rock or debris downstream. Avoidance of streams is paramount unless authorized via permits.

h) The Contractor shall defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees, from and against all claims asserted, or liability established for damages or injuries to any person or property resulting from any sewage spill caused or claimed to be caused by the Contractor's action or failure to take measures to prevent a spill. **The Contractor shall be responsible for payment of any fines assessed against the City for such sewage spills.** The Contractor's duty to indemnify and hold harmless shall not

include any claims or liability arising from the established active or sole negligence or willful misconduct of the City, its agents, officers or employees.

i) The Contractor shall obtain and maintain an additional insurance coverage for Pollution Liability with its limits and requirements as set forth in 7-3.5.3, "Contractors Pollution Liability Insurance Endorsements." The limits and requirements for Pollution Liability shall be in an amount sufficient to cover potential losses from sudden and accidental pollution. Unless otherwise provided for in the Bid Proposal, all costs associated with the requirements for Sewage Spill Prevention and Response Plan, including additional insurance, shall be included in the prices for other related Bid items.

804-2.1 Sewage Bypass and Pumping Plan. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

a) The Contractor shall submit to the Engineer for approval, a Sewage Bypass and Pumping Plan at least 15 Working Days prior to implementation of flow diversion in compliance with the City's policy of "ZERO SPILLS." The Sewage Bypass and Pumping Plan shall indicate the sequence of diversion operations, all other operations the Contractor will establish to maintain wastewater service during the construction period, and a quality assurance and quality control plan for the diversion Work.

b) The Sewage Bypass and Pumping Plan shall include an emergency response plan indicating the procedures, equipment, and activities that will be implemented in the event of an emergency shutdown or failure of the flow diversion equipment used for construction. The Contractor shall be responsible for implementation of the emergency plan in accordance with 804-2 "Sewage Spill Prevention and Response Plan".

c) The Contractor's Sewage Bypass and Pumping Plan shall be reviewed and approved by the Wastewater Collection Division of the City before flow can be diverted. No deviation from the approved Sewage Bypass and Pumping Plan will be allowed without prior approval from the Engineer.

d) The Contractor shall observe and comply with all Federal, State, and local laws, ordinances, codes, orders, and regulations which in any manner affect the conduct of the work, specifically as it relates to sewage spills. The Contractor shall be fully responsible for preventing sewage spill(s), containing any sewage spill(s), recovery and legal disposal of any spilled sewage, any fines, penalties, claims and liability arising from negligently causing a sewage spill(s), and any violation of any law, ordinance, code, order, or regulation as a result of the spill(s).

e) The Contractor shall exercise care not to damage existing public and private improvements, interrupt existing services or facility operations which may cause a sewage spill(s). Any reasonably anticipated utility or improvement which is damaged by the Contractor shall be immediately repaired at the expense of the Contractor. In the event that the Contractor damages an existing utility or interrupts an existing service, which causes a sewage spill(s), the Contractor shall immediately call the emergency number at (619) 515-3525.

f) The Contractor shall exercise care not to damage any sensitive habitats or historic resources unless authorized via the discretionary permit and Mitigation, Monitoring and Reporting Program approved by the City.

g) The Contractor shall provide all facilities, labor, power, and appurtenances necessary to divert wastewater flows as necessary to allow proper installation of the pipeline and/or manhole linings.

h) The Contractor shall submit as part of their Sewage Bypass and Pumping Plan their monitoring procedure and frequency and shall continuously monitor the flow levels downstream and upstream of the flow diversion to detect any possible failure that may cause a sewage backup and spill(s). The Contractor shall maintain a log of the monitoring and provide daily copies to the Engineer in a manner acceptable to the Engineer.

i) The Contractor shall inspect and maintain the diversion system daily, including the back-up system. The Contractor shall submit with their Sewage Bypass and Pumping Plan their maintenance procedures and frequency. The Contractor shall maintain a log of all inspection, maintenance and repair records, and provide copies to the Engineer upon request in a manner acceptable to the Engineer.

j) The Contractor shall size the flow diversion system to handle the peak flow and shall include a 100% backup in the flow diversion system. The Contractor shall provide temporary means to maintain and handle the sewage flow in the existing system as required to complete the necessary construction. The Contractor shall utilize the flow diversion system to mitigate any additional wet weather flows, perform the necessary maintenance and repairs on the flow diversion system, and exercise and ensure the operation of the backup system. Each pump, including the backup pumps, shall be a complete unit with its own suction and discharge piping.

k) The Contractor shall operate the backup flow diversion system for a minimum of 25% of the total diversion time on a weekly basis. The backup flow diversion system shall be fully installed, operational, and ready for immediate use. The diversion system shall be hydraulically tested with clean water prior to wastewater flow diversion. The Contractor shall demonstrate to the satisfaction of the Engineer that both the primary and backup flow diversion systems are fully functional and adequate, and shall certify the same, in writing, to the Engineer in a manner acceptable to the Engineer.

l) The Contractor shall provide one dedicated fuel tank for every single pump or generator, if fuel or generator driven pumps are used. The Contractor shall provide an emergency standby power generator, if electric power driven pumps are used. The Contractor shall provide a fuel level indicator outside each fuel tank. The Contractor shall continuously (while in use) monitor the fuel level in the tanks and ensure that the fuel level does not drop below a level equivalent of two hours of continuous flow diversion system operation. The Contractor shall take the necessary measures to ensure the fuel supply is protected against contamination. This includes but is not limited to fuel line water traps, fuel line filters, and protecting fuel stores from precipitation. The Contractor shall monitor all hoses and repair leaks immediately.

804-2.2 Payment To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Unless a Bid item has been provided, full compensation for the Sewage Bypass and Pumping Plan and, its implementation shall be included in the payment for sewer main installation or rehab.

SECTION 807– RESOURCE DISCOVERIES

807-1.1 Environmental Document. The City of San Diego Environmental Analysis Section (EAS) of the Development Services Department (DSD) has prepared **Mitigated Negative Declaration** for Alvarado Trunk Sewer Phase III, DEP No. 209815, as referenced in the Contract Appendix. The Contractor shall comply with all requirements of the **Mitigated Negative Declaration** as set forth in the Contract Appendix.

Unless a separate Bid item has been provided for compliance with the City's prepared environmental document e.g., MMRP, payment shall be included in the various Bid items.

807-1.2 Archeological and Native American Monitoring Program. To the City Supplement, DELETE in its entirety and SUBSTITUTE within the following:

Monitoring may include any incidental work (e.g. borings, potholing, laterals, other underground utilities) required for construction of the Project.

Unless specified otherwise in the Contract Documents, the Contractor shall retain a qualified archaeologist approved by the City's Environmental Analysis Section (EAS). In addition to being approved by EAS, and within 5 working days of the bid opening, the Contractor must provide a list of 3 successful local projects the archaeologist completed in the last 5 years, and provide a current reference for each. The City shall verify the information provided and only qualified monitors shall be accepted. The archeologist shall retain the appropriate Native American representative. Archeologist and the Native American representative shall attend the pre-construction meeting. The areas shown on the Plans subject to monitoring are approximate. The archaeologist shall confirm the sites and implement the required monitoring per Contract Appendices.

If a discovery is made, the Contractor's archaeological monitor shall make a determination as to whether excavation in the area must cease or can continue. The time the Contractor waits for this determination from their monitor cannot be claimed as delay time.

Unless included in the payment for the proposed item of Work e.g., utility main, the full compensation for archaeological and Native American monitoring program and report preparation, as prescribed in Contract Appendices, shall be included in the contract Bid item for archaeological and Native American monitoring program.

If any significant archaeological sites are known to exist in the project area, they will be shown in the Archaeological Data Recovery Program as part of Appendix A. In the event of a significant discovery, foreseen or unforeseen, and if no bid item for Archaeological and Native American Mitigation and Curation is included in the Contract, the Contractor shall be entitled to additional compensation in accordance with 3-3, "Extra Work", for implementation of a Mitigation Program as set forth in Contract Appendices.

The Contractor shall submit Archaeological work detailing description of Work related to Archaeology Monitoring on the sample form in the contract Appendix.

807-1.3 Paleontological Monitoring Program. To the City Supplement, DELETE in its entirety and SUBSTITUTE within the following:

Monitoring may include any incidental work (e.g. borings, potholing, laterals, other underground utilities) required for construction of the Project.

Unless specified otherwise in the Contract Documents, the Contractor shall retain a qualified paleontologist approved by EAS. In addition to being by approved by EAS, and within 5 working days of the bid opening, the Contractor must provide a list of 3 successful local projects the archaeologist completed in the last 5 years, and provide a current reference for each. The City shall verify the information provided and only qualified monitors shall be accepted. The paleontologist shall attend the pre-construction meeting. The areas shown on the Plans subject to monitoring are approximate. The paleontologist shall confirm the sites and implement the required monitoring in Contract Appendices.

Unless included in the payment for the proposed item of Work e.g., utility main, the full compensation for paleontological monitoring program and report preparation, as prescribed in Contract Appendices, shall be included in the Contract Bid item for paleontological monitoring program.

If a discovery is made, the Contractor's paleontological monitor shall make a determination as to whether excavation in the area must cease or can continue. The time the Contractor waits for this determination from their monitor cannot be claimed as delay time.

In the event of a significant discovery, and if no bid item for Paleontological Mitigation and Excavation is included in the Contract, the Contractor shall be entitled to additional compensation in accordance with 3-3, "Extra Work," for implementation of a Mitigation Program as set forth in Contract Appendices.

807-1.4 Archaeological and Native American Mitigation and Curation. To the City Supplement, DELETE in its entirety and SUBSTITUTE within the following:

In the event of a significant Native American or archaeological discovery foreseen or unforeseen and after consultation with EAS staff, the Contractor shall implement a mitigation program as set forth in Contract Appendices. In accordance with the Mitigation and Monitoring Reporting Program, the mitigation program shall include but not be limited to, preparation and implementation of an Archaeological Data Recovery Program (ADRP), recovery, sorting, cleaning, cataloging/identifying/analyzing, curation (bagging, placement into archival boxes, delivery to an appropriate institution, and any fees required by the institution), and reporting, of artifact remains. The Archaeological Principal Investigator (PI) as defined in the MMRP shall make a recommendation if all or a portion, (i.e. representative sample) of the items discovered need to be curated.

Work for mitigation shall be paid from the Allowance Bid item for Archaeological and Native American Mitigation and Curation. The Contractor shall provide the Engineer with invoices for the Work performed, including the invoice from the archaeological monitor in the format shown in the attached Appendix, and be reimbursed from the amount allocated.

If there is an ADRP or known site that is indicated in the Contract Documents, the payment shall be included in the Allowance Bid item for Archeological and Native American Mitigation and Curation.

(((((((END OF SUPPLEMENTARY SPECIAL PROVISIONS)))))))

APPENDIX A

SITE DEVELOPMENT PERMIT
AND
MITIGATED NEGATIVE DECLARATION

THE ORIGINAL OF THIS DOCUMENT
WAS RECORDED ON SEP 09, 2011
DOCUMENT NUMBER 2011-0467308
Ernest J. Dronenburg, Jr., COUNTY RECORDER
SAN DIEGO COUNTY RECORDER'S OFFICE
TIME: 10:45 AM

RECORDING REQUESTED BY
CITY OF SAN DIEGO
DEVELOPMENT SERVICES
PERMIT INTAKE, MAIL STATION 501

PROJECT MANAGEMENT
PERMIT CLERK
MAIL STATION 501

SPACE ABOVE THIS LINE FOR RECORDER'S USE

INTERNAL ORDER NUMBER: B-00481.02.01.03

SITE DEVELOPMENT PERMIT NO. 746116
ALVARADO TRUNK SEWER PHASE III
PROJECT NO. 209815 [MMRP]
PLANNING COMMISSION

This Site Development Permit No. 746116 is granted by the Planning Commission of the City of San Diego to THE CITY OF SAN DIEGO, Owner, and THE ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, Permittee, pursuant to San Diego Municipal Code [SDMC] section 126.0504. The site is located in a City open space urban canyon between the Smoke Tree Adobe Falls Subdivision to the north and Interstate 8 to the south. A smaller component of the project would occur on the south side of Interstate 8 at San Diego State University and is located within portions of both the College and Navajo Community Planning areas.

Subject to the terms and conditions set forth in this Permit, permission is granted to Owner/Permittee to construct a new underground trunk sewer line approximately 2,664 linear feet (LF) in length and abandon approximately 2,725 LF of existing trunk sewer line and associated improvements identified by size, dimension, quantity, type, and location on the approved exhibits Exhibit "A" dated August 4, 2011, on file in the Development Services Department.

The project shall include:

a. Construct a new underground trunk sewer line approximately 2,664 linear feet (LF) in length and abandon approximately 2,725 LF of existing trunk sewer line;

b. Off-street and on-street staging;

c. Removal of manholes;

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d. Landscaping (planting, irrigation and landscape related improvements);

e. Public and private accessory improvements determined by the Development Services Department to be consistent with the land use and development standards for this site in accordance with the adopted community plan, the California Environmental Quality Act [CEQA] and the CEQA Guidelines, the City Engineer's requirements, zoning regulations, conditions of this Permit, and any other applicable regulations of the SDMC.

STANDARD REQUIREMENTS:

1. This permit must be utilized within thirty-six (36) months after the date on which all rights of appeal have expired. This permit expires on July 13, 2014. If this permit is not utilized in accordance with Chapter 12, Article 6, Division 1 of the SDMC within the 36 month period, this permit shall be void unless an Extension of Time has been granted. Any such Extension of Time must meet all SDMC requirements and applicable guidelines in effect at the time the extension is considered by the appropriate decision maker.

2. No permit for the construction, occupancy, or operation of any facility or improvement described herein shall be granted, nor shall any activity authorized by this Permit be conducted on the premises until:

a. The Owner/Permittee signs and returns the Permit to the Development Services Department; and

b. The Permit is recorded in the Office of the San Diego County Recorder.

3. While this Permit is in effect, the subject property shall be used only for the purposes and under the terms and conditions set forth in this Permit unless otherwise authorized by the appropriate City decision maker.

4. This Permit is a covenant running with the subject property and all of the requirements and conditions of this Permit and related documents shall be binding upon the Owner/Permittee and any successor(s) in interest.

5. The continued use of this Permit shall be subject to the regulations of this and any other applicable governmental agency.

6. Issuance of this Permit by the City of San Diego does not authorize the Owner/Permittee for this Permit to violate any Federal, State or City laws, ordinances, regulations or policies including, but not limited to, the Endangered Species Act of 1973 [ESA] and any amendments thereto (16 U.S.C. § 1531 et seq.).

7. In accordance with authorization granted to the City of San Diego from the United States Fish and Wildlife Service [USFWS] pursuant to Section 10(a) of the federal Endangered Species Act [ESA] and by the California Department of Fish and Game [CDFG] pursuant to California Fish and Game Code section 2835 as part of the Multiple Species Conservation Program

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[MSCP], the City of San Diego through the issuance of this Permit hereby confers upon Owner/Permittee the status of Third Party Beneficiary as provided for in Section 17 of the City of San Diego Implementing Agreement [IA], executed on July 16, 1997, and on file in the Office of the City Clerk as Document No. OO-18394. Third Party Beneficiary status is conferred upon Owner/Permittee by the City: (1) to grant Owner/Permittee the legal standing and legal right to utilize the take authorizations granted to the City pursuant to the MSCP within the context of those limitations imposed under this Permit and the IA, and (2) to assure Owner/Permittee that no existing mitigation obligation imposed by the City of San Diego pursuant to this Permit shall be altered in the future by the City of San Diego, USFWS, or CDFG, except in the limited circumstances described in Sections 9.6 and 9.7 of the IA. If mitigation lands are identified but not yet dedicated or preserved in perpetuity, maintenance and continued recognition of Third Party Beneficiary status by the City is contingent upon Owner/Permittee maintaining the biological values of any and all lands committed for mitigation pursuant to this Permit and of full satisfaction by Owner/Permittee of mitigation obligations required by this Permit, in accordance with Section 17.1D of the IA.

8. The Owner/Permittee shall secure all necessary building permits. The Owner/Permittee is informed that to secure these permits, substantial building modifications and site improvements may be required to comply with applicable building, fire, mechanical, and plumbing codes, and State and Federal disability access laws.

9. Construction plans shall be in substantial conformity to Exhibit "A." Changes, modifications, or alterations to the construction plans are prohibited unless appropriate application(s) or amendment(s) to this Permit have been granted.

10. All of the conditions contained in this Permit have been considered and were determined-necessary to make the findings required for approval of this Permit. The Permit holder is required to comply with each and every condition in order to maintain the entitlements that are granted by this Permit.

If any condition of this Permit, on a legal challenge by the Owner/Permittee of this Permit, is found or held by a court of competent jurisdiction to be invalid, unenforceable, or unreasonable, this Permit shall be void. However, in such an event, the Owner/Permittee shall have the right, by paying applicable processing fees, to bring a request for a new permit without the "invalid" conditions(s) back to the discretionary body which approved the Permit for a determination by that body as to whether all of the findings necessary for the issuance of the proposed permit can still be made in the absence of the "invalid" condition(s). Such hearing shall be a hearing de novo, and the discretionary body shall have the absolute right to approve, disapprove, or modify the proposed permit and the condition(s) contained therein.

11. The Owner/Permittee shall defend, indemnify, and hold harmless the City, its agents, officers, and employees from any and all claims, actions, proceedings, damages, judgments, or costs, including attorney's fees, against the City or its agents, officers, or employees, relating to the issuance of this permit including, but not limited to, any action to attack, set aside, void, challenge, or annul this development approval and any environmental document or decision. The City will promptly notify Owner/Permittee of any claim, action, or proceeding and, if the City should fail to cooperate fully in the defense, the Owner/Permittee shall not thereafter be

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responsible to defend, indemnify, and hold harmless the City or its agents, officers, and employees. The City may elect to conduct its own defense, participate in its own defense, or obtain independent legal counsel in defense of any claim related to this indemnification. In the event of such election, Owner/Permittee shall pay all of the costs related thereto, including without limitation reasonable attorney's fees and costs. In the event of a disagreement between the City and Owner/Permittee regarding litigation issues, the City shall have the authority to control the litigation and make litigation related decisions, including, but not limited to, settlement or other disposition of the matter. However, the Owner/Permittee shall not be required to pay or perform any settlement unless such settlement is approved by Owner/Permittee.

12. This Permit may be developed in phases. Each phase shall be constructed prior to sale or lease to individual owners or tenants to ensure that all development is consistent with the conditions and exhibits approved for each respective phase per the approved Exhibit "A."

ENVIRONMENTAL/MITIGATION REQUIREMENTS:

13. Mitigation requirements in the Mitigation, Monitoring, and Reporting Program [MMRP] shall apply to this Permit. These MMRP conditions are hereby incorporated into this Permit by reference.

14. The mitigation measures specified in the MMRP and outlined in Mitigated Negative Declaration No. 209815, shall be noted on the construction plans and specifications under the heading ENVIRONMENTAL MITIGATION REQUIREMENTS.

15. The Owner/Permittee shall comply with the MMRP as specified in Mitigated Negative Declaration No. 209815, to the satisfaction of the Development Services Department and the City Engineer. Prior to the issuance of the "Notice to Proceed" with construction, all conditions of the MMRP shall be adhered to, to the satisfaction of the City Engineer in the following issue areas: Biological and Cultural Resources (Paleontology and Archaeology).

WATER AND SEWER REQUIREMENTS:

16. All proposed public sewer facilities are to be designed and constructed in accordance with established criteria in the most current City of San Diego sewer design guide.

17. No trees or shrubs exceeding three feet in height at maturity shall be installed within ten feet of any sewer facilities.

INFORMATION ONLY:

- The issuance of this discretionary use permit alone does not allow the immediate commencement or continued operation of the proposed use on site. The operation allowed by this discretionary use permit may only begin or recommence after all conditions listed on this permit are fully completed and all required ministerial permits have been issued and received final inspection.

- Any party on whom fees, dedications, reservations, or other exactions have been imposed as conditions of approval of this Permit, may protest the imposition within ninety days of the approval of this development permit by filing a written protest with the City Clerk pursuant to California Government Code-section 66020.

- This development may be subject to impact fees at the time of construction permit issuance.

APPROVED by the Planning Commission of the City of San Diego on July 13, 2011 and [Approved Resolution Number].

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Permit Type/PTS Approval No.: Site Development Permit No. 746116
Date of Approval: August 4, 2011

AUTHENTICATED BY THE CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT

Patricia Grabski
Development Project Manager

NOTE: Notary acknowledgment must be attached per Civil Code section 1189 et seq.

The undersigned Owner/Permittee, by execution hereof, agrees to each and every condition of this Permit and promises to perform each and every obligation of Owner/Permittee hereunder.

City of San Diego, Engineering and Capital Projects Department
Owner/Permittee

By _____
Jericho Gallardo
Associate Engineer Civil

NOTE: Notary acknowledgments must be attached per Civil Code section 1189 et seq.

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ACKNOWLEDGMENT

State of California
County of San Diego)

On August 8, 2011 before me, Stacie L. Maxwell (NOTARY PUBLIC)
(insert name and title of the officer)

personally appeared Patricia Grabski and Jericho Gallardo,
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.

STACIE L. MAXWELL
Commission # 1810493
Notary Public - California
San Diego County
My Comm. Expires Aug 22, 2012

Signature _____ (Seal)

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PLANNING COMMISSION RESOLUTION NO. 4718-PC
SITE DEVELOPMENT PERMIT NO. 746116
ALVARADO TRUNK SEWER PHASE III
PROJECT NO. 209815 [MMRP]

WHEREAS, THE CITY OF SAN DIEGO/ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, Owner/Permittee, filed an application with the City of San Diego for a permit to install approximately 2,058 linear feet (LF) of new 8, 15 and 36-inch sewer pipe; 797 LF through open trenching and 1,261 LF through tunneling; rehabilitation of approximately 239 LF of existing sewer pipes and abandonment of approximately 2,477 LF of existing trunk sewer and associated improvements as described in and by reference to the approved Exhibits "A" and corresponding conditions of approval for the associated Site Development Permit No. 746116; and

WHEREAS, the project site is located within the public right of way and portions of a City owned open space urban canyon (Alvarado Canyon), north of the Smoke Tree Adobe Falls Subdivision, San Diego State University (SDSU) to the south and Waring Road to the west and Adobe Falls Road to the east. The project site is zoned R-M-1-1, RS-1-1, R-1-7; RM -3-9 CN-1-2 and CV-1-2, within the College and Navajo Community Planning areas; and

WHEREAS, on August 4, 2011, the Planning Commission of the City of San Diego considered Site Development Permit No. 746116 pursuant to the Land Development Code of the City of San Diego.

BE IT RESOLVED by the Planning Commission of the City of San Diego as follows:

That the Planning Commission adopts the following written Findings, dated August 4, 2011.

FINDINGS:

Site Development Permit - Section 126.0504

A. Findings for all Site Development Permits

1. The proposed development will not adversely affect the applicable land use plan;

The land use designation of the Navajo Community Plan identifies the project and surrounding area north of the 8 freeway as residential, both single and multi-family, as well as park land. In the plan, the existing sewer main is identified as existing in Alvarado Canyon. The College Area Community Plan identifies the project area south of freeway 8 as University Campus. Sewer systems are essential public services that are allowed in the land use designations identified in both the Navajo and College Area Community Plans. The sewer pipes were constructed in the 1950s and 1960s and because of their age both maintenance and replacement is needed. In this case the maintenance would include re-alignment, to move a majority of the sewer line out of Alvarado Creek and to make it more accessible for maintenance purposes within the improved right of way, out of sensitive areas. Therefore, the proposed project would not adversely affect the applicable land use plans.

2. The proposed development will not be detrimental to the public health, safety, and welfare; and

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The project proposes to abandon, relocate, improve, and repair sewer mains within the City of San Diego's right of way within portions of both the College and Navajo community planning areas. The objective is to replace and upgrade the existing concrete and vitrified clay pipes with polyvinyl chloride (PVC) material, for performance and durability. This would increase pipe strength, allow better flow and decrease the chances of back-ups or breaks. The project also plans to abandon several sewer mains and manholes that will be redirected to improved right of way and in difficult to access areas within Alvarado Canyon, more importantly Alvarado Creek. This will allow for easier maintenance and access. The project also includes installing curb ramps areas where ramps are not present within the project limits. Following replacement of the sewer main, the streets will be improved by repairing existing cracks and street surface damages. The proposed project will not be detrimental to the public health, welfare, and safety.

3. **The proposed development will comply with the applicable regulations of the Land Development Code.**

The proposed project will be realigned within the City's right of way. It does cross multiple developed and vacant parcels as well, with zoning varying from RM-1-1, RM-2-5, RS-1-1, and RS-1-7. These zones allows for sewer facilities and related ancillary improvements identified for this project. The site is partially located within biologically sensitive areas, and would require construction monitoring. Applicable regulations of the Land Development Code (LDC) would allow the proposed replacement/realignment of the existing sewer facility and associated improvements. The project as proposed complies with the City Green Book, Landscape Manual, Historical Resources Guidelines, and the California Environmental Quality Act Guidelines. The proposed development complies with all applicable regulations of the LDC, except that it will impact wetlands. Due to the location of the existing sewer line within Alvarado Creek there would be temporary and minor impacts to wetlands to restore these areas to their natural state. Mitigation would be provided off-site for or via payment into the Habitat Acquisition Fund.

B. **Supplemental Findings--Environmentally Sensitive Lands**

1. **The site is physically suitable for the design and siting of the proposed development and the development will result in minimum disturbance to environmentally sensitive lands;**

The proposed development meets the sewer system conveyance requirements, while proposing the least impacts to environmentally sensitive lands (ESL). The project proposes to move a majority of the existing sewer line out of sensitive upland as well as wetland areas, and restore these areas to their natural state through revegetation. Where necessary to connect the existing line to the re-aligned areas, the least impacts are proposed to rehabilitate manholes and create subsurface structures for sewer flow, maintenance and access, as well as tunneling work with associated pits to lessen overall impacts. Typically open trenching is done in the paved right of way. As such, the overall design considers the balance between the limited impacts to the environment, while at the same time provides the necessary improvements for essential public infrastructure for this area.

2. **The proposed development will minimize the alteration of natural land forms and will not result in undue risk from geologic and erosional forces, flood hazards, or fire hazards;**

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Construction techniques include tunneling, and abandonment to ensure minimal alteration to landform. Improvements would install sewer lines and appurtenances below ground, or abandon lines and manholes in sensitive areas, in order to return them to their natural state and contours. Some of the project is within the Alvarado Creek and floodplain. Minor work would be done in the creek in order to connect the re-aligned segment and existing manhole to the new alignment in Adobe Falls Road. This would be the least necessary to connect the system, with other minor, temporary work within the canyon to ensure the system functions properly. Erosion control measures for construction BMPs, as well, as post construction revegetation would protect for erosion. In addition, the system would be designed to meet the necessary seismic requirements for underground sewer pipelines to limit geologic risk along the entire alignment. Because of the undergrounding of the project, no effects would occur in this category, or from fire hazard.

3. **The proposed development will be sited and designed to prevent adverse impacts on any adjacent environmentally sensitive lands;**

The proposed development is an underground sewer pipeline project that has been sited and designed to prevent adverse impacts on any adjacent environmental sensitive lands while providing adequate public sewer service to the area. The Alvarado Trunk Sewer exists and is a major system that serves the surrounding community. By re-aligning a majority of the line outside of sensitive areas that is comprised of wetlands, uplands, and floodplain, and restoring the abandoned portions to their natural state further lessens environmental impacts and adds to the natural environment. The potential for future spills and maintenance access would be reduced and as a result will prevent adverse impacts on any adjacent environmentally sensitive lands.

4. **The proposed development will be consistent with the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan;**

None of the areas within the project scope are located within the City's Multi Habitat Planning Area (MHPA). There are however, uplands and wetlands that would be minimally affected by this project, due to the re-alignment outside of sensitive areas. Due to the location of the existing sewer line within Alvarado Creek and floodplain, there would be temporary and minor impacts to wetlands to restore these areas to the natural state. The restoring of the wetlands, as well as impacts to upland areas would also be done through revegetation that would install non-invasive and appropriate species, and to address erosion control. All required mitigation would be provided for off-site for this project, and/or payment into the Habitat Acquisition Fund for upland impacts. Therefore, the proposed project would be consistent with the MSCP Subarea Plan.

5. **The proposed development will not contribute to the erosion of public beaches or adversely impact local shoreline sand supply; and**

The proposed project is not located in close proximity to the beach or shoreline and will not adversely impact local shoreline sand supply. BMPs and erosion control would be implemented to prevent inappropriate runoff.

6. **The nature and extent of mitigation required as a condition of the permit is reasonably related to, and calculated to alleviate, negative impacts created by the proposed development.**

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The mitigation developed for the proposed development is for biological, archaeological and paleontological resources, and the extent of such mitigation is typical for a project of this nature. As a result, the mitigation is directly related to the proposed development, its requirements, the need to construct the proposed development, while at the same time alleviating any negative impacts that may occur as a result of the development because the appropriately developed mitigation will satisfy all such requirements.

C. **Supplemental Findings--Environmentally Sensitive Lands Deviations**

1. **There are no feasible measures that can further minimize the potential adverse effects on environmentally sensitive lands; and**

The project is an underground project that minimizes impacts to ESL in order to provide adequate public sewer service to the area. The Alvarado Trunk Sewer exists and is a major system that serves the surrounding community. By re-aligning a majority of the line outside of sensitive areas that is comprised of wetlands, uplands, and floodplain, and restoring the abandoned portions to their natural state further lessens environmental impacts and adds to the natural environment. The potential of future spills and maintenance access would be reduced into the sensitive areas because of the re-alignment. As a result, there are no feasible measures that can further minimize the potential adverse effects on environmentally sensitive lands.

2. **The proposed deviation is the minimum necessary to afford relief from special circumstances or conditions of the land, not of the applicant's making.**

The proposed development complies with all applicable regulations of the LDC, except that it will impact wetlands. Due to the location of the existing sewer line within Alvarado Creek there would be temporary and minor impacts to wetlands to restore these areas to their natural state. Mitigation would be provided off-site for or via payment into the Habitat Acquisition Fund. Therefore, the proposed deviation is the minimum necessary to afford relief from special conditions of the land, not of the applicant's making.

BE IT FURTHER RESOLVED that based on the findings hereinbefore adopted by the Planning Commission that Site Development Permit No. 746116. is hereby GRANTED by the Planning Commission to the referenced Owner/Permittee, in the form, exhibits, terms and conditions as set forth in Site Development Permit No. 746116, a copy of which is attached hereto and made a part hereof.

Patricia Grabski

Patricia Grabski
Development Project Manager
Development Services

Adopted on: August 4, 2011
Internal Order Number B-00481.02.01.03

RESOLUTION NUMBER R-4718-PC

ADOPTED ON August 4, 2011

WHEREAS, on February 17, 2011, City of San Diego, Engineering and Capital Projects Department, submitted an application to the Development Services Department for a Site Development Permit (SDP)

WHEREAS, the permit was set for a public hearing to be conducted by the Planning Commission of the City of San Diego; and

WHEREAS, the issue was heard by the Planning Commission on August 4, 2011; and

WHEREAS, the Planning Commission of the City of San Diego considered the issues discussed in Mitigated Negative Declaration No.209815 NOW THEREFORE,

BE IT RESOLVED, by the Planning Commission of the City of San Diego, that it is hereby certified that Mitigated Negative Declaration No. 209815 has been completed in compliance with the California Environmental Quality Act of 1970 (California Public Resources Code Section 21000 et seq.) as amended, and the State guidelines thereto (California Administration Code Section 15000 et seq.), that the report reflects the independent judgment of the City of San Diego as Lead Agency and that the information contained in said report, together with any comments received during the public review process, has been reviewed and considered by the Planning Commission; directing staff to file a Notice of Determination.

BE IT FURTHER RESOLVED that the Planning Commission finds that project revisions now mitigate potentially significant effects on the environment previously identified in the Initial Study and therefore, that said Mitigated Negative Declaration, a copy of which is attached hereto and incorporated by reference, is hereby approved.

BE IT FURTHER RESOLVED that pursuant to California Public Resources Code, Section 21081.6, the Planning Commission hereby adopts the Mitigation Monitoring and Reporting Program, or alterations to implement the changes to the project as required by this body in order to mitigate or avoid significant effects on the environment, a copy of which is attached hereto and incorporated herein by reference.

By: Patricia Grabski

Patricia Grabski, Development Project Manager

ATTACHMENT: Exhibit A, Mitigation Monitoring and Reporting Program

EXHIBIT A

MITIGATION MONITORING AND REPORTING PROGRAM

Site Development Permit

PROJECT NO. 209815

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Entitlements Division, 1222 First Avenue, Fifth Floor, San Diego, CA 92101. All mitigation measures contained in the Mitigated Negative Declaration (Project No. 209815) shall be made conditions of the Site Development Permit as may be further described below.

A. GENERAL REQUIREMENTS – PART I
Plan Check Phase (prior to permit issuance)

1. Prior to Bid Opening/Bid Award or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD) (plans, specification, details, etc.) to ensure the MMRP requirements have been incorporated.

2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, "**ENVIRONMENTAL/MITIGATION REQUIREMENTS**."

3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website:

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

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

B. GENERAL REQUIREMENTS – PART II
Post Plan Check (After permit issuance/Prior to start of construction)

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

   Biologist, Archaeologist, Native American Monitor, and Paleontologist.

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

CONTACT INFORMATION:

a) The PRIMARY POINT OF CONTACT is the **RE** at the **Field Engineering Division 858-627-3200**

b) For Clarification of ENVIRONMENTAL REQUIREMENTS, it is also required to call **RE and MMC at 858-627-3360**

2. **MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) No. 209815, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD's ED, MMC and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e. to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc

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

3. **OTHER AGENCY REQUIREMENTS:** Evidence that any other agency requirements or permits have been obtained or are in process shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall include copies of permits, letters of resolution or other documentation issued by the responsible agency.

   California Department of Fish and Game (CDFG) - Streambed Alteration Permit, Regional Water Quality Control Board (RWQCB) - 401 Water Quality Certificate, and Army Corps of Engineers (ACOE) - preconstruction notification.

4. **MONITORING EXHIBITS:** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline's work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.

5. **OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner's representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

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Document Submittal/Inspection Checklist

Issue Area	*Document submittal*	*Associated Inspection/Approvals/Note*
General	Consultant Qualification Letters meeting	Prior to Pre-construction
General	Consultant Const. Monitoring	Prior to or at the Pre-Construction meeting
Biology	Biology Reports	Limit of Work Verification
Archaeology	Archaeology Reports	Archaeology observation
Paleontology	Paleontology Reports	Paleontology observation
Final MMRP		Final MMRP Inspection

SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS:

A BIOLOGICAL RESOURCES

I. Prior to the Notice to Proceed, which will be sent to DSD, the ADD Environmental Designee of the Entitlements Division shall verify that the following conditions have occurred to mitigate direct impacts to 0.072 acres of Tier II habitat (0.0050 acre of Diegan coastal sage scrub, 0.0020 acre of disturbed Diegan coastal sage scrub, 0.020 acre of coastal sage-chaparral scrub, 0.045 acre of baccharis scrub), 0.230 acres of Tier IIIB non-native grassland habitat, and 0.022 of disturbed riparian woodland (wetland):

a. In order to mitigate for the impacts to uplands the applicant would be required to provide verification that the payment into the Habitat Acquisition Fund (HAF) has occured. The required mitigation ratio for the Tier II habitat is 1:1 and would equal 0.072 acres of payment into the HAF and the required mitigation ratio for impacts for the Tier IIIB habitat is 0.5:1 and would equal 0.115 of payment into the HAF. Therefore, the applicant shall purchase a total of 0.187 acre of habitat through the City's Habitat Acquisition Fund (HAF) at the current per-acre contribution amount.

b. The applicant shall purchase 0.022 acres of wetland creation credits at the Camino del Rio North site and 0.022 acres of wetland enhancement credits at the Rancho Mission Canyon site. The total purchase of 0.044 acres of wetland credits will satisfy the required mitigation ratio of 2:1 for impacts to disturbed riparian woodland habitat.

Letters of Qualification Have Been Submitted to ADD

1. The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the Principal Qualified Biologist (PQB) and Qualified Biological Monitor (QBM) and the names of all other persons involved in the implementation of the biological monitoring program, as they are defined in the City of San Diego Biological Review References. Resumes and the biology worksheet should be updated annually.
2. MMC will provide a letter to the applicant confirming the qualifications of the PQB /QBM and all City Approved persons involved in the biological monitoring of the project.

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3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the biological monitoring of the project.
4. PBQ must also submit evidence to MMC that the PQB/QBM has completed Storm Water Pollution Prevention Prevention Program (SWPPP) training.

II. Prior to Start of Construction

A. PQB Shall Attend Preconstruction (Precon) Meetings

1. Prior to beginning any work that requires monitoring:
   a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC.
   b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the biological monitoring program.

   c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the revegetation/ restoration phase of the project, including site grading preparation.
2. When Biological Monitoring Will Occur
   a. Prior to the start of any work, the PQB shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur.
3. PQB Shall Contact MMC to Request Modification
   a. The PQB 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 other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present.

III. During Construction

A. PQB or QBM Present During Construction/Grading/Planting

1. The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, and excavation, in association with the construction of the project which could result in impacts to sensitive biological resources as identified in the LCD and on the RRME. **The QBM is responsible for notifying the PQB of changes to any approved construction plans, procedures, and/or activities. The PQB is responsible to notify MMC of the changes.**
2. The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVR's shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is

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a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC.

3. The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other than that of associated with biology).
4. All construction activities (including staging areas) shall be restricted to the development areas. The PQB or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance.
5. The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance adjacent to (or at the edge of) all sensitive habitats.
6. The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly
7. The PQB or QBM shall oversee implementation of BMP's, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMP's upon completion of construction activities. Removal of temporary construction BMP's shall be verified in writing on the final construction phase CSVR.
8. PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area.

9. The project would implement protection measures such as orange construction fencing for areas of impact, flagging of select plant species, sensitive access with hand –carried or machine tools, etc. In addition, the project biologist will monitor all construction through the end of revegetation to ensure project scope compliance, and to minimize impacts to sensitive resources where feasible based on the biological assessment and in-field conditions.
10. The biological monitor shall ensure that all steep-walled trenches or excavations used during construction are covered at all times except when being actively utilized. If trenches or excavations cannot be covered, exclusive fencing (i.e. silt fence) shall be installed around trench or excavation, in order to prevent entrapment of wildlife. Open trenches, or other excavations that could entrap wildlife should be inspected by the biological monitor at a minimum of three times per day and immediately before backfilling. An inspection under all vehicles and equipment should be conducted for the presence of wildlife prior to moving. If wildlife is observed, no vehicles or equipment should be moved until the animal has left voluntarily or is relocated by a biologist with the appropriate qualifications and permit authority.

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B. Disturbance/Discovery Notification Process

1. If unauthorized disturbances occurs or sensitive biological resources are discovered that were not previously identified, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate.
2. The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMP's). After obtaining concurrence with MMC and the RE, PQB and CM shall install the approved protection and agreement on BMP's.
3. The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation).

C. Determination of Significance

1. The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs.
2. MMC shall review this letter report and provide the RE with MMC's recommendations and procedures.

IV. General Bird Mitigation

a. If project grading/brush management is proposed in or adjacent to native habitat during the typical bird breeding season (i.e. Feb. 1-Sept. 15), or an active nest is noted, the project biologist shall conduct a pregrading survey for active nests in the development area and within 300 feet of it, and submit a letter report to MMC prior to the preconstruction meeting.

b. If active nests are detected, or considered likely, the report shall include mitigation in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) to the satisfaction of the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division. Mitigation requirements determined by the project biologist and the ADD shall be incorporated into the project's Biological Construction Monitoring Exhibit (BCME) and all monitoring results shall be incorporated into the final biological construction monitoring report.

c. If no nesting birds are detected per III.a above, mitigation under III a. is not required.

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

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Prior to the preconstruction meeting, the City Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans:

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

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

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

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

C. AT LEAST TWO WEEKS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, UNDER THE DIRECTION OF A

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

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

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

I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR LEAST BELL'S VIREO TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.

II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

HISTORICAL RESOURCES (ARCHAEOLOGY)

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

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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)

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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

   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.

   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).

   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.

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4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process
   1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
   2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
   3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
   4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance
   1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
      a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
      b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
         (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
      c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
         (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.

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(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.

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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 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

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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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PALEONTOLOGICAL RESOURCES

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

A. Entitlements Plan Check

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

B. Letters of Qualification have been submitted to ADD

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

II. **Prior to Start of Construction**

A. Verification of Records Search

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

B. PI Shall Attend Precon Meetings

1. Prior to beginning any work that requires monitoring, the Applicant shall arrange a Precon Meeting that shall include the PI, Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified paleontologist shall attend any grading/excavation related Precon Meetings to make comments and/or suggestions concerning the Paleontological Monitoring program with the Construction Manager and/or Grading Contractor.
   a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects) The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored

a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.

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b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).
c. MMC shall notify the PI that the PME has been approved.

4. When Monitoring Will Occur
   a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
   b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.
5. Approval of PME and Construction Schedule
   After approval of the PME by MMC, the PI shall submit to MMC written authorization of the PME and Construction Schedule from the CM.

III. During Construction

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

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

B. Discovery Notification Process

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

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C. Determination of Significance
   1. The PI shall evaluate the significance of the resource.
      a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
      b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.
         (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
      c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
      d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
         (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
         (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching Projects
   The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
   1. Procedures for documentation, curation and reporting
      a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.
      b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
      c. The PI shall be responsible for recording (on the appropriate forms for the San Diego Natural History Museum) the resource(s) encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines. The forms shall be submitted to the San Diego Natural History Museum and included in the Final Monitoring Report.

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d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Night and/or Weeekend Work

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

B. If night and/or weekend work becomes necessary during the course of construction
   1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
   2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

V. Post Construction

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

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5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Fossil Remains
   1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.

C. Curation of artifacts: Deed of Gift and Acceptance Verification
   1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
   2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
   3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.
   4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

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

The above mitigation monitoring and reporting program will require additional fees and/or deposits to be collected prior to the issuance of building permits, certificates of occupancy and/or final maps to ensure the successful completion of the monitoring program.

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City of San Diego
Development Services

ENTITLEMENTS DIVISION
(619) 446-5460

MITIGATED NEGATIVE DECLARATION

Project No. 209815
SCH No. 2011051049

SUBJECT: Alvarado Trunk Sewer: SITE DEVELOPMENT PERMIT (SDP) to allow for the installation of approximately 2,058 linear feet (LF) of new 8, 15 and 36-inch sewer pipe. The project would install 797 LF of sewer pipe through open trenching, 1,261 LF would be installed through tunneling, 239 LF of rehabilitation, and approximately 2,477 LF of existing trunk sewer would be abandoned. Five (5) launch, receiver, and/or work pits ranging in size between 225 and 400 square feet would be used for tunneling and/or manhole-related work. Off-street and on-street staging is being proposed. Existing access paths would primarily be used for the installation and abandonment. Eleven (11) manholes would be removed in vegetated areas each resulting in an approximate 5-foot radius of temporary disturbance. Where additional access is needed, a 10-foot wide temporary access path is proposed and steel plates would be used if needed for construction equipment to cross the drainages. In addition, for more difficult access areas, a crane or hand carried equipment may be employed. The tunneling would occur in two separate locations, south of Interstate 8 near SDSU and on the north side of Interstate 8 next to Alvarado Creek and sensitive habitat.

All temporary impacts in vegetated areas would be re-vegetated for erosion control purposes. Also included in the scope of work is the construction and rehabilitation of manholes, the installation of new diversion manhole structures, new or replacement laterals if needed, installation of various other appurtenances as necessary, as well as street slurry seal application, and traffic control measures.

The project is located in a City Open Space urban canyon between the Smoke Tree Adobe Falls Subdivision to the north and Interstate 8 to the south. A smaller component of the project would occur on the south side of Interstate 8 within the jurisdiction of San Diego State University, and all within the College and Navajo Community Planning areas. Applicant: City of San Diego, Engineering and Capital Projects Department, Right-of-Way Design Division.

UPDATE: July 18, 2011

Revisions to this document have been made when compared to the Draft Mitigated Negative Declaration (DMND) dated May 17, 2011. Minor additions have been made to the MMRP which strengthens the biological monitoring program. In addition, a discussion has been added to the project description in the Initial Study that demonstrates consistency with Council Policy 400-13 and 400-14. The additional language to the MND are denoted by in a underline format.

In accordance with the California Environmental Quality Act, Section 15073.5 (c)(4), the addition of new information that clarifies, amplifies, or makes insignificant modification does not require recirculation as there are no new impacts and no new mitigation identified. An environmental document need only be recirculated when there is identification of new significant environmental impact or the addition of a new mitigation measure required to avoid a significant environmental impact. The addition of updated mitigation language within the environmental document does not affect the environmental analysis or conclusions of the MND.

I. PROJECT DESCRIPTION: See attached Initial Study.

II. ENVIRONMENTAL SETTING: See attached Initial Study.

III. DETERMINATION:

The City of San Diego conducted an Initial Study which determined that the proposed project could have a significant environmental effect in the following areas(s): Biological Resources, Historical Resources (Archaeology) and Paleontology. The project requires implementation of specific mitigation identified in Section V of this Mitigated Negative Declaration (MND). The project as presented now avoids or mitigates the potentially significant environmental effects identified and the preparation of an Environmental Impact Report (EIR) would not be required.

IV. DOCUMENTATION:

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

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

A. GENERAL REQUIREMENTS – PART I
Plan Check Phase (prior to permit issuance)

1. Prior to Bid Opening/Bid Award or beginning any construction related activity on-site, the Development Services Department (DSD) Director's Environmental Designee (ED) shall review and approve all Construction Documents (CD) (plans, specification, details, etc.) to ensure the MMRP requirements have been incorporated.

2. In addition, the ED shall verify that the MMRP Conditions/Notes that apply ONLY to the construction phases of this project are included VERBATIM, under the heading, "**ENVIRONMENTAL/MITIGATION REQUIREMENTS**."

3. These notes must be shown within the first three (3) sheets of the construction documents in the format specified for engineering construction document templates as shown on the City website:

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

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

B. GENERAL REQUIREMENTS – PART II
Post Plan Check (After permit issuance/Prior to start of construction)

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

   Biologist, Archaeologist, Native American Monitor, and Paleontologist.

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

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

2. **MMRP COMPLIANCE:** This Project, Project Tracking System (PTS) No. 209815, shall conform to the mitigation requirements contained in the associated Environmental Document and implemented to the satisfaction of the DSD's ED, MMC and the City Engineer (RE). The requirements may not be reduced or changed but may be annotated (i.e. to explain when and how compliance is being met and location of verifying proof, etc.). Additional clarifying information may also be added to other relevant plan sheets and/or specifications as appropriate (i.e., specific locations, times of monitoring, methodology, etc

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

3. **OTHER AGENCY REQUIREMENTS:** Evidence that any other agency requirements or permits have been obtained or are in process shall be submitted to the RE and MMC for review and acceptance prior to the beginning of work or within one week of the Permit Holder obtaining documentation of those permits or requirements. Evidence shall

include copies of permits, letters of resolution or other documentation issued by the responsible agency.
California Department of Fish and Game (CDFG) - Streambed Alteration Permit, Regional Water Quality Control Board (RWQCB) - 401 Water Quality Certificate, and Army Corps of Engineers (ACOE) - preconstruction notification.

4. **MONITORING EXHIBITS:** All consultants are required to submit, to RE and MMC, a monitoring exhibit on a 11x17 reduction of the appropriate construction plan, such as site plan, grading, landscape, etc., marked to clearly show the specific areas including the **LIMIT OF WORK**, scope of that discipline's work, and notes indicating when in the construction schedule that work will be performed. When necessary for clarification, a detailed methodology of how the work will be performed shall be included.

5. **OTHER SUBMITTALS AND INSPECTIONS:** The Permit Holder/Owner's representative shall submit all required documentation, verification letters, and requests for all associated inspections to the RE and MMC for approval per the following schedule:

Document Submittal/Inspection Checklist

Issue Area	*Document submittal*	*Associated Inspection/Approvals/Note*
General	Consultant Qualification Letters	Prior to Pre-construction meeting
General	Consultant Const. Monitoring	Prior to or at the Pre-Construction meeting
Biology	Biology Reports	Limit of Work Verification
Archaeology	Archaeology Reports	Archaeology observation
Paleontology	Paleontology Reports	Paleontology observation
Final MMRP		Final MMRP Inspection

SPECIFIC MMRP ISSUE AREA CONDITIONS/REQUIREMENTS:

A BIOLOGICAL RESOURCES

I. Prior to the Notice to Proceed, which will be sent to DSD, the ADD Environmental Designee of the Entitlements Division shall verify that the following conditions have occurred to mitigate direct impacts to 0.072 acres of Tier II habitat (0.0050 acre of Diegan coastal sage scrub, 0.0020 acre of disturbed Diegan coastal sage scrub, 0.020 acre of coastal sage-chaparral scrub, 0.045 acre of baccharis scrub), 0.230 acres of Tier IIIB non-native grassland habitat, and 0.022 of disturbed riparian woodland (wetland):

a. In order to mitigate for the impacts to uplands the applicant would be required to provide verification that the payment into the Habitat Acquisition Fund (HAF) has occured. The required mitigation ratio for the Tier II habitat is 1:1 and would equal

0.072 acres of payment into the HAF and the required mitigation ratio for impacts for the Tier IIIB habitat is 0.5:1 and would equal 0.115 of payment into the HAF. Therefore, the applicant shall purchase a total of 0.187 acre of habitat through the City's Habitat Acquisition Fund (HAF) at the current per-acre contribution amount.

b. The applicant shall purchase 0.022 acres of wetland creation credits at the Camino del Rio North site and 0.022 acres of wetland enhancement credits at the Rancho Mission Canyon site. The total purchase of 0.044 acres of wetland credits will satisfy the required mitigation ratio of 2:1 for impacts to disturbed riparian woodland habitat.

Letters of Qualification Have Been Submitted to ADD

1. The applicant shall submit, for approval, a letter verifying the qualifications of the biological professional to MMC. This letter shall identify the Principal Qualified Biologist (PQB) and Qualified Biological Monitor (QBM) and the names of all other persons involved in the implementation of the biological monitoring program, as they are defined in the City of San Diego Biological Review References. Resumes and the biology worksheet should be updated annually.
2. MMC will provide a letter to the applicant confirming the qualifications of the PQB /QBM and all City Approved persons involved in the biological monitoring of the project.
3. Prior to the start of work, the applicant must obtain approval from MMC for any personnel changes associated with the biological monitoring of the project.
4. PBQ must also submit evidence to MMC that the PQB/QBM has completed Storm Water Pollution Prevention Prevention Program (SWPPP) training.

II. Prior to Start of Construction

A. PQB Shall Attend Preconstruction (Precon) Meetings

1. Prior to beginning any work that requires monitoring:
   a. The owner/permittee or their authorized representative shall arrange and perform a Precon Meeting that shall include the PQB, Construction Manager (CM) and/or Grading Contractor (GC), Landscape Architect (LA), Revegetation Installation Contractor (RIC), Revegetation Maintenance Contractor (RMC), Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC.
   b. The PQB shall also attend any other grading/excavation related Precon Meetings to make comments and/or suggestions concerning the biological monitoring program.

   c. If the PQB is unable to attend the Precon Meeting, the owner shall schedule a focused Precon Meeting with MMC, PQB, CM, BI, LA, RIC, RMC, RE and/or BI, if appropriate, prior to the start of any work associated with the revegetation/ restoration phase of the project, including site grading preparation.
2. When Biological Monitoring Will Occur

a. Prior to the start of any work, the PQB shall also submit a monitoring procedures schedule to MMC and the RE indicating when and where biological monitoring and related activities will occur.

3. PQB Shall Contact MMC to Request Modification

a. The PQB 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 other sensitive species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA) which may reduce or increase the potential for biological resources to be present.

III. <u>During Construction</u>

A. PQB or QBM Present During Construction/Grading/Planting

1. The PQB or QBM shall be present full-time during construction activities including but not limited to, site preparation, cleaning, grading, and excavation, in association with the construction of the project which could result in impacts to sensitive biological resources as identified in the LCD and on the RRME. **The QBM is responsible for notifying the PQB of changes to any approved construction plans, procedures, and/or activities. The PQB is responsible to notify MMC of the changes.**
2. The PQB or QBM shall document field activity via the Consultant Site Visit Record Forms (CSVR). The CSVR's shall be faxed by the CM the first day of monitoring, the last day of monitoring, monthly, and in the event that there is a deviation from conditions identified within the LCD and/or biological monitoring program. The RE shall forward copies to MMC.
3. The PQB or QBM shall be responsible for maintaining and submitting the CSVR at the time that CM responsibilities end (i.e., upon the completion of construction activity other than that of associated with biology).
4. All construction activities (including staging areas) shall be restricted to the development areas. The PQB or QBM staff shall monitor construction activities as needed, with MMC concurrence on method and schedule. This is to ensure that construction activities do not encroach into biologically sensitive areas beyond the limits of disturbance.
5. The PQB or QBM shall supervise the placement of orange construction fencing or City approved equivalent, along the limits of potential disturbance adjacent to (or at the edge of) all sensitive habitats.
6. The PBQ shall provide a letter to MMC that limits of potential disturbance has been surveyed, staked and that the construction fencing is installed properly
7. The PQB or QBM shall oversee implementation of BMP's, such as gravel bags, straw logs, silt fences or equivalent erosion control measures, as needed to ensure prevention of any significant sediment transport. In addition, the PQB/QBM shall be responsible to verify the removal of all temporary construction BMP's upon completion of construction activities. Removal of temporary construction BMP's shall be verified in writing on the final construction phase CSVR.
8. PQB shall verify in writing on the CSVR's that no trash stockpiling or oil dumping, fueling of equipment, storage of hazardous wastes or construction

equipment/material, parking or other construction related activities shall occur adjacent to sensitive habitat. These activities shall occur only within the designated staging area located outside the area defined as biological sensitive area.

9. The project would implement protection measures such as orange construction fencing for areas of impact, flagging of select plant species, sensitive access with hand –carried or machine tools, etc. In addition, the project biologist will monitor all construction through the end of revegetation to ensure project scope compliance, and to minimize impacts to sensitive resources where feasible based on the biological assessment and in-field conditions.
10. The biological monitor shall ensure that all steep-walled trenches or excavations used during construction are covered at all times except when being actively utilized. If trenches or excavations cannot be covered, exclusive fencing (i.e. silt fence) shall be installed around trench or excavation, in order to prevent entrapment of wildlife. Open trenches, or other excavations that could entrap wildlife should be inspected by the biological monitor at a minimum of three times per day and immediately before backfilling. An inspection under all vehicles and equipment should be conducted for the presence of wildlife prior to moving. If wildlife is observed, no vehicles or equipment should be moved until the animal has left voluntarily or is relocated by a biologist with the appropriate qualifications and permit authority.

B. Disturbance/Discovery Notification Process
   1. If unauthorized disturbances occurs or sensitive biological resources are discovered that were not previously identified, the PQB or QBM shall direct the contractor to temporarily divert construction in the area of disturbance or discovery and immediately notify the RE or BI, as appropriate.
   2. The PQB shall also immediately notify MMC by telephone of the disturbance and report the nature and extent of the disturbance and recommend the method of additional protection, such as fencing and appropriate Best Management Practices (BMP's). After obtaining concurrence with MMC and the RE, PQB and CM shall install the approved protection and agreement on BMP's.
   3. The PQB shall also submit written documentation of the disturbance to MMC within 24 hours by fax or email with photos of the resource in context (e.g., show adjacent vegetation).

C. Determination of Significance
   1. The PQB shall evaluate the significance of disturbance and/or discovered biological resource and provide a detailed analysis and recommendation in a letter report with the appropriate photo documentation to MMC to obtain concurrence and formulate a plan of action which can include fines, fees, and supplemental mitigation costs.
   2. MMC shall review this letter report and provide the RE with MMC's recommendations and procedures.

IV. General Bird Mitigation

a. If project grading/brush management is proposed in or adjacent to native habitat during the typical bird breeding season (i.e. Feb. 1-Sept. 15), or an active nest is noted, the project biologist shall conduct a pregrading survey for active nests in the development area and within 300 feet of it, and submit a letter report to MMC prior to the preconstruction meeting.

b. If active nests are detected, or considered likely, the report shall include mitigation in conformance with the City's Biology Guidelines and applicable State and Federal Law (i.e. appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) to the satisfaction of the Assistant Deputy Director (ADD) Environmental Designee of the Entitlements Division. Mitigation requirements determined by the project biologist and the ADD shall be incorporated into the project's Biological Construction Monitoring Exhibit (BCME) and all monitoring results shall be incorporated into the final biological construction monitoring report.

c. If no nesting birds are detected per III.a above, mitigation under III a. is not required.

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

1. Prior to the preconstruction meeting, the City Manager (or appointed designee) shall verify that the following project requirements regarding the least Bell's vireo are shown on the construction plans:

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

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

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

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

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

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

include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

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

I. IF THIS EVIDENCE INDICATES THE POTENTIAL IS HIGH FOR LEAST BELL'S VIREO TO BE PRESENT BASED ON HISTORICAL RECORDS OR SITE CONDITIONS, THEN CONDITION A.III SHALL BE ADHERED TO AS SPECIFIED ABOVE.

II. IF THIS EVIDENCE CONCLUDES THAT NO IMPACTS TO THIS SPECIES ARE ANTICIPATED, NO MITIGATION MEASURES WOULD BE NECESSARY.

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

III. During Construction

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

1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. **The Construction Manager is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.**
2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
4. The archaeological and Native American consultant/monitor shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR's shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly **(Notification of Monitoring Completion)**, and in the case of ANY discoveries. The RE shall forward copies to MMC.

B. Discovery Notification Process

1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by fax or email with photos of the resource in context, if possible.
4. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.

C. Determination of Significance

1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
   a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.

b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) and obtain written approval of the program from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA Section 15064.5, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
   (1). Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."

c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
   (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
   (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.

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

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

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

IV. Discovery of Human Remains

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

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

B. Isolate discovery site
   1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenience of the remains.
   2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenience.
   3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.

C. If Human Remains **ARE** determined to be Native American
   1. The Medical Examiner will notify the Native American Heritage Commission (NAHC) within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
   2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
   3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
   4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
   5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
      a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the Commission, OR;
      b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner, THEN
      c. To protect these sites, the landowner shall do one or more of the following:
         (1) Record the site with the NAHC;
         (2) Record an open space or conservation easement; or

(3) Record a document with the County.

d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and 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.

PALEONTOLOGICAL RESOURCES

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

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

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

II. Prior to Start of Construction

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

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

a. If the PI is unable to attend the Precon Meeting, the Applicant shall schedule a focused Precon Meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.

2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)
The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the paleontological monitoring program.
3. Identify Areas to be Monitored

a. a. Prior to the start of any work that requires monitoring, the PI shall submit a Paleontological Monitoring Exhibit (PME) based on the appropriate construction documents (reduced to 11x17) to MMC for approval identifying the areas to be monitored including the delineation of grading/excavation limits. Monitoring shall begin at depths below 10 feet from existing grade or as determined by the PI in consultation with MMC. The determination shall be based on site specific records search data which supports monitoring at depths less than ten feet.

b. b. The PME shall be based on the results of a site specific records search as well as information regarding existing known soil conditions (native or formation).

c. c. MMC shall notify the PI that the PME has been approved.

d. 4. When Monitoring Will Occur

a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.

b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate conditions such as depth of excavation and/or site graded to bedrock, presence or absence of fossil resources, etc., which may reduce or increase the potential for resources to be present.

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

III. During Construction

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

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

Completion), and in the case of ANY discoveries. The RE shall forward copies to MMC.

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

C. Determination of Significance
   1. The PI shall evaluate the significance of the resource.
      a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required. The determination of significance for fossil discoveries shall be at the discretion of the PI.
      b. If the resource is significant, the PI shall submit a Paleontological Recovery Program (PRP) and obtain written approval of the program from MMC, MC and/or RE. PRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume.
         (1). Note: For pipeline trenching projects only, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
      c. If resource is not significant (e.g., small pieces of broken common shell fragments or other scattered common fossils) the PI shall notify the RE, or BI as appropriate, that a non-significant discovery has been made. The Paleontologist shall continue to monitor the area without notification to MMC unless a significant resource is encountered.
      d. The PI shall submit a letter to MMC indicating that fossil resources will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that no further work is required.
         (1). Note: For Pipeline Trenching Projects Only. If the fossil discovery is limited in size, both in length and depth; the information value is limited and there are no unique fossil features associated with the discovery area, then the discovery should be considered not significant.
         (2). Note, for Pipeline Trenching Projects Only: If significance can not be determined, the Final Monitoring Report and Site Record shall identify the discovery as Potentially Significant.

D. Discovery Process for Significant Resources - Pipeline Trenching Projects
   The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance.
   1. Procedures for documentation, curation and reporting
      a. One hundred percent of the fossil resources within the trench alignment and width shall be documented in-situ photographically, drawn in plan view (trench and profiles of side walls), recovered from the trench and photographed after

cleaning, then analyzed and curated consistent with Society of Invertebrate Paleontology Standards. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact and so documented.

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

IV. Night and/or Weeekend Work

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

B. If night and/or weekend work becomes necessary during the course of construction
   1. The Construction Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
   2. The RE, or BI, as appropriate, shall notify MMC immediately.

C. All other procedures described above shall apply, as appropriate.

V. Post Construction

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

The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.

2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.

B. Handling of Fossil Remains
   1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.

C. Curation of artifacts: Deed of Gift and Acceptance Verification
   1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
   2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
   3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall return to PI with copy submitted to MMC.
   4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

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

VI. PUBLIC REVIEW DISTRIBUTION:

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

United States Government
- U.S. Fish and Wildlife Service (23)
- U.S. Army Corps of Engineers (26)
- U.S. Environmental Protection Agency (19)

State of California
- California Department of Fish and Game (32A)
- Caltrans (31)
- State Clearinghouse (46)
- California Regional Water Control Board (44)

City of San Diego
- Council Member Emerald, District 7
- Historical Resource Board (87)
- City Planning and Community Investment Department
  - Craig Hooker (MS 5A)

City Attorney (MS 56A)
Shannon Thomas (MS 93C)
Engineering and Capital Projects
Jericho Gallardo (MS 908A)
Roman Anissi (MS 908A)
Rania Amen (MS 908A)
Development Services Department
Patricia Grabski (MS 301)
Julius Ocen (MS 501)
Myra Herrmann (MS 501)
Patrick Thomas (MS 501)
Library Dept.-Gov. Documents MS 17 (81)
San Carlos Branch Library (81dd)
Benjamin Branch (81d)
College-Rolando Branch (81l)

Other

College Area Community Planning Board (456)
Malcolm A. Love Library (457)
San Diego State University, Facilities Planning and Management (455)
Navajo Community Planners (336)
San Diego Gas and Electric (114)
V.P. Business and Financial Affairs (458)
Editor Daily Aztec (459)
San Diego River Park Foundation (163)
San Diego River Conservancy (168)
Sierra Club (165)
Wetland Advisory Board (171)
San Diego Bay and Coast Keeper (173)
San Diego Canyonlands (165a)
San Diego Audubon Society (167)
Jim Pugh (167A)
California Native Plant Society (170)
Endangered Habitat League (182 and 182A)
South Coastal Information Center @ San Diego State University (210)
San Diego Historical Society (211)
Carmen Lucas (206)
Clint Linton (215b)
San Diego Archaeological Center (212)
Save Our Heritage Organization (214)
Ron Christman (215)
Louie Guassac (215A)
San Diego County Archaeological Society (218)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution (NOTICE ONLY 225A-R)

VII. RESULTS OF PUBLIC REVIEW:

( ) No comments were received during the public input period.

( ) Comments were received but did not address the draft Mitigated Negative Declaration finding or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.

(x) Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public input period. The letters and responses follow.

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

Myra Hermann, Senior Planner
Development Services Department

May 17, 2011
Date of Draft Report

Analyst: J. Szymanski

July 18, 2011
Date of Final Report

Attachments:

Figure 1 - Location/Vicinity Map
Figure 2 - Site Plan
Initial Study Checklist

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

June 17, 2011

Jeffrey Szymanski
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: Alvarado Trunk Sewer
SCH#:. 2011051049

Dear Jeffrey Szymanski:

(1) The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 16, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

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

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

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044

Response to Comments

CALIFORNIA STATE CLEARING HOUSE AND PLANNING UNIT (6/17/2011)

1. Comment acknowledged no response is necessary.

Document Details Report
State Clearinghouse Data Base

SCH# 2011051049
Project Title Alvarado Trunk Sewer
Lead Agency San Diego, City of

Type MND Mitigated Negative Declaration

Description Site Development Permit to allow for the installation of approximately 2,058 linear feet of new 8, 15 and 36-inch sewer pipe. The project would install 797 LF of sewer pipe through open trenching, 1,261 LF would be installed through tunneling, 239 LF of rehabilitation, and approximately 2,477 LF of existing trunk sewer would be abandoned. Five launch, receiver, and/or work pits ranging in size between 225 and 400 sq. ft. would be used for tunneling and/or manhole-related work. Off-street and on-street staging is being proposed. Existing access paths would primarily be used for the installation and abandonment. Eleven manholes would be removed in vegetated areas each resulting in an approximate 5-foot radius of temporary disturbance. Where additional access is needed, a 10-foot wide temporary access path is proposed and steel plates would be used if needed for construction equipment to cross the drainages. In addition, for more difficult access areas, a crane or hand carried equipment may be employed. The tunneling would occur in two separate locations, south of I-8 near SDSU and on the north side of I-8 next to Alvarado Creek and sensitive habitat.

Lead Agency Contact

Name Jeffrey Szymanski
Agency City of San Diego
Phone 619 446 5324 **Fax**
email
Address 1222 First Avenue, MS-501
City San Diego **State** CA **Zip** 92101

Project Location

County San Diego
City
Region
Lat / Long 32° N / 117° 07' W
Cross Streets I-8 & Waring Road
Parcel No.
Township 3W **Range** 16S **Section** **Base**

Proximity to:

Highways Hwy 15
Airports
Railways MTS trolley
Waterways San Diego River
Schools SDSU
Land Use Open Space

Project Issues Archaeologic-Historic; Biological Resources; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 11; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 05/18/2011 **Start of Review** 05/18/2011 **End of Review** 06/16/2011

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

CALIFORNIA STATE CLEARING HOUSE AND PLANNING UNIT (6/17/2011)

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CALIFORNIA DEPARTMENT OF FISH AND GAME (6/15/2011)

2. As requested the following mitigation language shall be added to the MND: The biological monitor shall ensure that all steep-walled trenches or excavations used during construction are covered at all times except when being actively utilized. If trenches or excavations cannot be covered, exclusive fencing (i.e. silt fence) shall be installed around trench or excavation, in order to prevent entrapment of wildlife. Open trenches, or other excavations that could entrap wildlife should be inspected by the biological monitor at a minimum of three times per day and immediately before backfilling. An inspection under all vehicles and equipment should be conducted for the presence of wildlife prior to moving. If wildlife is observed, no vehicles or equipment should be moved until the animal has left voluntarily or is relocated by a biologist with the appropriate qualifications and permit authority.

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RECEIVED
JUN 15 2011
STATE CLEARING HOUSE

Shella Brown

From: Paul Schlitt [PSchlitt@dfg.ca.gov]
Sent: Wednesday, June 15, 2011 11:47 AM
To: DSDEAS@sandiego.gov
Cc: Marilyn Fluharty; State Clearinghouse
Subject: Department of Fish and Game comments on the Draft Mitigated Negative Declaration for the Alvarado Trunk Sewer (Project No. 209815; SCH# 2011051049)

Subject: Comments on the Draft Mitigated Negative Declaration for the Alvarado Trunk Sewer, San Diego, California (Project No. 209815; SCH# 2011051049)

Dear Mr. Szymanski:

The California Department of Fish and Game (Department) has reviewed the draft Mitigated Negative Declaration (MND) for the Alvarado Trunk Sewer, dated May 17, 2011. The comments provided herein are based on information provided in the draft MND and associated documents (including the Biological Survey Report for the Alvarado Trunk Sewer Phase III Project, prepared by ICF International, dated January 2011), our knowledge of sensitive and declining vegetation communities in the County of San Diego, and our participation in regional conservation planning efforts.

The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; Sections 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code Section 2050 et seq.) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) Program. The City of San Diego (City) participates in the NCCP program by implementing its approved Multiple Species Conservation Program Subarea Plan.

We are generally in agreement with the proposed mitigation measure and the analysis provided within the draft MND. We have the following comments that should be addressed prior to the adoption of the CEQA document.

(2) 1. The biological survey report identifies a moderate potential for orange-throated whiptail (Aspidoscelis hyperythra) and two-striped garter snake (Thamnophis hammondii) to occur within the project area. Consequently, we believe that there is a potential for species-specific impacts from construction actions associated with trenching/grading (e.g., proposed 797 linear feet of sewer pipe through open trenching), stockpiling of fill, refilling trenches, and moving vehicles along the corridor during construction and inspections and that a more thorough mitigation strategy should be evaluated and adopted to address potential impacts to the aforementioned species. Appropriate mitigation measures to address impacts to these species (along with other reptiles and small mammals occurring in the area) should include biological monitoring during construction activities and ensuring that all steep-walled trenches or excavations used during construction are covered at all times except when being actively utilized. If trenches or excavations cannot be covered, exclusion fencing (i.e., silt fence) shall be installed around trench or excavation, in order to prevent entrapment of wildlife (i.e., reptiles and small mammals). Open trenches, or other excavations that could entrap wildlife should be inspected by a qualified biologist at a minimum of three times per day and immediately before backfilling. An inspection under all vehicles and equipment should be conducted for the presence of wildlife prior to moving. If wildlife is observed, no vehicles or equipment should be moved until the animal has left voluntarily or is relocated by a biologist with the appropriate qualifications and permit authority.

CALIFORNIA DEPARTMENT OF FISH AND GAME (6/15/2011) continued

3. Comment noted. The following mitigation measure shall be added to the MND: The project would implement protection measures such as orange construction fencing for areas of impact, flagging of select plant species, sensitive access with hand –carried or machine tools, etc. In addition, the project biologist will monitor all construction through the end of revegetation to ensure project scope compliance, and to minimize impacts to sensitive resources where feasible based on the biological assessment and in-field conditions. The oversight and implementations of such protections is part of the City's MMRP, and will be overseen by the Mitigation Monitoring and Coordination (MMC) group.

4. The areas of temporary impact defined in the biological survey report were included in the required mitigation acreage. As cited in the MND and in the report all mitigation for impacts would be located off site. Therefore, the on-site revegetation efforts are not included as mitigation for project impacts and are not required to comply with the City's Biological Review References (Attachment III); however, the revegetation plan is consistent with the City's Landscape Standards.

5. The City of San Diego acknowledges that all projects must comply with state and federal laws and, regulations, including the Fish and Game Code and the Migratory Bird Treaty Act (MBTA). As such, language requiring compliance with the MBTA has been written into the project's contracts and specifications in addition to the mitigation measures included in the MND, and is a condition of approval in the Site Development Permit. The survey distances identified in the MND are adequate and no evidence has been provided that supports expanding the buffer area from 300' to 500' for this site. It is City staff and project biologist position that the mitigation requirements included in the final MND would ensure compliance with the Fish and Game Code and MBTA and modifications to this language are not required.

6. Comment acknowledged, as asset manager for the City's utility infrastructure and associated appurtenances, the Public Utilities Department is required to conduct a cost benefit analysis and redirection of low study in accordance with Council Policies 400-13 and 400-14 when it has been determined that a particular pipeline or facility is in need of replacement or rehabilitation. These studies ultimately result in the project that is submitted to DSD for environmental review. Omission of the fact that these studies were conducted was an oversight. Therefore, the following discussion will be added to the MND: An initial design to re-align the sewer line into the main HOA streets of the adjacent Adobe Falls Condominium complex, and onto their private HOA streets was conducted as the preferred option. However, alignment modifications had 90 degree connections, which the City's Public Utilities Department did not approve, and found it not in conformance with the design standards. As such, the alternate alignment located within Alvarado Canyon was chosen. However a large portion of the sewer line is being abandoned within the sensitive areas, being redirected to more accessible areas for maintenance (City streets), and using the existing alignment within the natural areas to continue the project. A total of seven manholes will be abandoned and removed in the sensitive areas, two of which will be removed within the creek itself. A cost benefit analysis was conducted and determined that the cost to redirect the flow thru the Smoke Tree Adobe Falls Subdivision is 35% more compare to keeping the alignment in the canyon. The estimated cost to redirect the flow is $2,114,000 and to construct the pipe within the canyon is $1,373,396. Redirection was not considered because of City Operations concern where the proposed depth is more than 35 feet deep.

(3) 2. The initial study cites that it is anticipated that the project would avoid all impacts to sensitive plants. The Department recommends that the Mitigation, Monitoring and Reporting Program (MMRP) include specific conditions that identify those referenced sensitive plants (or associated areas) that shall be avoided and/or flagging/fenced-off within proximity to construction activities (e.g., manhole abandonment phase of the project). This requirement is particularly important given that the biological survey report acknowledges that annual plant species would not have been detected given the timing that plant surveys were conducted.

(4) 3. The biological survey report cites that all temporary impact areas (e.g., areas impacted as a result of the abandonment of existing manholes, manhole replacement, jack-and-bore areas, staging areas, and temporary access road) would be restored upon completion of the proposed work for erosion control purposes. Therefore, we recommend that the MMRP incorporate those conditions outlined within the Alvarado Trunk Sewer conceptual revegetation plan (Attachment F). These conditions should be provided on the construction documents for this project, including specifications on the plant establishment period, irrigations obligations, invasive plant control, and biological monitoring criteria. The MMRP should further specify that the revegetation plan shall be implemented in conformance with City's Biological Review References (Attachment III) and the City's Landscape Standards.

(5) 4. In order to comply with Section 3503 and 3503.5 of the Fish and Game Code and to ensure no direct and indirect take of nests and eggs of any non-MSCP covered bird, including raptors, any construction activities (including grubbing and clearing of vegetation) in or adjacent to habitat that may support active nests of non-MSCP covered birds should occur outside of the avian breeding season (January 15 to August 31). Therefore, Biological Resources mitigation measure (IV.a.) should be revised to take into account the earlier occurrences of raptor nesting activity (i.e., January 15) that has been documented in San Diego County. Accompanying the surveys performed for passerines, the qualified biologist should also determine the presence or absence of raptor nesting within 500-feet of the construction area. The pre-construction surveys should be conducted within 10 calendar days prior to the start of construction activities.

(6) 5. The initial study is silent on the projects conformance/consistency with Council Policy 400-13 and 400-14. Supplemental discussion should be provided within the CEQA document as to the applicability and conformance of this project to these policies.

We appreciated the opportunity to comment on the draft MND for this project and to assist the City in further minimizing and mitigating project impacts to biological resources. We would appreciate it if you would confirm by e-mail your receipt of our comments.

Regards,

Paul Schlitt
Staff Environmental Scientist
Department of Fish and Game
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Phone (858) 637-5510
Fax (858) 467-4299
pschlitt@dfg.ca.gov

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6/14/2011
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Department of Toxic Substances Control

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Linda S. Adams
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

June 13, 2011

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STATE CLEARING HOUSE

Mr. Jeffrey Szymanski
City of San Diego Planning Department
1222 First Avenue MS 501
San Diego, California 92101

DRAFT MITIGATED NEGATIVE DECLARATION (ND) FOR ALVARADO TRUNK SEWER (SCH# 2011051049)

Dear Mr. Szymanski:

The Department of Toxic Substances Control (DTSC) has received your submitted document for the above-mentioned project. As stated in your document: "Site Development Permit (SDP) to allow for the installation of approximately 2,058 linear feet of new 8, 15 and 36 inch sewer pipe. The project would install 797 LF of sewer pipe through open trenching, 1,261 LF would be installed through tunneling, 239 LF of rehabilitation, and approximately 2,477 LF of existing trunk sewer would be abandoned. Five launch, receiver, and work pits ranging in size between 225 and 400 square feet would be used for tunneling or manhole related work. Off street and on street staging is being proposed. Existing access paths would primarily be used for the installation and abandonment. Eleven manholes would be removed in vegetated areas each resulting in an approximate 5 foot radius of temporary disturbance. Where additional access is needed, a 10 foot wide temporary access path is proposed and steel plates would be used if needed for construction equipment to cross the drainages. In addition, for more difficult access areas, a crane or hand carried equipment may be employed. The tunneling would occur in two separate locations, south of Interstate 8 near SDSU and on the north side of Interstate 8 next to Alvarado Creek and sensitive habitat".

Based on the review of the submitted document DTSC has the following comments:

(7) 1) The document states that the ND would identify any known or potentially contaminated sites within the proposed project area.

(8) 2) The document states that the ND would identify any known or potentially contaminated sites within the proposed project area. For all identified sites, the ND should evaluate whether conditions at the site may pose a threat to human

DEPARTMENT OF TOXIC SUBSTNACES CONTROL (June 13, 2011)

7. City staff performed an environmental site assessment using the state's Geotracker as well as the Environstor data for comprehensive evaluation. Areas of contamination were not located within the project's APE or within the project vicinity.

8. Please refer to #7. No areas of contamination were indentified and therefore a threat to human health or the environment is not anticipated.

5

health or the environment. Following are the databases of some of the regulatory agencies:

- National Priorities List (NPL): A list maintained by the United States Environmental Protection Agency (U.S.EPA).
- EnviroStor, a database primarily used by the California Department of Toxic Substances Control, at www. Envirostor.dtsc.ca.gov.
- Resource Conservation and Recovery Information System (RCRIS): A database of RCRA facilities that is maintained by U.S. EPA.
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS): A database of CERCLA sites that is maintained by U.S.EPA.
- Solid Waste Information System (SWIS): A database provided by the California Integrated Waste Management Board which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations.
- GeoTracker: A List that is maintained by Regional Water Quality Control Boards.
- Local Counties and Cities maintain lists for hazardous substances cleanup sites and leaking underground storage tanks.
- The United States Army Corps of Engineers, 911 Wilshire Boulevard, Los Angeles, California, 90017, (213) 452-3908, maintains a list of Formerly Used Defense Sites (FUDS).

(9) 28 The ND should identify the mechanism to initiate any required investigation and/or remediation for any site that may be contaminated, and the government agency to provide appropriate regulatory oversight. If hazardous materials or wastes were stored at the site, an environmental assessment should be conducted to determine if a release has occurred. If so, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. It may be necessary to determine if an expedited response action is required to reduce existing or potential threats to public health or the environment. If no immediate threat exists, the final remedy should be implemented in compliance with state laws, regulations and policies.

DEPARTMENT OF TOXIC SUBSTNACES CONTROL (June 13, 2011) continued

9. Please refer to #7. The results of the assessment did not identify areas of contamination. However, during construction, measures shall be incorporated to ensure that accidental discoveries for possible contaminants and/or contaminated groundwater be addressed to meet local (Whitebook specifications), state, as well as federal standards, as is required for all City projects.

(10) 4) The project construction may require soil excavation and soil filling in certain areas. Appropriate sampling is required prior to disposal of the excavated soil. If the soil is contaminated, properly dispose of it rather than placing it in another location. Land Disposal Restrictions (LDRs) may be applicable to these soils. Also, if the project proposes to import soil to backfill the areas excavated, proper sampling should be conducted to make sure that the imported soil is free of contamination.

(11) 5) Human health and the environment of sensitive receptors should be protected during the construction or demolition activities. A study of the site overseen by the appropriate government agency might have to be conducted to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

(12) 6) If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the ND should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

(13) 7) If weed abatement occurred, onsite soils may contain herbicide residue. If so, proper investigation and remedial actions, if necessary, should be conducted at the site prior to construction of the project.

(14) 8) If it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Division 4.5). If it is determined that hazardous wastes will be generated, the facility should also obtain a United States Environmental Protection Agency Identification Number by contacting (800) 618-6942. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA). Information about the requirement for authorization can be obtained by contacting your local CUPA.

(15) 9) DTSC can provide guidance for cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

DEPARTMENT OF TOXIC SUBSTNACES CONTROL (June 13, 2011) continued

10. Comment noted. Please see #9, all necessary steps shall be implemented during construction activities.

11. Comment noted. Please refer to #7, as there are no known sites in the project alignment and/or vicinity, no additional assessments are necessary at this time.

12. Please refer to #9. The City implements such procedures for all projects, as part of its Whitebook and standard specifications during construction.

13. A majority of the site is either within paved improved areas, or within natural undisturbed areas. As such, it is not likely that weed abatement is an issue for this project. Please also refer to #9.

14. Comment noted. Although hazardous waste is not expected to be generated with this project, please refer to #9. All hazardous waste issues related to this comment are included and addressed in the City's Whitebook specifications for proper and necessary handling.

15. Comment noted.

If you have any questions regarding this letter, please contact me at ashami@dtsc.ca.gov, or by phone at (714) 484-5472.

Sincerely,

Al Shami
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
ADelacr1@dtsc.ca.gov

CEQA # 3229

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STATE OF CALIFORNIA — Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
916 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

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JUN 10 2011
STATE CLEARING HOUSE

June 6, 2011

Mr. Jeffrey Szymanski, Environmental Planner
CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT
1222 FIRST AVENUE, MS 501
San Diego, CA 92101

Re: SCH#2011051049 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the; **"Alvarado Trunk Sewer Project; (City Project No. 209815)"** Located in the Community Plan College area; City of San Diego; San Diego County, California

Dear Mr. Szymanski:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC wishes to comment on the above-referenced proposed Project.

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

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted in; **Native American cultural resources were not identified** within the 'area of potential effect (APE), based on the USGS coordinates of the project location provided. However, there are Native American cultural resources are in close proximity to the APE. The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254.10.

(16)

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

(17)

NATIVE AMERICAN HERITAGE COMMISSION (6/6/2011)

16. Comment noted, Native American cultural resources were not identified within the project's APE.

17. Comment noted, the draft MND was sent to all individuals on the recommended list from the NAHC, with the exception of Inaja Band of Mission Indians and the Kumeyaay Cultural Heritage Preservation, these groups will be included in the distribution of the final MND.

make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to C"A Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Furthermore we recommend, also, that you contact the California Historic Resources Information System (CHRIS) California Office of Historic Preservation for pertinent archaeological data within or near the APE, at (916) 445-7000 for the nearest Information Center in order to learn what archaeological fixtures may have been recorded in the APE.

(19) Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

(20) Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

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

(22) The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places and there may be sites within the APE eligible for listing on the California Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

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NATIVE AMERICAN HERITAGE COMMISSION (6/6/2011) continued

18. City staff conducted the CHRIS search and archaeological resources were located within or adjacent to the project's APE.

19. Comment noted.

20. Please see section III and IV of the MMRP under Historical Resources (Archaeology) mitigation measures are in place in case of discovery of human remains and archaeological resources during construction that would ensure compliance with Public Resources Code Section 5097.98, California Government Code §27491 and Health and Safety Code Section 7050.5

21. Comment acknowledged.

22. Comment noted.

California Native American Contact List
San Diego County
June 6 2011

Jamul Indian Village
Kenneth Meza, Chairperson
P.O. Box 612 Diegueno/Kumeyaay
Jamul , CA 91935
jamulitez@sctdv.net
(619) 669-4785
(619) 669-48178 - Fax

Inaja Band of Mission Indians
Rebecca Osuna, Spokesperson
2005 S. Escondido Blvd. Diegueno
Escondido , CA 92025
(760) 737-7628
(760) 747-8568 Fax

Mesa Grande Band of Mission Indians
Mark Romero, Chairperson
P.O Box 270 Diegueno
Santa Ysabel, CA 92070
mesagrandeband@msn.com
(760) 782-3818
(760) 782-9092 Fax

Kumeyaay Cultural Repatriation Committee
Steve Banegas, Spokesperson
1095 Barona Road Diegueno/Kumeyaay
Lakeside , CA 92040
(619) 742-5587 - cell
(619) 742-5587
(619) 443-0681 FAX

Kumeyaay Cultural Heritage Preservation
Paul Cuero
36190 Church Road, Suite 5 Diegueno/ Kumeyaay
Campo , CA 91906
(619) 478-9046
(619) 478-9505
(619) 478-5818 Fax

Ewiiaapaayp Tribal Office
Will Micklin, Executive Director
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
wmicklin@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

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

Ewiiaapaayp Tribal Office
Michael Garcia, Vice Chairperson
4054 Willows Road Diegueno/Kumeyaay
Alpine , CA 91901
michaelg@leaningrock.net
(619) 445-6315 - voice
(619) 445-9126 - fax

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

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011051049; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Alvarado Trunk Sewer Project; located in the College Community Plan Area; San Diego County, California.

NATIVE AMERICAN HERITAGE COMMISSION (6/6/2011) continued

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California Native American Contact List
San Diego County
June 6 2011

Ipai Nation of Santa Ysabel
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Kumeyaay Cultural Repatriation Committee
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NATIVE AMERICAN HERITAGE COMMISSION (6/6/2011) continued

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California Native American Contact List
San Diego County
June 6 2011

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619 445-1927 Fax

La Posta Band of Mission Indians ✓
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619-478-2125

Viejas Band of Kumeyaay Indians ✓
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San Pasqual Band of Mission Indians ✓
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Iipay Nation of Santa Ysabel ✓
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Alvarado Trunk Sewer Project Site Design Permit and Public Utility Easement Deviation

NATIVE AMERICAN HERITAGE COMMISSION (6/6/2011) continued

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State Water Resources Control Board

Division of Financial Assistance
1001 I Street • Sacramento, California 95814 • (916) 341-5700
Mailing Address: P.O. Box 944212 • Sacramento, California • 94244-2120
FAX (916) 341-5707 Internet Address: http://www.waterboards.ca.gov

Linda S. Adams
Acting Secretary for Environmental Protection

Edmund G. Brown Jr.
Governor

We've got the **green**... to keep California's **water clean.**
CLEAN WATER STATE REVOLVING FUND

JUN - 6 2011

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

Dear Mr. Szymanski:

CLEAN WATER STATE REVOLVING FUND (CWSRF) PROGRAM INFORMATION FOR THE CITY OF SAN DIEGO (CITY); ALVARADO TRUNK SEWER (PROJECT)

We have received a notice from the State Clearinghouse on the opportunity to comment on the City's draft Mitigated Negative Declaration (MND) for the Project. Since the Project may be eligible for CWSRF financing, the State Water Resources Control Board (State Water Board) is providing some information on the environmental review requirements of the CWSRF Program should you decide to pursue CWSRF financing in the future.

The CWSRF Program provides low-cost financial assistance for a wide variety of water quality improvement and enhancement projects that protect water quality and public health. It has grant funds under certain conditions with limited availability. The application period is continuous. For additional information, please refer to the State Water Board's CWSRF Program website at:
www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml.

(23) Due to staffing constraints, we are unable to provide "specific" comments at this time if there are no clear indications that an agency will seek funding from the CWSRF Program. If you decide to pursue CWSRF financing, please note that in addition to CEQA requirements, there are federal environmental laws and regulations applicable to the CWSRF Program. Any environmental issues must be resolved before the State Water Board can approve CWSRF financing for your Project. Enclosed are three brochures that explain the CWSRF Program environmental review process, and an environmental evaluation form listing the applicable federal requirements. The City must meet those listed federal requirements if it decides to seek CWSRF financing.

STATE WATER RESOURCES CONTROL BOARD (6/6/2011)

23. This comment does not address the adequacy of the CEQA document; therefore no response is necessary. An informational brochure was submitted with the comment letter and has been forwarded to the applicant City Department for their reference.

San Diego County Archaeological Society, Inc.

Environmental Review Committee

11 June 2011

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

Subject: Draft Mitigated Negative Declaration
Alvarado Trunk Sewer
Project No. 209815

Dear Mr. Szymanski:

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

(24) Based on the information contained in the initial study and DMND, we concur with the mitigation measures as proposed.

Thank you for including SDCAS in the public review of this project's environmental documents.

Sincerely,

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

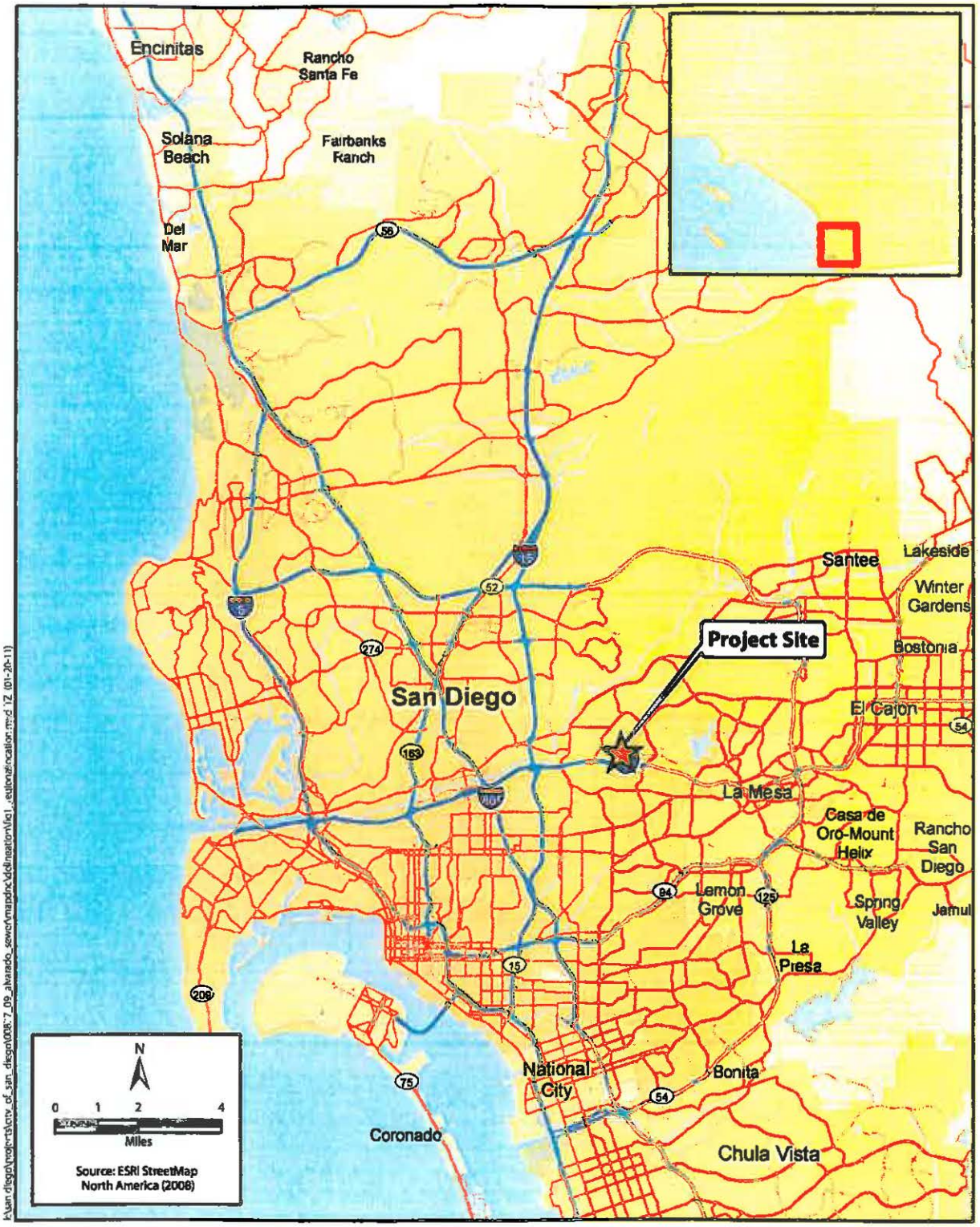
cc: SDCAS President
File

P.O. Box 81106 • San Diego, CA 92138-1106 • (858) 538-0935

SAN DIEGO COUNTY ARCHAEOLOGICAL SOCIETY, INC (6/11/2011)

24. Comment acknowledged.

VT



Location Map

Alvarado Trunk Sewer/Project No. 209815

City of San Diego – Development Services Department

FIGURE No. 1



Site Plan
Alvarado Trunk Sewer / Project No. 209815
City of San Diego – Development Services Department

FIGURE
No. 2

INITIAL STUDY CHECKLIST

1. Project Title/Project number: Alvarado Trunk Sewer/209815

2. Lead agency name and address: City of San Diego, Development Services Department, 1222 First Avenue, MS 501, San Diego, CA 92101

3. Contact person and phone number: Jeff Szymanski, Associate Planner, 619-533-7523

4. Project location: The project is located in a City Open Space urban canyon (Alvarado Canyon) between the Smoke Tree Adobe Falls Subdivision to the north and Interstate 8 to the south. The southern component of the project would occur on the south side of Interstate 8 within the jurisdiction of San Diego State University (SDSU), and all within the College and Navajo Community Planning areas.

5. Project Applicant/Sponsor's name and address: City of San Diego, E&CP Dept./ Rania Amen, 600 B Street, Suite 800 (MS 908A) San Diego, CA 92101 (619) 533- 5492.

6. General Plan designation: City of San Diego Open Space and San Diego State University (SDSU) jurisdiction.

7. Zoning: R-M-1-1, RS-1-1, and R-1-7, within SDSU CN-1-2, CV-1-2, RM -3-9, RS-1-1, and RS-1-7

8. Description of project (Describe the whole action involved, including but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation.): SITE DEVELOPMENT PERMIT (SDP) to allow for the installation of approximately 2,058 linear feet (LF) of new 8, 15 and 36-inch sewer pipe. The project would install 797 LF of sewer pipe through open trenching, 1,261 LF would be installed through tunneling, 239 LF of rehabilitation, and approximately 2,477 LF of existing trunk sewer would be abandoned. Five (5) launch, receiver, and/or work pits ranging in size between 225 and 400 square feet would be used for tunneling and/or manhole-related work. Off-street and on-street staging is being proposed. Existing access paths would primarily be used for the installation and abandonment. Eleven (11) manholes would be removed in vegetated areas each resulting in an approximate 5-foot radius of temporary disturbance. Where additional access is needed, a 10-foot wide temporary access path is proposed and steel plates would be used if needed for construction equipment to cross the drainages. In addition, for more difficult access areas, a crane or hand carried equipment may be employed. The tunneling would occur in two separate locations, south of Interstate 8 near SDSU and on the north side of Interstate 8 next to Alvarado Creek and sensitive habitat.

   All temporary impacts in vegetated areas would be re-vegetated for erosion control purposes. Also included in the scope of work is the construction and rehabilitation of manholes, the installation of new diversion manhole structures, new or replacement laterals if needed, installation of various other appurtenances as necessary, as well as street slurry seal application, and traffic control measures.

An initial design to re-align the sewer line into the main HOA streets of the adjacent Adobe Falls Condominium complex, and onto their private HOA streets was conducted as the preferred option. However, alignment modifications had 90 degree connections, which the City's Public Utilities Department did not approve, and found it not in conformance with the design standards. As such, the alternate alignment located within Alvarado Canyon was chosen. However a large portion of the sewer line is being abandoned within the sensitive areas, being redirected to more accessible areas for maintenance (City streets), and using the existing alignment within the natural areas to continue the project. A total of seven manholes will be abandoned and removed in the sensitive areas, two of which will be removed within the creek itself. A cost benefit analysis was conducted and determined that the cost to redirect the flow thru the Smoke Tree Adobe Falls Subdivision is 35% more compare to keeping the alignment in the canyon. The estimated cost to redirect the flow is $2,114,000 and to construct the pipe within the canyon is $1,373,396. Redirection was not considered because of City Operations concern where the proposed depth is more than 35 feet deep.

9. Surrounding land uses and setting: Briefly describe the project's surroundings: The surrounding land uses are residential, commercial, SDSU to the south.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): California Department of Fish and Game (CDFG) - Streambed Alteration Permit, Regional Water Quality Control Board (RWQCB) - 401 Water Quality Certificate, and Army Corps of Engineers (ACOE) - preconstruction notification, SDSU access rights.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐	Aesthetics	☐	Greenhouse Gas Emissions	☐	Population/Housing
☐	Agriculture and Forestry Resources	☐	Hazards & Hazardous Materials	☐	Public Services
☐	Air Quality	☐	Hydrology/Water Quality	☐	Recreation
☒	Biological Resources	☐	Land Use/Planning	☐	Transportation/Traffic
☒	Cultural Resources	☐	Mineral Resources	☐	Utilities/Service System
☐	Geology/Soils	☐	Noise	☒	Mandatory Findings Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required.

☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or (MITIGATED) NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or (MITIGATED) NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

I) AESTHETICS – Would the project:

a) Have a substantial adverse effect on a scenic vista? ☐ ☐ ☐ ☒

The trunk sewer project is located below grade, with the exception of manholes, and would not be visible once constructed. In addition, no designated scenic vistas have been identified within the project Area of Potential Affect (APE). No impacts to a scenic vista would occur.

b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ☐ ☐ ☐ ☒

As stated in I.a the project would be located below grade and is not located within a scenic highway. There are no scenic resources such as trees, rock outcroppings or historic buildings within the project's APE. Therefore the project would not damage scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☐ ☐ ☒

Please see I.a

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? ☐ ☐ ☐ ☒

The project is largely located below grade, with the exception of manholes, and would not have the potential to create light or glare impacts.

II) AGRICULTURAL AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:

a) Converts Prime Farmland, Unique Farmland, or Farmland of Statewide ☐ ☐ ☐ ☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				

The trunk sewer project is located within the developed public right of way and within Alvarado Canyon. These areas are not classified as farmland by the Farmland Mapping and Monitoring Program (FMMP). Similarly, land surrounding the project is not in agricultural production and is not classified as farmland by the FMMP. Therefore, the trunk sewer project would not convert farmland to non-agricultural uses.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒

Please see II.a

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

The public right of way and canyon is not zoned as forest land. Therefore, the utility project would not conflict with existing zoning for forest land.

d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

The trunk sewer project is located within the developed areas on the campus of SDSU and Alvarado canyon. These areas are not designated forest land. Therefore, the project would not convert forest land to non-forest use.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No existing agricultural uses are located in the proximity of the project that could be affected.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Therefore, the sewer replacement project would not convert farmland to non-agricultural uses.

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

a) Conflict with or obstruct implementation of the applicable air quality plan? ☐ ☐ ☐ ☒

Construction of the project could increase the amount of harmful pollutants entering the air basin. However, construction emissions would be temporary and finite. In addition, construction Best Management Practices (BMPs), such as watering for dust abatement, would reduce construction dust emissions by 75 percent.

The project would primarily replace and rehabilitate existing sewer lines. The project would not generate additional trips to these facilities once constructed, other than periodic maintenance, and operational needs for the trunk sewer would be minimal. With the implementation of project BMPs during construction and the lack of operational emissions the project would not result in a conflict of air quality plans.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? ☐ ☐ ☐ ☒

Please see III.a

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☐ ☐ ☐ ☒

As described above, construction operations could temporarily increase the emissions of dust and other pollutants. However, construction emissions would be temporary and implementation of BMPs would reduce potential impacts related to construction activities to a level less than significant. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standards.

d) Expose sensitive receptors to substantial pollutant ☐ ☐ ☐ ☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

concentrations?

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

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

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

IV. BIOLOGICAL RESOURCES – Would the project:

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

As mentioned above portions of the project would be located within Alvarado Canyon which contains Environmentally Sensitive Lands (ESL) in the form of uplands and wetland habitat. Therefore, a biological survey report, which included a wetland delineation, was prepared by ICF International (*Biological Survey Report for the Alvarado Trunk Sewer III Project,* January, 2011) to assess the impacts of the project on these sensitive habitats. Biological field surveys conducted included: vegetation mapping, a sensitive plant species assessment, and a general wildlife survey. The biological survey report is available for review at the offices of the Entitlements Division.

Five sensitive plant species were detected within the survey area during the biological survey including: spineshrub, Palmer's sagewort, San Diego marsh-elder, southwestern spiny rush, and San Diego sunflower. Due to the proximity (approximately 14 ft.) of San Diego marsh-elder to manhole 94, individual plants would be flagged prior to manhole abandonment in order to avoid impacts to this species. As documented in the biological report it is anticipated that the project would avoid all impacts to sensitive plants.

The least Bell's vireo, a covered species under the City's MSCP, is considered to have moderate potential to occur within the study area. The proposed project would not result in direct impacts to

suitable habitat for the least Bell's vireo (i.e., disturbed southern cottonwood-willow riparian scrub and disturbed southern willow scrub). However, project activities have been proposed adjacent to areas supporting potentially suitable habitat. Mitigiation language has been included in the MMRP avoid impacts to the least Bell's vireo.

The coastal California gnatcatcher, a covered species under the City's MSCP, is also considered to have moderate potential to occur within the study area. However, because the project site is located outside of the MHPA there are no restrictions on clearing of vegetation during the breeding season for this species.

The tunneling for the water line is being proposed in an effort to minimize impacts to sensitive resources and to accommodate for topography constraints. The report determined that the implementation of the proposed project would result in impacts to biological resources related to abandonment of existing manholes, manhole replacement/relocation, jack-and-bore work areas (i.e. jacking pit areas and receiver pits), temporary access roads, and staging areas. No impacts to sensitive biological resources would occur from open trenching activities.

Impacts associated with abandonment of individual manholes would occur within a 5-foot radius (centered on each manhole). Replacement of manhole 316 would require a 225 square-foot (SF; 15 ft. x 15 ft.) work area. Jack-and-bore activities would require a 400 SF (16 ft. x 25 ft.) area for the receiver pit and a 360 SF (12 ft. x 30 ft.) area for the jacking pit; abandonment of manhole 320 and relocation slightly to the south (manhole 2) and would not result in impacts beyond the identified 400 SF receiving pit. In addition, a temporary 10-foot-wide access road would be created in order to provide vehicular access to manholes in the southwestern portion of Alvarado Canyon. Crossing of Alvarado Canyon Creek and an unnamed tributary that runs north to south near manholes 84-88 would be required to complete the project. Steel plates would be used to span Alvarado Canyon Creek and this unnamed drainage and would allow for vehicular access to work areas south of Alvarado Canyon Creek and west of the unnamed drainage channel.

Total impacts to sensitive habitat were calculated and equals 0.324 acres, including 0.0050 acre of Diegan coastal sage scrub (Tier II), 0.0020 acre of disturbed Diegan coastal sage scrub (Tier II), 0.020 acre of coastal sage-chaparral scrub (Tier II), 0.045 acre of baccharis scrub (Tier II), 0.022 acre of disturbed riparian woodland, 0.230 acre of non-native grassland (Tier III B), 0.041 acre of disturbed habitat (Tier IV), and 0.036 acre of ornamental areas (Tier IV). Disturbed and ornamental habitats are not considered sensitive and would not require mitigation. Total upland impacts would constitute .302 acres and total wetland impacts would constitute .022 acres.

Mitigation for project impacts (using the established mitigation ratios for impacts outside the MHPA and mitigation inside the MHPA) would include: 0.007 acre of Diegan coastal sage scrub (Tier II), 0.020 acre of coastal sage chaparral scrub (Tier II), 0.045 acre of baccharis scrub (Tier II), 0.044 acre of disturbed riparian woodland, and 0.115 acre of non-native grassland (Tier III B). Mitigation for impacts to upland habitats would be fulfilled through payment into the City's Habitat Acquisition Fund. Mitigation for impacts to wetland habitats are proposed to occur through the purchase of credits in Public Utilities grouped mitigation sites such as Camino del Rio North for wetland creation (a minimum ratio of 1:1 is required to be in the form of creation) and the Rancho Mission Canyon for wetland enhancement credits.

Mitigation requirements shall be incorporated into Section V of the MMRP and would reduce potential impacts to biological resources to below a level of significance. Therefore the project would

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

not have substantial effects on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ☐ ☒ ☐ ☐

The biological survey report identified a total of 6.93 acres of wetland habitat occurring on site. As mentioned in IV a. the project would result in impacts to 0.022 acres of disturbed riparian woodland. These impacts would occur due to the excavation of the jack and bore pits, improvements to the manholes, and the creation of the temporary access road and staging area. As noted in the wetland delineation the California Department of Fish and Game have jurisdiction over the impacted wetlands and therefore, additional mitigation for these impacts would be carried out in consultation with this agency.

Due to access constraints, water availability, and private ownership issues it was determined that the wetland mitigation would occur off-site but within the San Diego River watershed, furthermore, mitigation sites located within grouped sites can be maintained and monitored more effectively by the Wildlife Agencies as well as the City rather than in isolated small sites. Project impacts to 0.022 acre of disturbed riparian woodland would require 0.044 acre of mitigation, which would be accomplished using 0.022 acre of wetland creation credits at Camino del Rio North mitigation site and 0.022 acre of wetland enhancement credits at Rancho Mission Canyon. The creation of 0.022 acres of wetlands would satisfy the no net loss of these resources and since the project would not be constructing permanent structures the impacts to wetlands in Alvarado Canyon are temporary in nature and the functions and values of wetlands would not be affected.

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

Please see IV b., mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife ☐ ☐ ☐ ☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

corridors, or impede the use of native wildlife nursery sites?

The project is located within Alvarado Canyon, however, once constructed the improvements would be located below grade, within the exception of manholes, and would not impede wildlife movement in the project APE.

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

Please see IVa. mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ☐ ☐ ☐ ☒

The project is not located in or directly adjacent to the City's Multi-Habitat Planning Area (MHPA) or any other conservation planning areas. Therefore the project does not have the potential to conflict with any habitat conservation plans.

V. CULTURAL RESOURCES – Would the project:

a) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5? ☐ ☒ ☐ ☐

The purpose and intent of the *Historical Resources Regulations of the Land Development Code(Chapter14, Division 3, and Article 2*) is to protect, preserve and, where damaged, restore the historical resources of San Diego. The regulations apply to all proposed development within the City of San Diego when historical resources are present on the premises. CEQA requires that before approving discretionary projects, the Lead Agency must identify and examine the significant adverse environmental effects, which may result from that project. A project that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (Sections 15064.5(b) and 21084.1). A substantial adverse change is defined as demolition, destruction, relocation, or alteration activities, which would impair historical significance (Sections 15064.5(b)(1)). Any historical resource listed in, or eligible to be listed in the California Register of Historical Resources, including archaeological resources, is considered to be historically or culturally significant.

A record search of the California Historic Resources Information System (CHRIS) digital database was reviewed to determine presence or absence of potential resources within the project site and one-

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

mile radius. No on-site archaeological resources were identified; however, several sites were identified within a one-mile radius. Trenching and excavation associated with the project have the potential to impact buried archaeological resources. Because the potential exists that cultural material could be impacted, mitigation would be required to reduce this impact to below a level of significance. Excavation within previously undisturbed soils would be monitored by a qualified archaeologist or archaeological monitor and Native American Monitor. Any significant archaeological resources encountered would be recovered and curated and significant impacts would be reduced to below a level of significance. This mitigation requirement is included in Section V of the MMRP.

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

The project would require archaeological monitoring. Please see V a.

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

The project is underlain by alluvium/slopewash and the Pomerado formation. The alluvium and slopewash areas are categorized as having a low sensitivity for paleontological resources However, the Pomerado formation has a moderate sensitivity for paleontological resources. As defined in the City's CEQA Thresholds, pipeline projects that excavate deeper than 10 feet of soil in areas of moderate sensitivity could result in impacts to these resources.

To reduce this impact to below a level of significance, excavation within previously undisturbed formations at a depth of 10 or more feet would be monitored by a qualified paleontologist or paleontological monitor. Any significant paleontological resources encountered would be recovered and curated. Paleontological monitoring would be required and would reduce potential impacts to below a level of CEQA significance. This mitigation requirement is included in Section V of the MMRP.

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

The project would require archaeological monitoring. If human remains are encountered during the construction of the project, human remains would be addressed in accordance with the MMRP from Section V of the MND.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

VI. GEOLOGY AND SOILS – Would the project:

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

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ☐ ☐ ☐ ☒

The project alignment is not located within an Alquist-Priolo Fault Zone. The project would utilize proper engineering design and utilization of standard construction practices in order to ensure that potential impacts in this category based on regional geologic hazards would remain less than significant. Therefore, risks from rupture of a known earthquake fault would remain less than significant.

ii) Strong seismic ground shaking? ☐ ☐ ☐ ☒

The following geotechnical reports were prepared for the trunk sewer project: *Geotechnical Investigation, Alvarado Trunk Sewer Phase 3, San Diego, California* (Group Delta Consultants, Inc., June 25, 2002) and *Response to City Comments, Alvarado Trunk Sewer Phase III, San Diego, California*; (Southern California Soil & Testing, Inc., January 4, 2011).

The results from the reports indicated that the project would not measurably destabilize neighboring properties or induce settlement of adjacent structures. Furthermore, the project in and of itself is not proposing to construct facilities that would attract people to the location, other than for routine maintenance.

Therefore, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. The design of the project would utilize proper engineering design and utilization of standard construction practices to ensure that the potential for impacts from ground shaking would remain less than significant.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

The design of the project would utilize proper engineering design and utilization of standard construction practices to ensure that the potential for impacts from liquefaction and groud failure would be less than significant.

iv) Landslides?	☐	☐	☐	☒

The City of San Diego Seismic Safety Study maps have designated the geology at the project location as being in a landslide and slide prone zone. The project would not expose people or structures to the risk of loss, injury, or death involving landslides.

The above referenced, *Geotechnical Investigation, Alvarado Trunk Sewer Phase 3, San Diego, California* report addressed unstable soil conditions, on or off-site landslides, lateral spreading, subsidence, and liquefaction and City Geology Staff determined that the report adequately addressed the soil and geologic conditions that could potentially affect the proposed project. The design of the project would utilize proper engineering design and utilization of standard construction practices would ensure that the potential for impacts would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒

Construction of the project would take place within the developed areas south of Interstate 8 within SDSU and Alvarado Canyon. All disturbances to paved areas would be replaced in kind and a revegetaion plan would be implemented that would preclude soil erosion.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒

As stated above the *Geotechnical Investigation, Alvarado Trunk Sewer Phase 3, San Diego, California* report addressed unstable soil conditions, on or off-site landslides, lateral spreading, subsidence, and liquefaction and City Geology Staff determined that the report adequately addressed the soil and geologic conditions that could potentially affect the proposed project.

Furthermore, the design of the project would utilize proper engineering design and utilization of standard construction practices would ensure that the potential for impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the	☐	☐	☐	☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Uniform Building Code (1994), creating substantial risks to life or property?

The project would be located within developed land and Olivenhain cobbly loam, which are not characterized as being expansive. No impacts would occur in this category.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ☐ ☐ ☐ ☒

The project is part of the City's sewer system. As a result, septic tanks or alternative wastewater systems would not be used. Therefore, no impact with regard to the capability of soils to adequately support the use of septic tanks or alternative wastewater disposal systems would result.

VII. GREENHOUSE GAS EMISSIONS - Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ☐ ☐ ☒ ☐

The City of San Diego is utilizing the California Air Pollution Control Officers Association (CAPCOA) report "CEQA and Climate Change" (CAPCOA 2009) to determine whether a GHG analysis would be required for submitted projects. The CAPCOA report references a 900 metric ton guideline as a conservative threshold for requiring further analysis and possible mitigation. This emission level is based on the amount of vehicle trips, the typical energy and water use associated with projects, and other factors.

CAPCOA identifies project types that are estimated to emit approximately 900 metric tons of GHG's annually. This 900 metric ton threshold is roughly equivalent to 36,000 square feet of office space, 11,000 square feet of retail, 50 residential units, and 6,300 square feet of supermarkets. Since the sewer project being considered in this CEQA document does not fit the categories listed above the project conducted an independent modeling analysis to determine the level of GHG emissions. The Roadway Construction Emissions Model is a spreadsheet program created by the Sacramento Metropolitan Air Quality Management District to analyze construction related GHGs (i.e. Carbon Dioxide) and was utilized to quantify the project's GHG emissions. The model utilizes project information (e.g. total construction months, project type and total project area) to quantify GHG emissions from heavy-duty construction equipment, haul trucks, and worker commute trips associated with linear construction projects. The output of the model is carbon dioxide (CO2) which is the major contributor of GHGs.

The Roadway Construction Emissions Model was conducted for this project. The results demonstrated that during the 22 months of estimated construction the project would produce approximately 167.4 metric tons of CO2 in the first year and 401.8 metric tons of CO2 in the second

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

year. The output for the project falls well below the 900 metric ton per year figure. Therefore, based upon the analysis showed above the project would result in a less than significant CEQA Greenhouse gas impact and mitigation would not be required.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Please see VII.a. It is anticipated that the project would not conflict with any applicable plans, policies, or regulations related to greenhouse gases.

VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:

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

Construction of the project may require the use of hazardous materials (fuels, lubricants, solvents, etc.), which would require proper storage, handling, use and disposal; however, the trunk sewer project would not routinely transport, use or dispose of hazardous materials. Therefore, the project would not create a significant hazard to the public or environment.

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

The project would incorporate project design features, as well as incorporate specifications for construction to meet the local, state and federal requirements to address such hazardous materials should they be discovered during construction. Therefore, the project would not involve the release of hazardous materials into the environment. Impacts would remain less than significant.

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

San Diego State University is adjacent to the project. However, please see VIII.a, impacts would not occur.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, known as the Cortese list. Therefore, no hazards would occur in relation to the Government Code Section.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two mile of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

The project is not located within the boundaries of an existing airport land use plan or an airport land use plan pending adoption. The project is not located within the flight path of any airport and is located below ground surface and therefore would not introduce any new features that would create a flight hazards.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

The project is not located within 2 miles of a private airstrip. Furthermore, the project is located below ground surface and therefore would not result in a safety hazard that would create flight hazards.

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

Construction of the project would temporarily affect traffic circulation within the project APE and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction which would allow emergency plans to be employed. Therefore, the project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

The project is located in developed public areas within the SDSU campus to the south and Alvarado Canyon, however, the canyon land is not identified as wildlands that would pose a threat of wildland fires. Additionally, the proposed sewer infrastructure project would not introduce any new features that would increase the risk of fire.

IX. HYDROLOGY AND WATER QUALITY - Would the project:

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

Potential impacts to existing water quality standards associated with the project would include minimal short-term construction-related erosion/sedimentation and no long term operational storm water discharge. Conformance to BMPs outlined in the Water Pollution Control Plan (WPCP) and conformance with the City's Stormwater Regulations would prevent or effectively minimize short-term water quality impacts. Therefore, the project would not violate any existing water quality standards or discharge requirements.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒

The project does not propose the use of groundwater. Furthermore, the project would not introduce a substantially large amount of new impervious surfaces over ground that could interfere with groundwater recharge. Therefore, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a	☐	☐	☐	☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
manner, which would result in substantial erosion or siltation on- or off-site?				

The project is located below the surface of the developed areas within the SDSU campus to the south and Alvarado Canyon. Upon completion of the installation of the utility lines in the paved areas would be returned to their preexisting conditions and the areas of disturbances within the canyon would be revegetated and would not substantially alter any existing drainage patterns.

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

Please see IX.c.

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

Conformance to BMPs outlined in the approved WPCP and compliance with the City Stormwater Regulations would prevent or effectively minimize short-term construction runoff impacts. Additionally, no new impervious areas are proposed that would increase runoff from the project area. Therefore, the underground utility project would not contribute runoff water that would exceed the capacity of existing storm water systems.

f) Otherwise substantially degrade water quality?	☐	☐	☐	☒

Conformance to BMPs outlined in the approved WPCP to be prepared for the project and compliance with the City's Stormwater Regulations would prevent or effectively minimize short-term water quality impacts and would preclude impacts to water quality.

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

The project does not propose construction of any new housing.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	☐	☐	☐	☒

The project does not propose any new structures that would be located in the 100-year flood hazard areas.

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

The project would not include any new project features that would increase the risk associated with flooding beyond those of the existing conditions.

j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The project would not include any new project features that would increase the risk associated with seiche, tsunami, or mudflow beyond those of the existing conditions.

X. LAND USE AND PLANNING – Would the project:

a) Physically divide an established community?	☐	☐	☐	☒

Implementation of the project would involve replacing and installing utility infrastructure and would not introduce any features that could divide an established community.

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

The project is consistent with all applicable land use plans, policies, or regulations of an agency with jurisdiction over the project and would not conflict with any land use plans.

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

The project is located within developed areas within the SDSU campus to the south and within

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Alvarado Canyon but is not located within the MHPA or adjacent to areas containing conservation plans. No conflicts with habitat conservation plans would occur.

XI. MINERAL RESOURCES – Would the project?

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

The APE is not designated for the recovery of mineral resources on the City of San Diego General Plan Land Use Map. Therefore, the project would not result in the loss of availability of a known mineral resource.

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

The areas surrounding the project site is not designated for the recovery of mineral resources on the City of San Diego General Plan Land Use Map. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site.

XII. NOISE – Would the project result in:

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

The development of the project would generate noise from construction but would be temporary and transitory in nature. Furthermore, the project is required to comply with the City Noise Ordinance and therefore, people would not be exposed to noise levels in excess of noise regulations.

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

Please see XII.a.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? ☐ ☐ ☐ ☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Please see XII.a.

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

Construction of the project would result in a temporary increase in the ambient noise levels in the project vicinity. However, based upon the transitory nature of the utility project and surrounding noise levels in the area resulting from traffic along the streets the increase in ambient noise would be less than significant.

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

The project is not located within the boundaries of an existing airport land use plan or an airport land use plan pending adoption. Furthermore, the utility project would not introduce any new features that would expose people residing or working in the project area to excessive noise levels beyond those associated with what currently exist.

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

The project is not located within proximity to a private airstrip. Furthermore, the utility project would not introduce any new features that would expose people residing or working in the project area to excessive noise levels beyond those associated with existing conditions. No impacts would result.

XIII. POPULATION AND HOUSING – Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ☐ ☐ ☐ ☒

The utility project would replace and install new utility infrastructure. The upgrade of the utility lines is intended to improve currently outdated sewer system in order to keep up with current demand. The project would not extend any existing roadways into an undeveloped area or introduce any new

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

roadways that could induce growth. Therefore, the project would not induce substantial population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

The project would replace and upgrade sewer utility infrastructure and would not result in the displacement of any existing housing, or otherwise affect existing housing in any way that would necessitate the construction of replacement housing.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

The project would replace and upgrade utility sewer infrastructure and would not result in the displacement of any existing housing or other structures, or otherwise affect existing housing or other structures in any way that would result in the displacement of any people.

XIV. PUBLIC SERVICES

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

i) Fire Protection ☐ ☐ ☐ ☒

The project would not physically alter any fire protection facilities. Replacement and installation of utility infrastructure would not require any new or altered fire protection services.

ii) Police Protection ☐ ☐ ☐ ☒

The project would not physically alter any police protection facilities. Replacement and installation of utility infrastructure would not require any new or altered police protection services.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Schools	☐	☐	☐	☒

The project would not physically alter any schools. Additionally, the project would not include construction of future housing or induce growth that could increase demand for schools in the area.

v) Parks	☐	☐	☐	☒

The project would not physically alter any parks or create new housing. Therefore, the project would not create demand for new parks or other recreational facilities.

vi) Other public facilities	☐	☐	☐	☒

The project would not increase the demand for electricity, gas, or other public facilities. The project would improve the sewer utility system to keep up with current demand.

XV. RECREATION –

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

Implementation of the utility project would replace and improve sewer infrastructure. The project would not generate additional trips to existing recreation areas or induce future growth that would result in additional trips to these facilities. Therefore, the project would not increase the use of existing recreational areas such that substantial physical deterioration of the facility would occur or be accelerated.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

The project would replace and improve sewer utility infrastructure and does not include the construction of recreational facilities or require the construction or expansion of recreational facilities.

XVI. TRANSPORTATION/TRAFFIC – Would the project?

a) Conflict with an applicable plan,	☐	☐	☐	☒

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				

Construction of the project would temporarily affect traffic circulation within the project's APE and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction so that traffic circulation would not be substantially impacted. Therefore, the project would not result in an increase of traffic which is substantial in relation to existing traffic capacity.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒

Construction of the project would temporarily affect traffic circulation within the project's APE and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction so that traffic would not exceed cumulative or individual level of service.

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

The project does not include any tall structures or new features that could affect air traffic patterns or introduce new safety hazards related to air traffic.

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

The project was designed to meet City design standards and, therefore, would meet existing levels of safety.

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	☐	☐	☐	☒

Construction of the project would temporarily affect traffic circulation within the project's APE and its adjoining roads. However, an approved Traffic Control Plan would be implemented during construction so that there would be adequate emergency access.

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

The project once completed would be located below grade and within Alvarado Canyon and does not have the potential to conflict with any alternative transportation systems.

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:

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

The project would facilitate the treatment of wastewater and would not exceed the requirements of the Regional Water Quality Control Board.

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

The project would facilitate the treatment of wastewater and, therefore, would not require the construction of any new water or wastewater treatment facilities.

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

The project would not result in expanded impervious surface area and would not result in substantial quantities of runoff which would require new or expanded treatment facilities. Therefore, the project would not require the construction of new storm water drainage facilities or expansion of existing

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

facilities.

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

The project would not require the use of any permanent water source and, therefore, would not impact existing water supplies.

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

The project would facilitate the transmission of wastewater but would not impact an existing wastewater treatment provider. The project is being proposed to keep up with current demands and would facilitate the treatment of wastewater.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? ☐ ☐ ☐ ☒

Construction of the project would likely generate waste associated with construction activities. This waste would be disposed of in accordance with all applicable local and state regulations pertaining to solid waste including permitting capacity of the landfill serving the project area. Materials able to be recycled shall be done to local standards regulating such activity. Operation of the project would not generate waste and, therefore, would not affect the permitted capacity of the landfill serving the project area.

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

Any solid waste generated during construction related activities would be recycled or disposed of in accordance with all applicable local, state and federal regulations.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, ☐ ☒ ☐ ☐

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				

The project would result in direct impacts to Biological Resources and potential impacts to Paleontological Resources and Historical Resources. However, implementation of the MMRP in section IV of the MND would reduce direct and/or potential impacts to these resources to below a level of significance and would not result in degradation to the environment.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable futures projects)?	☐	☒	☐	☐

When viewed in connection with the effects of other projects in the Navajo and College areas, construction activities have the potential to impact cultural resources which could incrementally contribute to a cumulative loss of non-renewable resources. However, with implementation of the mitigation measures in Section V of the MND, incremental impacts would be reduced to below a level of significance. In addition the project would result in impacts to Biological Resources. Mitigation for upland and wetland impacts has been incorporated and the impacts associated with this project combined with other closely related past, present, and reasonably foreseeable future projects would not result in a considerable incremental contribution to any cumulative impact.

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

The City of San Diego conducted an Initial Study which determined that the proposed project could have a significant environmental effect in the following areas: Biological Resources and Cultural Resources. However, with the implementation of mitigation identified in Section V of this MND the project would not have environmental effects which would cause substantial direct or indirect adverse effects on human beings.

INITIAL STUDY CHECKLIST

REFERENCES

I. **AESTHETICS / NEIGHBORHOOD CHARACTER**

_X_ City of San Diego General Plan.

_X_ Community Plan.

___ Local Coastal Plan.

II. **AGRICULTURAL RESOURCES & FOREST RESOURCES**

_X_ City of San Diego General Plan.

_X_ U.S. Department of Agriculture, Soil Survey - San Diego Area, California, Part I and II, 1973.

____ California Agricultural Land Evaluation and Site Assessment Model (1997)

___ Site Specific Report:

III. **AIR QUALITY**

___ California Clean Air Act Guidelines (Indirect Source Control Programs) 1990.

_X_ Regional Air Quality Strategies (RAQS) - APCD.

___ Site Specific Report:

IV. **BIOLOGY**

_X_ City of San Diego, Multiple Species Conservation Program (MSCP), Subarea Plan, 1997

_X_ City of San Diego, MSCP, "Vegetation Communities with Sensitive Species and Vernal Pools" Maps, 1996.

_X_ City of San Diego, MSCP, "Multiple Habitat Planning Area" maps, 1997.

___ Community Plan - Resource Element.

___ California Department of Fish and Game, California Natural Diversity Database, "State and Federally-listed Endangered, Threatened, and Rare Plants of California," January 2001.

___ California Department of Fish & Game, California Natural Diversity Database, "State and Federally-listed Endangered and Threatened Animals of California," January 2001.

X_ City of San Diego Land Development Code Biology Guidelines.

X Site Specific Report: *Biological Survey Report for the Alvarado Trunk Sewer III Project* (ICF Jones and Stokes, January, 2011)

V. CULTURAL RESOURCES (INCLUDES HISTORICAL RESOURCES)

X City of San Diego Historical Resources Guidelines.

X City of San Diego Archaeology Library.

___ Historical Resources Board List.

___ Community Historical Survey:

___ Site Specific Report:

VI. GEOLOGY/SOILS

X City of San Diego Seismic Safety Study.

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

X Site Specific Report: *Alvarado Trunk Sewer Phase 3, San Diego, California* (Group Delta Consultants, Inc., June 25, 2002) and *Response to City Comments, Alvarado Trunk Sewer Phase III, San Diego, California*; (Southern California Soil & Testing, Inc., January 4, 2011).

VII. GREENHOUSE GAS EMISSIONS

X Site Specific Report: 'Green House Gas Memo prepared for Alvarado Trunk Sewer, February 9, 2011

VIII. HAZARDS AND HAZARDOUS MATERIALS

X San Diego County Hazardous Materials Environmental Assessment Listing

___ San Diego County Hazardous Materials Management Division

___ State Water Resources Control Board Geotracker

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

___ Airport Land Use Compatibility Plan.

___ Site Specific Report:

IX. HYDROLOGY/WATER QUALITY

X Flood Insurance Rate Map (FIRM).

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

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

___ Site Specific Report:

X. LAND USE AND PLANNING

_X_ City of San Diego General Plan.

_X_ Community Plan.

_X_ Airport Land Use Compatibility Plan

_X_ City of San Diego Zoning Maps

___ FAA Determination

XI. MINERAL RESOURCES

___ California Department of Conservation - Division of Mines and Geology, Mineral Land Classification.

___ Division of Mines and Geology, Special Report 153 - Significant Resources Maps.

_X_ California Geological Survey - SMARA Mineral Land Classification Maps.

___ Site Specific Report:

XII. NOISE

_X_ Community Plan

_X_ San Diego International Airport Master Plan CNEL Maps.

___ MCAS Miramar ALUCP

___ Brown Field Airport Master Plan CNEL Maps.

___ Montgomery Field CNEL Maps.

___ San Diego Association of Governments - San Diego Regional Average Weekday Traffic Volumes.

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

___ City of San Diego General Plan.

___ Site Specific Report:

XIII. PALEONTOLOGICAL RESOURCES

_X_ City of San Diego Paleontological Guidelines.

___ Deméré, Thomas A., and Stephen L. Walsh, "Paleontological Resources City of San Diego," Department of Paleontology San Diego Natural History Museum, 1996.

_X_ Kennedy, Michael P., and Gary L. Peterson, "Geology of the San Diego Metropolitan Area, California. Del Mar, La Jolla, Point Loma, La Mesa, Poway, and SW 1/4 Escondido 7 1/2 Minute Quadrangles," California Division of Mines and Geology Bulletin 200, Sacramento, 1975.

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

___ Site Specific Report:

XIV. POPULATION / HOUSING

_X_ City of San Diego General Plan.

_X_ Community Plan.

___ Series 11 Population Forecasts, SANDAG.

___ Other:

XV. PUBLIC SERVICES

_X_ City of San Diego General Plan.

_X_ Community Plan.

XVI. RECREATIONAL RESOURCES

_X_ City of San Diego General Plan.

_X_ Community Plan.

___ Department of Park and Recreation

___ City of San Diego - San Diego Regional Bicycling Map

___ Additional Resources:

XVII. TRANSPORTATION / CIRCULATION

_X_ City of San Diego General Plan.

_X_ Community Plan.

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

___ San Diego Region Weekday Traffic Volumes, SANDAG.

___ Site Specific Report:

XVIII. UTILITIES

_X_ City of San Diego General Plan.

_X_ Community Plan.

___ Site Specific Report:

XIX. WATER CONSERVATION

_X_ City of San Diego General Plan.

___ Community Plan.

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

___ Site Specific Report:

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 1OF 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.)

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.

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.

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.

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

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

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

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.

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. Theses 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.

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

City of San Diego
Water Department

Application For Fire Hydrant Meter

(EXHIBIT A)

For Office Use Only	
NS Rec:	Fac #:
Date:	By:

2797 Caminito Chollas • San Diego, California 92105-5097 METER SHOP 619 527 7449 FAX 619 527 3125

Meter Information

Application Date:	Requested Install Date:

Fire Hydrant Location: (Attach detailed map, Thomas Bros. map location or construction drawing.)

Specific Use of Water:

Any return to Sewer or Storm Drain, if so, explain:

Estimated Duration of Meter Use: ☐ ☐ Check Box if Reclaimed Water

Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip Code:	Phone: ( )
*Business License #:		*Contractor License #:	

*A copy of the Contractor's License and/or Business License is required at the time of meter issuance.

Name and Title of Agent:	Phone: ( )
Site Contact Name and Title:	Phone: ( )
Pager #:	Cell : ( )
Responsible Party Name:	Title:
Social Security or 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

☐ Check Box to Request Removal of Above Meter | Requested Removal Date:

Provide current Meter location if different from above:

Signature:	Title:	Date:
Phone: ( )	Pager: ( )	

For Office Use Only

☐ City Meter ☐ Private Meter

CIS Account #:	Deposit Amount: $	Fees Amount: $	
Meter Serial #:	Meter Size:	Meter Make & Style:	
Backflow #:	Backflow Size:	Meter Make & Style:	
Name:	Signature:	Date:	

$1,108.45 - FOR 24 HR INSTALLATION
$1,052.26 - FOR 48 HR INSTALLATION

FHM App Created: 11/2/00-htp

"Exhibit B"

CONSTRUCTION AND MAINTENANCE RELATED ACTIVITIES WITH NO 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 Seeding
Irrigation (for establishing irrigation only; not continuing irrigation)
Mixing Concrete
Mobile Car Washing
Special Events
Street Sweeping
Water Tanks
Water Trucks
Window Washing

Note: If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charged.

"Exhibit C"

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 refer to the Water Departments', Department Instruction (D.I.) 55.27 for further information and procedure.

Mail your request for an extension to :

City of San Diego, Water Department
Attn: Meter Services
2797 Caminito Chollas
San Diego, Ca. 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant "Hot Line" at: (xxx) xxx-xxxx.

Sincerely,

City of San Diego Water Department

City of San Diego Water Department

Fire Hydrant Meter Relocate/Removal Request

(EXHIBIT D)

For Office Use Only	
NS Req:	FHM Fac #:
Date	By

Date:

Instruction: Complete pertinent information then FAX both form and map to (xxx) xxx-xxxx, mail, or hand-deliver to the City of San Diego, Water Deparmtnet/Meter Shop at: 2707 Caminito Chollas San Diego, CA 92105

Meter Information

Billing Account #:	Requested Move Date:
Current Fire Hydrant Meter Location:	
New Meter Location: (Attach a detailed map, Thomas Bros map location or construction drawing.)	

Company Information

Company Name:			
Mailing Address			
City:	State:	Zip Code:	Phone: ( )
Name and Title of Requestor:			Phone: ( )
Site Contact Name and Title			Phone: ( )
Pager #:			Cell : ( )
Responsible Party Name authorizing relocation fee:			
Signature:	Title:		Date:

Fire Hydrant Meter Removal Request

☐ Check Box to Request Removal of Above Meter	Requested Removal Date:
Provide current Meter location if different from above:	

Signature:	Title:	Date:
Phone: ( )	Pager: ( )	

For Office Use Only

CIS Account #:	Fees Amount: $	
Meter Serial #:	Size:	Make/Style
Backflow #:	Size:	Make/Style
Name:	Signature:	Date:

FHM Relocate_Removal Form

FHM App Created: 11/2/00-htp

APPENDIX C

SAMPLE CITY INVOICE

City of San Diego, Field Engineering Div., 9485 Aero Drive, SD CA 92123						Contractor's Name:					
Project Name:						Contractor's Address:					
SAP No. (WBS/IO/CC)											
City Purchase Order No.						Contractor's Phone #:				Invoice No.	
Resident Engineer (RE):						Contractor's Fax #:				Invoice Date:	
RE Phone#:		RE Fax#:				Contact Name:			Billing Period:		
Item #	Item Description	Contract Authorization				Previous Estimate		This Estimate		Totals to Date	
		Unit	Qty	Price	Extension	%/QTY	Amount	% / QTY	Amount	% / QTY	Amount
1	2 Parallel 4" PVC C900	LF	1,380	$34.00	$46,920.00						
2	48" Primary Steel Casing	LF	500	$1,000.00	$500,000.00						
3	2 Parallel 12" Secondary Steel	LF	1,120	$53.00	$59,360.00						
4	Construction and Rehab of PS 49	LS	1	$150,000.00	$150,000.00						
5	Demo	LS	1	$14,000.00	$14,000.00						
6	Install 6' High Chain Link Fence	LS	1	$5,600.00	$5,600.00						
7	General Site Restoration	LS	1	$3,700.00	$3,700.00						
8	10" Gravity Sewer	LF	10	$292.00	$2,920.00						
9	4" Blow Off Valves	EA	2	$9,800.00	$19,600.00						
10	Bonds	LS	1	$16,000.00	$16,000.00						
11	Field Orders	AL	1	80,000	$80,000.00						
11.1	**Field Order 1**	**LS**	**5,500**	**$1.00**	$5,500.00						
11.2	**Field Order 2**	**LS**	**7,500**	**$1.00**	$7,500.00						
11.3	**Field Order 3**	**LS**	**10,000**	**$1.00**	$10,000.00						
11.4	**Field Order 4**	**LS**	**6,500**	**$1.00**	$6,500.00						
12	**Certified Payroll**	**LS**	**1**	**$1,400.00**	$1,400.00						
CHANGE ORDERS											
Change Order 1		**4,890**									
Items 1-4					**$11,250.00**						
Item 5-Deduct Bid Item 3		**LF**	**120**	**-$53.00**	**($6,360.00)**						
Change Order 2		**160,480**									
Items 1-3					**$95,000.00**						
Item 4 Deduct Bid Item 1		**LF**	**380**	**-$340.00**	**($12,920.00)**						
Item 5-Encrease bid Item 9		**LF**	**8**	**$9,800.00**	**$78,400.00**						
Change Order 3 (Close Out)		**-121,500**									
Item 1 Deduct Bid Item 3			**53**	**-500.00**	**($26,500.00)**						
Item 2 Deduct Bid Item 4		**LS**	**-1**	**45,000.00**	**($45,000.00)**						
Items 3-9			**1**	**-50,500.00**	**($50,500.00)**						
SUMMARY								Total This	$ -	**Total Billed**	$0.00
A. Original Contract Amount							**Retention and/or Escrow Payment Schedule**				
B. Approved Change Order 1 Thru 3							Total Retention Required as of this billing				
C. Total Authorized Amount (A+B)							Previous Retention Withheld in PO or in Escrow				
D. Total Billed to Date							Add'l Amt to Withhold in PO/Transfer in Escrow:				
E. Less Total Retention (5% of D)							Amt to Release to Contractor from PO/Escrow:				
F. Less Total Previous Payments											
G. Payment Due Less Retention						**Contractor Signature and Date:**					
H. Remaining Authorized Amount											

APPENDIX D

LONG-TERM REVEGETATION MAINTENANCE AND MONITORING CONTRACT

LONG-TERM REVEGETATION MAINTENANCE AND MONITORING CONTRACT

This Long-Term Revegetation Maintenance and Monitoring Contract [Contract] is made and entered into by and between the City of San Diego [City], a municipal corporation, and **[insert name of Contractor]** [Contractor], who may be individually or collectively referred to herein as a "Party" or the "Parties."

RECITALS

A. On or about **[*insert date*]** the Parties entered into an agreement for the construction of **Alvarado Trunk Sewer Phase III** [Agreement], a copy of which is on file in the Office of the City Clerk as Document No. RR- **[*insert Clerk's official document number*]**.

B. In accordance with Section 800-2.12 of the Agreement, Contractor shall enter into this contract with City for the purpose of implementing and fulfilling long-term revegetation maintenance and monitoring requirements in accordance with the City of San Diego Municipal Code and the Contract Documents for **Alvarado Trunk Sewer Phase III** [Maintenance Requirements].

C. Contractor is ready and willing to fulfill its Maintenance Requirements in accordance with the terms of this contract.

NOW, THEREFORE, in consideration of the above recitals and the mutual covenants and conditions set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows:

THE PARTIES AGREE:

INTRODUCTORY PROVISIONS

1. **Recitals Incorporated.** The above referenced Recitals are true and correct and are incorporated into this contract by this reference.

2. **Exhibits Incorporated.** All Exhibits and Attachments referenced in this contract are incorporated into this contract by this reference.

3. **Contract Term.** This Contract shall be effective on the date it is executed by the last Party to sign the Contract, and it shall be effective until completion of the Work, described in Section 1.1 below.

PART 1: SCOPE OF WORK

1.1 **General. The Contractor** shall provide all equipment, labor, and materials necessary to perform the **[*insert appropriate time period*]** - month long-term revegetation maintenance and monitoring program [Monitoring Program] as further described in the written Scope of Work [Work], attached hereto as Exhibit A, at the direction of the City.

1.2 **Work Schedule. The Contractor** shall create and adhere to a comprehensive schedule of Work for performance of this contract [Work Schedule]. The Work Schedule shall include routine work as well as infrequent operations such as fertilization, aerification, renovation, and pruning. The Work Schedule shall be submitted to and approved by City prior to the commencement of Work. The City may require Contractor to revise the Work Schedule. The Contractor shall not revise the Work Schedule unless the revisions have received the prior written approval of City.

1.3 **Commencement of Work.** The Monitoring Program shall begin on the date indicated in the field notification to be issued by City to Contractor in accordance with Section 800-2.12 of the Agreement [Field Notification], and shall continue for a minimum of **[*insert appropriate time period*]** months. A copy of the Field Notification shall be attached hereto as Exhibit B.

1.4 **Performance of Work.**

1.4.1 **Quality of Work.** The Contractor shall perform the Work using the degree of care and skill ordinarily exercised by competent providers of landscape maintenance services in the State of California.

1.4.2 **Safety and Convenience.** The Work shall be performed in a manner that provides maximum safety to the public and, where applicable, complies with all safety standards required by CalOSHA. The City may issue restraint or cease and desist orders to Contractor when unsafe or harmful acts are observed or reported relative to the performance of the Work under this contract. Further, Contractor shall perform the Work in a manner which does not unreasonably interfere with pedestrian traffic on adjacent sidewalks or with vehicular traffic on adjacent streets.

1.4.3 **Hours of Performance.** The Contractor shall perform the Work between the hours of 6:00 a.m. and 6:00 p.m., Monday through Friday [Working Hours]. The City may, in its sole discretion, grant permission to Contractor to perform Work during non-Working Hours. Maintenance functions that generate excess noise, e.g., operations of power equipment which would cause annoyance to area residents, shall not begin before 7:00 a.m.

1.4.4 **Licenses and Permits.** To perform the Work, Contractor shall comply with the following:

1.4.4.1 The Contractor shall hold a C-27 State Contractor's License or retain the services of a Subcontractor who shall hold a C-27 State Contractor's License. The Contractor shall provide documentation substantiating holder of this license.

1.4.4.2 The Contractor shall hold a City of San Diego Business License.

1.4.4.3 The Contractor shall hold a Pest Control Advisor's License or retain the services of a licensed Pest Control Advisor. Further, Contractor or Contractor's Pest Control Advisor shall be registered with the County Agriculture Commission. Additionally, any person supervising the use of pesticides, herbicides, or rodenticides on Contractor's behalf shall hold a valid Qualified Applicator's Certificate for Category B.

1.4.4.4 Prior to performing the Work, Contractor shall complete and submit to City the License Data Sheet, attached hereto as Exhibit C.

1.5 **Extra Work.** "Extra Work" means new or unforeseen work that is not covered by the Scope of Work or by other provisions of this contract. The Contractor shall promptly notify City of any potential Extra Work. The Contractor shall obtain City's approval of any Extra Work prior to performance of the Extra Work. The Contractor shall not be paid for Extra Work that has not been authorized in writing by City.

1.6 **Disputed Work.** "Disputed Work" means either: i) potential Extra Work that City determines does not qualify as Extra Work; or ii) Work that City determines is unsatisfactory. If City determines Disputed Work exists, City will so notify Contractor in writing. If City and Contractor are unable to reach agreement on the Disputed Work, City may direct Contractor to proceed with or correct the Disputed Work. Payment shall be as later determined by the Parties, by mediation or arbitration, if City and Contractor agree thereto, or as fixed in a court of law. The City may adjust payment to Contractor for Disputed Work in accordance with Section 4.4. the Contractor shall keep and furnish records of Disputed Work to City.

1.7 **City Inspections.** The City will periodically inspect all maintenance operations and approve or reject the Work performed and methods or materials used. The City will issue a Field Inspection Notice (FIN), to Contractor to indicate deficiencies or discrepancies in the Work that require corrective action. The FIN will include a date for completion of corrective actions. The Contractor shall complete the FIN and indicate on the FIN the actual date the corrective work was completed. The FINs may be the basis for payment adjustments made in accordance with Section 4.4.

1.8 **Defective Work.** "Defective Work" for the purpose of this contract means Work that is unsatisfactory, faulty, incomplete, or does not conform to the Contract. If City finds that Defective Work exists, whether or not manufactured, fabricated, installed, completed or overlooked and accepted by City, Contractor shall, promptly and in accordance with the written instructions of City and within the reasonable time limits stated therein, either correct the Defective Work, or, if it has been rejected by City, remove the Defective Work from the Work site and replace it with non-defective and conforming Work.

1.9 **Completion of Work.** The City will inspect the Work for acceptance, and if, in City's opinion, the Work has been completed and 100% Cover has been achieved, as defined in the Scope of Work, City will so notify Contractor in writing. If, in City's opinion, the Work has not been completed or 100% Cover has not been achieved, City will so notify Contractor in writing and Contractor shall thereafter diligently pursue the Work to completion.

1.10 **Contractor's Duty to Perform.** The Contractor's obligation to perform and complete the Work in accordance with the terms of this contract shall be absolute. Neither any payment by City to Contractor, nor any use or occupancy of the Work or any part thereof

by City, nor any act of acceptance by City, nor any failure to do so, will constitute an acceptance of Work not performed in accordance with this contract.

1.11 **Liquidated Damages.** The failure of Contractor to complete the Work in accordance with the Work Schedule will result in damages being sustained by City. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified in the Work Schedule for the completion of Work, Contractor shall pay to City, or have withheld from monies due it, the sum of $250. Execution of this contract shall constitute agreement by City and Contractor that $250 per calendar day is the minimum value of the costs and actual damage caused by the failure of Contractor to complete the Work within the allotted time. Such sum is liquidated damages and shall not be construed as a penalty, and may be deducted from payments due to Contractor if such delay occurs.

PART 2: WORK SITE MAINTENANCE

2.1 **General.** The Contractor shall maintain the Work site free of hazards to persons, property, or both resulting from Contractor's operations.

2.2 **Use of Chemicals.** The Contractor shall submit to City for approval sample labels and Material Safety Data Sheets for all chemical herbicides, rodenticides and pesticides proposed for use under this contract. Materials included shall be limited to chemicals approved by the State of California Department of Agriculture. The use of any chemical shall be based on the recommendations of a licensed pest control advisor. Annual PCA Pesticide Recommendations are required for each pesticide proposed to be used for the Work site covered by this contract. The use of chemicals shall conform to the current San Diego County Department of Agriculture regulations. No chemical herbicide, rodenticide, or pesticide shall be applied until its use is approved, in writing, by City as appropriate for the purpose and area proposed.

2.3 **Irrigation Water**. The Contractor shall diligently practice water conservation, including minimizing run-off or other waste. The Contractor shall turn off irrigation systems, if any, during periods of rainfall and at such other times when suspension of irrigation is desirable to conserve water and to remain within the guidelines of good horticultural acceptable landscape maintenance practices. The Contractor's failure to properly manage and conserve water may result in deductions or other penalties.

2.3.1 **Payment for Water. The Contractor** shall pay for the water used in the maintenance of the Work site.

2.4 **Encountering Hazardous Conditions.** If Contractor encounters hazardous substances, Work in the area shall immediately cease. Any substance which is toxic, corrosive, an irritant, a strong sensitizer, flammable, combustible, or radioactive and may cause substantial personal injury or substantial illness as a proximate result of any customary or reasonable foreseeable handling or use is considered a hazardous substance. The Contractor shall immediately notify City and the County of San Diego, Department of Environmental Health (DEH), at Telephone No. (619) 338-2222, (during normal work hours) or Telephone No. 911 (outside normal work hours). If there is an immediate fire, explosion, health or safety threat, Contractor shall notify the Fire Department via 911.

2.5 **Repairs to Existing Facilities.** The Contractor shall immediately notify City in writing of any damage to existing structures or facilities [Existing Facilities], including damage caused by theft or vandalism. The Contractor shall repair or replace, at no cost to City, Existing Facilities, including irrigation systems, which are damaged or altered in any way as a result of the performance of Work under this contract. The Contractor shall perform repairs or replacement to Existing Facilities as directed by City. If Contractor fails to make repairs to the satisfaction of City, City and Contractor shall resolve the matter in accordance with Section 1.6, Disputed Work.

PART 3: ADMINISTRATION

3.1 **Contract Administrator.** The Engineering and Capital Projects Department is the Contract Administrator for this contract. The Contractor shall perform the Work under the direction of a designated representative of the Engineering and Capital Projects Department. The City's designated representative will communicate with Contractor on all matters related to the administration of this contract and Contractor's performance of the Work rendered hereunder. When this contract refers to communications to or with City, those communications will be with the designated representative, unless the designated representative or this contract specifies otherwise. Further, when this contract requires an act or approval by City, that act or approval will be performed by the Engineering and Capital Projects Department Director or duly designated representative.

3.2 **Local Office.** The Contractor shall maintain a local office with a competent company representative who can be reached during normal working hours and who is authorized to discuss matters pertaining to this contract with City. A local office is one located in San Diego County that can be reached by telephone and facsimile. An answering service in conjunction with a pager for the designated company representative would fulfill this requirement. A mobile telephone shall not fulfill the requirement for a local office. All calls from City shall be returned within a one (1) hour period.

3.3 **Emergency Calls.** The Contractor shall have the capability to receive and to respond immediately to calls of an emergency nature. The City shall refer emergency calls to Contractor for immediate disposition. The Contractor shall provide City with a twenty-four (24) hour emergency telephone number for this purpose.

3.4 **Staffing.**

3.4.1 **Supervision.** The Contractor shall furnish sufficient supervisory and working personnel capable of promptly accomplishing on schedule, and to the satisfaction of City, all Work required under this contract.

3.4.2 **Contractor Inspections.** The Contractor shall perform **[insert appropriate time period, e.g. weekly, monthly*]** inspections of the Work site and prepare and submit to City a punch list of Work to be performed and dates of correction. The punch list shall include a comprehensive report of Work performed at the Work site.

3.4.3 **Appearance.** The Contractor and all employees shall conduct themselves in a proper and efficient manner at all times and shall cause the least possible annoyance to the public. Employees shall be fully clothed in suitable uniform attire with a company identifying marker (a safety vest with the company identification on the back will be considered as an adequate company identifier).

3.4.4 **Removal of Employee.** The City may require Contractor to remove from the Work site any employee(s) deemed careless, incompetent, or otherwise objectionable, whose continued employment on the job is considered to be contrary to the best interests of City.

3.4.5 **Communication Skills.** The Contractor shall ensure that all supervisors present at the Work site can communicate in English both verbally and in writing.

3.5 **Subcontractors.** The Contractor's hiring of or retaining any third parties [Subcontractors] to perform services related to this contract [Subcontractor Services] is subject to prior approval by City. The Contractor has provided a list to City of all Subcontractors known to Contractor at the time the Agreement was executed. If at any time after this contract is entered into Contractor identifies a need for additional Subcontractor Services, Contractor shall give written notice to City of the need, at least forty-five days before entering into a contract for such Subcontractor Services. The Contractor's notice shall include a justification, a description of the scope of work, and an estimate of all costs for the Subcontractor Services. The Contractor may request that City reduce the forty-five day notice period. The City agrees to consider such requests in good faith.

3.5.1 **Subcontractor Contracts.** All contracts entered into between Contractor and a Subcontractor shall contain the information as described in Sections 8.3, 8.6, 8.7, and 8.8, and shall also provide as follows:

3.5.1.1 Each Subcontractor shall obtain insurance policies which shall be kept in full force and effect during any and all work on this contract and for the duration of this contract. Each Subcontractor shall obtain, and Contractor shall require the Subcontractor to obtain, all policies described in Section 6.2.

3.5.1.2 Contractor is obligated to pay the Subcontractor, for Contractor- and City-approved invoice amounts, out of amounts paid by City to Contractor, not later than fourteen working days from Contractor's receipt of payment from City. Nothing in this paragraph shall be construed to impair the right of Contractor and any Subcontractor to negotiate fair and reasonable pricing and payment provisions among themselves.

3.5.1.3 In the case of a deficiency in the performance of Subcontractor Services, Contractor shall notify City in writing of any withholding of payment to the Subcontractor, specifying: (a) the amount withheld; (b) the specific cause under the terms of the subcontract for withholding payment; (c) the connection between the cause for withholding payment and the amount withheld; and (d) the remedial action the Subcontractor shall take in order to receive the amount withheld. Once the Subcontractor corrects the deficiency, Contractor shall pay the Subcontractor the amount withheld within fourteen working days of Contractor's receipt of City's next payment.

3.5.1.4 In any dispute between Contractor and Subcontractor, City shall not be made a party to any judicial or administrative proceeding to resolve the dispute. The Contractor agrees to defend and indemnify City as described in Section 6.3 of this contract in any dispute between Contractor and Subcontractor should City be made a party to any judicial or administrative proceeding to resolve the dispute in violation of this provision.

3.5.1.5 The Subcontractor is bound to City's Equal Opportunity Contracting Program covenants set forth in Section 8.8.

PART 4: COMPENSATION

4.1 **Maximum Compensation.** The compensation for this contract shall not exceed **[*Project Manager: insert Contractor's lump sum bid amount for this long-term maintenance and monitoring contract; do not include Contractor's lump sum bid amount for planting and plant establishment period*]** [Contract Price].

4.2 **Wage Rates.** Prevailing wages are not applicable to this contract.

4.3 **Method of Payment/Monthly Reports. The Contractor** will be paid monthly, in arrears, for Work performed satisfactorily under this contract. The payments will be made as a percentage of Contract Price relative to the length of time passed. As conditions precedent to payment, Contractor shall submit the following documents to City by the first of each month: i) a detailed invoice and report of maintenance performed and materials used in the prior month; and ii) Monthly Pesticide Use Report, described below. The Contractor's failure to submit the required reports or certified payrolls as described below may result in the delay of payment to Contractor.

4.3.1 **Certified Payrolls.** Upon City's request, Contractor shall provide City with certified payrolls to substantiate the actual cost of labor. The Contractor shall include the cost for submitting certified payrolls in its lump sum bid for this contract.

4.3.2 **Monthly Pesticide Use Report.** The Contractor shall submit a monthly pesticide use report to City along with Contractor's invoices for payment. This report shall include a statement of all applications of herbicides, rodenticides, and pesticides, detailing the chemical used, undiluted quantity, rate of application, applicator's name, and the date and purpose of the application. For months in which no pesticides are applied, state "No Pesticide Used" on the report.

4.4 **Payment Adjustment. The Contractor** understands and agrees that if Contractor fails to perform the Work as specified herein, City will pay only for the amount of service actually received, as determined by City, with an appropriate downward adjustment in the compensation due to Contractor. The circumstances under which City may adjust payment include:

4.4.1 **Water Waste.** If Contractor causes excessive use or waste of irrigation water, the estimated cost of that water shall be deducted from the monthly payment. Further, any monetary fines or other damages assessed to City for Contractor's failure to follow water conservation regulations imposed by the State of California, the County Water Authority, or other legal entity shall be Contractor's responsibility and may be deducted from the monthly payment.

4.4.2 **Satisfactory Progression.** If the Revegetation Area is not progressing towards the required 100% Cover, as defined in the Scope of Work, in accordance with the Work Schedule, as determined by City, City may adjust monthly payments to Contractor accordingly.

4.5 **Final Payment.** The Contractor shall not receive the final payment, and the bond(s) will not be released, until the following conditions have been completed to City's satisfaction:

4.5.1 Contractor has achieved 100% Cover of the Revegetation Area as defined in the Scope of Work.

4.5.2 The Contractor has provided to City a signed and notarized Affidavit of Disposal, a copy of which is attached hereto as Exhibit E, stating that all brush, trash, debris, and surplus materials resulting from the Work have been disposed of in a legal manner.

4.5.3 The Contractor has performed a comprehensive and successful testing and check of all permanent irrigation systems, if any. The Contractor shall repair the irrigation system(s) as deemed necessary by City.

PART 5: TERMINATION

5.1 **Termination for Default.** If Contractor fails to perform or adequately perform any obligation required by this contract, Contractor's failure constitutes a Default. If Contractor fails to satisfactorily cure a Default within ten calendar days of receiving written notice from City specifying the nature of the Default, City may immediately cancel this contract and make a demand on Contractor's surety, or terminate this contract, and terminate each and every right of Contractor, and any person claiming any rights by or through Contractor under this contract. The rights and remedies of City enumerated in this Section are cumulative and shall not limit, waive, or deny any of City's rights under any other provision of this contract. Nor does this Section otherwise waive or deny any right or remedy, at law or in equity, existing as of the date of this contract or hereinafter enacted or established, that may be available to City against Contractor.

5.2 **Termination for Bankruptcy or Assignment for the Benefit of Creditors.** If Contractor files a voluntary petition in bankruptcy, is adjudicated bankrupt, or makes a general assignment for the benefit of creditors, City may at its option and without further notice to or demand upon Contractor, City may immediately cancel this contract and make a demand on Contractor's surety, or terminate this contract, and terminate each and every right of Contractor, and any person claiming any rights by or through Contractor. The rights and remedies of City enumerated in this Section are cumulative and shall not limit, waive, or deny any of City's rights under any other provision of this contract. Nor does this Section otherwise waive or deny any right or remedy, at law or in equity, existing as of the date of this contract or hereinafter enacted or established, that may be available to City against Contractor.

5.3 **Force Majeure.** Due to circumstances beyond the control of City, such as "Acts of God" (e.g., floods, earthquakes, etc.), or due to transfer of ownership, (e.g., through sale, easements or transfer of ownership), it may be necessary for City to suspend all, or a portion, of the remaining Contract. The Contractor shall be notified in writing immediately of any suspension. Monthly invoices from Contractor to City and payment by City to Contractor shall be adjusted accordingly.

5.4 **Notice of Termination. The City** will terminate this contract by delivering to Contractor a written notice of termination specifying the extent of termination and the effective date [Termination Notice]. Upon effective delivery of the Termination Notice in accordance with Section 9.2, Notice, and except as otherwise directed by City, Contractor shall immediately proceed as follows: i) stop work as specified in the Notice; ii) place no further subcontracts for materials, services, or facilities, except as necessary to complete any authorized continued portion of the Contract; iii) terminate all subcontracts to the

extent that they relate to the Work terminated; iv) with approval of City, settle all outstanding obligations arising from the termination of subcontracts; v) as directed by City, transfer the title and deliver to City, completed or partially completed drawings, plans, calculations, specifications and any other documents and records that, if the Contract had been completed, would be required to be furnished to City; vi) complete performance of the Work not terminated; and vii) take any action that may be necessary, or that City may direct, for the protection and preservation of the property related to this contract that is in the possession of Contractor and in which City has or may acquire an interest.

5.5 **Notice of Cancellation.** The City will cancel this contract by delivering to Contractor a written notice of cancellation specifying the extent of cancellation and the effective date [Cancellation Notice]. Upon effective delivery of the Cancellation Notice in accordance with Section 9.2, Contractor shall immediately proceed as directed by City.

PART 6: BONDS, INSURANCE, AND INDEMNIFICATION

6.1 **Contract Bonds.** Prior to commencement of the Work, Contractor, at its sole cost and expense, shall provide to City the following bonds issued by a surety authorized to issue bonds in California and otherwise satisfactory to City:

6.1.1 A Payment Bond (Material and Labor Bond) in an amount not less than **[*insert Contractor's lump sum bid amount for this long-term maintenance and monitoring contract; do not include Contractor's lump sum bid amount for planting and plant establishment period*]**,$24,000.00[Contract Price] to satisfy claims of material suppliers and mechanics and laborers employed by it on the Work. The Payment Bond shall be maintained by Contractor in full force and effect until the Work is accepted by City and until all claims for materials and labor are paid, and shall otherwise comply with the California Civil Code.

6.1.2 A Performance Bond in an amount not less than **[*insert Contractor's lump sum bid amount for this long-term maintenance and monitoring contract; do not include Contractor's lump sum bid amount for planting and plant establishment period*]**$29,000.00[Contract Price] to guarantee faithful performance of all Work, within the time prescribed, in an manner satisfactory to City, and that all materials and workmanship will be free from original or developed defects. The Performance Bond shall remain in full force and effect until performance of the Work is completed as set forth in Section 1.9.

6.2 **Insurance.** The Contractor shall not begin the Work under this contract until it has: a) obtained insurance certificates reflecting evidence of all insurance required in this Section; however, City reserves the right to request, and Contractor shall submit, copies of any policy upon reasonable request by City; b) obtained City approval of each company or companies as required by this Section; c) confirmed that all policies contain the specific provisions required in this Section. Further, Contractor shall not modify any policy or endorsement thereto which increases City's exposure to loss for the duration of this contract.

6.2.1 **Types of Insurance.** At all times during the term of this contract, Contractor shall maintain insurance coverages as follows**:**

6.2.1.1 **Commercial General Liability.** For all of Contractor's operations, including contractual, broad form property damage, completed operations, and independent Contractor's liability, Contractor shall keep in full force and effect, during any and all Work on this contract, all applicable insurance to cover personal injury, bodily injury and property damage, providing coverage to a combined single limit of $1,000,000 per occurrence, subject to an annual aggregate of $2,000,000 for general liability, completed operations and personal injury other than bodily injury. 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. Contractual liability limitation endorsement is not acceptable. Coverage shall be primary and non-contributory. The policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents and representatives as additional insured.

6.2.1.2 **Commercial Automobile Liability.** For all of Contractor's automobiles including owned, hired and non-owned automobiles, Contractor shall keep in full force and effect, automobile insurance for bodily injury and property damage providing coverage to a combined single limit of $1 million per occurrence. Insurance certificate shall reflect coverage for any automobile [any auto]. The City shall be named as an additional insured, but only for liability arising out of use of Contractor's automobiles and only arising out of Work performed under this contract. The policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents and representatives as additional insured.

6.2.1.3 **Worker's Compensation.** For all of Contractor's employees who are subject to this contract and to the extent required by the State of California, Contractor shall keep in full force and effect, a workers' compensation policy. That policy shall provide a minimum of $1 million of employers liability coverage, and Contractor shall provide an endorsement that the insurer waives the right of subrogation against City and its respective elected officials, officers, employees, agents and representatives.

6.2.1.4 **Third Party Property Damage.**

6.2.2 **Rating Requirements.** All insurance required by express provision of this contract shall be carried only by responsible insurance companies that have been given at least an "A" or "A-" and "V" rating by AM BEST, that are licensed to do business in the State of California, and that have been approved by City.

6.2.3 **Deductibles.** All deductibles on any policy shall be the responsibility of Contractor.

6.2.4 **Specific Provisions Required.** Each policy required under this Section shall expressly provide, and an endorsement shall be submitted to City, that:

6.2.4.1 Except as to Workers Compensation, City of San Diego and its respective elected officials, officers, employees, agents, and representatives shall be named as additional insureds. The City's Additional Insured status shall be reflected on additional insured endorsement form CG 20 10, or equivalent, which shall be submitted to City.

6.2.4.2 The policies are primary and non-contributing to any insurance that may be carried by City, as reflected in an endorsement which shall be submitted to City.

6.2.4.3 The policies cannot be canceled, non renewed or materially changed except after thirty calendar days prior written notice by Contractor to City by certified mail, as reflected in an endorsement which shall be submitted to City except for non-payment of premium, in which case ten days notice will be provided.

6.2.4.4 Before performing any Work, Contractor shall provide City with all Certificates of Insurance accompanied with all endorsements.

6.2.4.5 Contractor may obtain additional insurance not required by this contract.

6.2.5 **Surplus Lines.** A policy by a Surplus Lines insurer is presumptively invalid unless accompanied by: i) a document specifically naming The City of San Diego as additional insured; ii) a Service of Suit stating that the company agrees to be sued in California on any issue arising out of this contract; iii) a cut-through endorsement to an admitted company; iv) a statement regarding why the company could not be placed with an admitted insurer (Cal. Ins. Code Section 1763); v) an insurance certificate which names the surplus lines broker (Cal. Ins. Code Section 1764).

6.3 **Indemnification and Hold Harmless Agreement.** Contractor agrees to defend, indemnify, protect and hold City, its agents, officers and employees, harmless from and against all claims asserted, or liability established for damages or injuries to any person or property including to Contractor's employees, agents or officers, or judgments arising directly or indirectly out of obligations, work or services herein undertaken, which arise from, are connected with, are caused or claimed to be caused by the acts or omissions of the Contractor, its agents, officers and employees. The obligation to indemnify shall be effective even if the City, its agents, officers or employees established passive negligence contributes to the loss or claim. Contractor further agrees that the duty to defend includes attorneys fees and all costs associated with enforcement of this indemnification provision, defense of any claims arising from this Project; and, where a conflict of interest exists, or may exist between Contractor and the City, the reasonable value of attorneys fees and all costs if the city chooses, at its own election, to conduct its own defense or participate in its own defense of any claim related to this Project. The Contractor's duty to indemnify and hold harmless shall not include any claims or liability arising from the established active or sole negligence, or sole willful misconduct of the City, its agents, officers or employees.

This section in no way alters, affects or modifies Contractor's obligations and duties under Section 6.2.4.1 herein.

6.4 **Enforcement Costs.** The Contractor agrees to pay any and all costs City incurs enforcing the indemnity and defense provisions set forth in this contract.

PART 7: MEDIATION

7.1 **Mandatory Non-binding Mediation.** If a dispute arises out of, or relates to this contract, or the breach thereof, and if said dispute cannot be settled through normal contract negotiations, the Parties agree to first endeavor to settle the dispute in an amicable manner, using mandatory mediation under the Construction Industry Mediation Rules of the American Arbitration Association [AAA] or any other neutral organization agreed upon before having recourse in a court of law.

7.1.1 **Mandatory Mediation Costs.** The expenses of witnesses for either side shall be paid by the Party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator [Mediator], and the cost of any proofs or expert advice produced at the direct request of the Mediator, shall be borne equally by the Parties, unless they agree otherwise.

7.1.2 **Selection of Mediator.** A single Mediator that is acceptable to both Parties shall be used to mediate the dispute. The Mediator will be knowledgeable in construction aspects and may be selected from lists furnished by the AAA or any other agreed upon Mediator. To initiate mediation, the initiating Party shall serve a Request for Mediation on the opposing Party. If the Mediator is selected from a list provided by AAA, the initiating Party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a list of three requested Mediators marked in preference order, and a preference for available dates.

7.1.2.1 If AAA is selected to coordinate the mediation [Administrator], within ten working days from the receipt of the initiating Party's Request for Mediation, the opposing Party shall file the following: a list of preferred Mediators listed in preference order after striking any Mediators to which they have any factual objection, and a preference for available dates. If the opposing Party strikes all of initiating Party's preferred Mediators, opposing Party shall submit a list of three preferred Mediators listed in preference order to initiating Party and Administrator. Initiating Party shall file a list of preferred Mediators listed in preference order, after striking any Mediator to which they have any factual objection. This process shall continue until both sides have agreed upon a Mediator.

7.1.2.2 The Administrator will appoint or the Parties shall agree upon the highest, mutually preferred Mediator from the individual Parties' lists who is available to serve within the designated time frames.

7.1.2.3 If the Parties agree not to use AAA, then a Mediator, date and place for the mediation shall be agreed upon.

7.2 **Conduct of Mediation Sessions.** Mediation hearings will be conducted in an informal manner and discovery will not be allowed. All discussions, statements, or admissions will be confidential to the Party's legal position. The Parties may agree to exchange any information they deem necessary.

7.2.1 Both Parties shall have an authorized representative attend the mediation. Each representative shall have the authority to recommend entering into a settlement. Either Party may have attorney(s) or expert(s) present. Upon reasonable demand, either Party may request and receive a list of witnesses and notification whether attorney(s) will be present.

7.2.2 Any agreements resulting from mediation shall be documented in writing. All mediation results and documentation, by themselves, shall be "non-binding" and inadmissible for any purpose in any legal proceeding, unless such admission is otherwise agreed upon, in writing, by both Parties. Mediators shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

PART 8: SPECIAL PROVISIONS

8.1 Right to Audit.

8.1.1 Access. The City retains the right to review and audit, and the reasonable right of access to Contractor's and all Subcontractor's premises to review and audit Contractor's compliance with the provisions of this contract [City's Right]. The City's Right includes the right to inspect and photocopy same, and to retain copies, outside of Contractor's premises, of any and all records with appropriate safeguards, if such retention is deemed necessary by City in its sole discretion. This information shall be kept by City in strictest confidence allowed by law.

8.1.2 Audit. The City's Right includes the right to examine any and all books, records, documents and any other evidence of procedures and practices that City determines is necessary to discover and verify that Contractor is in compliance with all requirements under this contract.

8.1.2.1 Cost Audit. If there is a claim for Extra Work or Disputed Work, the City's Right includes the right to examine books, records, documents, and any and all other evidence and accounting procedures and practices that City determines is necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred.

8.1.3 Accounting Records. The Contractor shall maintain complete and accurate records in accordance with generally accepted accounting practices in the industry. The Contractor shall make available to City for review and audit, all Contract related accounting records and documents, and any other financial data. Upon City's request, Contractor shall submit exact duplicates of originals of all requested records to City.

8.1.4 City's Right-Binding on Subcontractors. The Contractor shall include the City's Right as described in this Section 8.1, in any and all of its subcontracts, and shall ensure that this Section is binding upon all Subcontractors.

8.1.5 Compliance Required before Mediation or Litigation. A condition precedent to proceeding with mandatory mediation provided for in Part 7 is Contractor's full compliance with the provisions of this Section 8.1 within sixty days of the date on which City mailed a written request to review and audit compliance.

8.2 Illness and Injury Prevention Program. The Contractor shall comply with all the mandates of Senate Bill 198 and specifically shall have a written Injury Prevention Program on file with City in accordance with all applicable standards, orders, or requirements of California Labor Code, Section 6401.7. This Program shall be on file prior to performance of any Work.

8.3 Drug-Free Workplace. The Contractor agrees to comply with the City's Drug-Free Workplace requirements set forth in Council Policy 100-17, adopted by Council Resolution No. R-277952 and incorporated into this contract by this reference. The Contractor has certified to City that it will provide a drug-free workplace by submitting a Certification for a Drug-Free Workplace form.

8.3.1 **Contractor's Notice to Employees.** The Contractor shall publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the work place, and specifying the actions that will be taken against employees for violations of the prohibition.

8.3.2 **Drug-Free Awareness Program.** The Contractor shall establish a drug-free awareness program to inform employees about all of the following:

8.3.2.1 The dangers of drug abuse in the work place.

8.3.2.2 The policy of maintaining a drug-free work place.

8.3.2.3 Available drug counseling, rehabilitation, and employee assistance programs.

8.3.2.4 The penalties that may be imposed upon employees for drug abuse violations.

8.3.2.5 **Posting the Statement.** In addition to Section 8.3.1 above, Contractor shall post the drug-free policy in a prominent place.

8.3.2.6 **Subcontractor's Contracts.** The Contractor further certifies that each contract for Subcontractor Services for this contract shall contain language that binds the Subcontractor to comply with the provisions of Section 9.1 of this contract, as required by Sections 2.A.(1) through (3) of Council Policy 100-17. The Contractors and Subcontractors shall be individually responsible for their own drug-free work place program.

8.3.2.7 **Program Requirements Satisfaction.** The requirements of a drug-free awareness program can be satisfied by periodic "tailgate sessions" covering the various aspects of drug-abuse education. Although an in-house employee assistance program is not required, Contractor should be able to provide a listing of drug rehabilitation and counseling programs available in the community at large.

8.4 **Americans with Disabilities Act.** The Contractor is responsible as an employer, contractor, and City representative to comply with all portions of Title 24 and the ADA. (For specific services and public accommodations, Contractor may contact the Office of the Americans with Disabilities Act, Civil Rights Division, U.S. Department of Justice, P.O. Box 66118, Washington, D.C. 20035-6118; phone number (202) 514-0301.) Contractor acknowledges and agrees that it is aware of and will comply with Council Policy 100-04, incorporated herein by this reference, adopted by Resolution No. R-282153, relating to the federally-mandated ADA. The policy applies equally to the Contractor and all Subcontractors. The Contractor shall include in each subcontract agreement language which requires Subcontractor to abide by the provisions of this Section 9.2. The Contractor and all Subcontractors will be individually responsible for administering their own ADA and Title 24 program.

8.5 **Product Endorsement.** Any advertisement referring to the City of San Diego as a user of a product, material or service by Contractor or any Subcontractor, material supplier, vendor or manufacturer is expressly prohibited without prior written approval of City.

8.6 **Conflict of Interest.** The Contractor is subject to all federal, state and local conflict of interest laws, regulations and policies applicable to public contracts and procurement

practices, including but not limited to California Government Code sections 1090, et. seq. and 81000, et. seq. The City may determine that a conflict of interest code requires Contractor to complete one or more statements of economic interest disclosing relevant financial interests. Upon City's request, Contractor shall submit the necessary documentation to City.

8.6.1 The Contractor shall establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business or other relationships.

8.6.2 The Contractor's personnel employed on this contract shall not accept gratuities or any other favors from any Subcontractors or potential Subcontractors. The Contractor shall not recommend or specify any product, supplier, or contractor with whom Contractor has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

8.6.3 If Contractor violates any conflict of interest laws or any of these provisions in Section 8.7, the violation shall be grounds for immediate termination of this contract. Further, the violation subjects Contractor to liability to City for attorneys fees and all damages sustained as a result of the violation.

8.7 **Equal Employment Opportunity.** The Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. The Contractor shall provide equal opportunity in all employment practices. The Contractor shall ensure that its Subcontractors comply with City's Equal Employment Opportunity Outreach Program [EEOP]. Nothing in this Section shall be interpreted to hold Contractor liable for any discriminatory practice of its Subcontractors. If requested by City, Contractor shall submit any reports or other documents City deems necessary for compliance with the EEOP.

8.8 **Non-Discrimination Ordinance.** The Contractor shall not discriminate on the basis of race, gender, 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. This language shall be in contracts between the Contractor and any subcontractors, vendors and suppliers.

8.8.1 **Compliance Investigations.** Upon City's request, Contractor agrees to provide to City, within sixty calendar days, a truthful and complete list of the names of all subcontractors, vendors, and suppliers that Contractor has used in the past five years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by Contractor for each subcontract or supply contract. The Contractor further agrees to fully cooperate in any investigation conducted by City pursuant to City's Nondiscrimination in Contracting Ordinance (Municipal Code sections 22.3501-22.3517). 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 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 Ordinance apply only to violations of said Nondiscrimination Ordinance.

8.9 **Taxpayer Identification Number.** I.R.S. regulations require City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide services or products to City. This information is necessary to complete Form 1099 at the end of each tax year. As such, Contractor shall provide City with a Form W-9 upon execution of this contract.

PART 9: GENERAL PROVISIONS

9.1 **Assignment. The Contractor** shall not assign the obligations under this contract, whether by express assignment or by sale of the company, nor any monies due or to become due, without City's prior written approval. Any assignment in violation of this Section shall constitute a Default and is grounds for immediate termination of this contract, at the sole discretion of City. In no event shall any putative assignment create a contractual relationship between City and any putative assignee.

9.2 **Notice.** In all cases where written notice is required under this contract, service shall be deemed sufficient if the notice is deposited in the United States mail, postage paid. Proper notice shall be effective on the date it is mailed, unless provided otherwise in this contract. For the purpose of this contract, unless otherwise agreed in writing, notice to City shall be addressed to: **[*insert City's address*]** and notice to Contractor shall be addressed to: **[*insert Contractor's address*]**.

9.3 **Headings.** All article headings are for convenience only and shall not affect the interpretation of this contract.

9.4 **Independent Contractors. The Contractor** and any Subcontractors employed by Contractor shall be independent contractors and not agents of City. Any provisions of this contract that may appear to give City any right to direct Contractor concerning the details of performing the Work, or to exercise any control over such performance, shall mean only that Contractor shall follow the direction of City concerning the end results of the performance.

9.5 **Covenants and Conditions.** All provisions of this contract expressed as either covenants or conditions on the part of City or Contractor shall be deemed to be both covenants and conditions.

9.6 **Compliance with Controlling Law. The Contractor** shall comply with all laws, ordinances, regulations, and policies of the federal, state, and local governments applicable to this contract. In addition, Contractor shall comply immediately with all directives issued by City or its authorized representatives under authority of any laws, statutes, ordinances, rules, or regulations. The laws of the State of California shall govern and control the terms and conditions of this contract.

9.7 **Jurisdiction, Venue, and Attorney's Fees**. The venue for any suit or proceeding concerning this contract, the interpretation or application of any of its terms, or any related disputes shall be in the County of San Diego, State of California. The prevailing

Party in any such suit or proceeding shall be entitled to a reasonable award of attorney's fees in addition to any other award made in such suit or proceeding.

9.8 **Successors in Interest.** This Contract and all rights and obligations created by this contract shall be in force and effect whether or not any Parties to the Contract have been succeeded by another entity, and all rights and obligations created by this contract shall be vested and binding on any Party's successor in interest.

9.9 **Integration.** This Contract and the exhibits, attachments, and references incorporated into this contract fully express all understandings of the Parties concerning the matters covered in this contract. No change, alteration, or modification of the terms or conditions of this contract, and no verbal understanding of the Parties, their officers, agents, or employees shall be valid unless made in the form of a written change agreed to in writing by both Parties or an amendment to this contract agreed to by both Parties. All prior negotiations and agreements are merged into this contract.

9.10 **Counterparts.** This Contract may be executed in counterparts, which when taken together shall constitute a single signed original as though all Parties had executed the same page.

9.11 **No Waiver.** No failure of either City or Contractor to insist upon the strict performance by the other of any covenant, term or condition of this contract, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this contract, shall constitute a waiver of any such breach or of such covenant, term or condition. No waiver of any breach shall affect or alter this contract, and each and every covenant, condition, and term hereof shall continue in full force and effect to any existing or subsequent breach.

9.12 **Severability.** The unenforceability, invalidity, or illegality of any provision of this contract shall not render any other provision of this contract unenforceable, invalid, or illegal.

9.13 **Drafting Ambiguities.** The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms and conditions of this contract, and the decision of whether to seek advice of counsel with respect to this contract is a decision which is the sole responsibility of each Party. This Contract shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in the drafting of the Contract.

9.14 **Signing Authority.** The representative for each Party signing on behalf of a corporation, partnership, joint venture or governmental entity hereby declares that authority has been obtained to sign on behalf of the corporation, partnership, joint venture, or entity and agrees to hold the other Party or Parties hereto harmless if it is later determined that such authority does not exist.

[*Project Manager: please ensure that all signatures and at least one section of agreement appear on the same page*]

IN WITNESS WHEREOF, this Contract is executed by the City of San Diego, acting by and through its Purchasing & Contracting Department Director in accordance with Resolution No. R-**[*insert number of Resolution authorizing advertising and award of underlying construction contract*]**, and by Contractor.

Dated this _____ day of _____, **[*insert year*]**.2010.

THE CITY OF SAN DIEGO

By:_____
Mayor or designee

I HEREBY CERTIFY I can legally bind **[*insert name of Contractor*]** and that I have read all of this Contract, this _____ day of _____, **[*insert year*]**.

By:_____

Printed Name:_____

Title:_____

I HEREBY APPROVE the form and legality of the foregoing Contract this _____ day of _____, **[*insert year*]**.

Jan I. Goldsmith, City Attorney

By:_____

Printed Name:_____
Deputy City Attorney

EXHIBIT A

SCOPE OF WORK

(Note to PM: This is a sample. Insert specifications which apply to your project.)

I. **Location of Work.** The location of the Work to be performed [Revegetation Area] is shown on those Specifications and Drawing number 31650-14-D [Specifications], which are incorporated into this contract by this reference as though fully set forth herein.

II. **Description of Work. The Contractor** shall maintain and monitor the Revegetation Area during the Monitoring Program in accordance with this contract and the Specifications such that the Revegetation Area meets the success criteria specified in the Revegetation Plan at each of the milestones listed and on the last date of the Monitoring Program as set forth in the Work Schedule. The Work includes complete landscape maintenance consisting of irrigation, pruning, shaping and training of trees, shrubs, and ground cover plants; fertilization; weed control; control of all plant diseases and pests; and trash removal, and all other maintenance listed in this contract and as required to maintain the Revegetation Area in a [******* safe, attractive and usable may not be appropriate descriptors for restoration projects**] safe, attractive and useable condition and to maintain the plant material in good ecologically healthy and viable condition.

[*******Include options and instructions for PE. 1) refer to revegation plan, or 2) include specific language here.**] The work also includes biological monitoring of the Revegetation Area according to the schedule and methods specified in the Revegetation Plan. The monitoring work shall include all reporting tasks specified in the Revegetation plan.

III. **Method of Performing Work.**

A. Irrigation. Irrigation shall be applied to container and salvaged plants at the discretion of the Project Biologist. Delivery techniques and schedules will vary depending on the availability of a sprinkler irrigation system and weather patterns. Timing of implementation is intended to use natural precipitation, but supplemental watering shall be applied when needed. Failure of an existing irrigation system to provide full and proper coverage shall not relieve Contractor of the responsibility to provide adequate irrigation with full and proper coverage to all areas.

1. In areas where an automatic sprinkler system is installed, Contractor shall periodically inspect the operation of the system for any malfunction. The maximum interval between inspections shall not exceed seven (7) days. The Contractor shall maintain all sprinkler systems in such a way as to guarantee proper coverage and full working capability, and shall make whatever adjustments may be necessary to prevent excessive run-off into streets, rights-of-way, or other areas not meant to be irrigated. The cost of wasted water may be charged to Contractor.

2. All areas not adequately covered by a sprinkler system shall be irrigated by a portable irrigation method **[*****Add instructions to**

PE with options to choose from, listing backpack sprayers, water truck, etc]. . The Contractor shall furnish all hoses, nozzles, sprinklers, etc. necessary to accomplish this supplementary irrigation. Care shall be exercised to prevent water waste, erosion, and/or detrimental seepage into existing underground improvements or structures.

3. Irrigation shall be accomplished as follows:

   a) Turf (if any) shall be irrigated Monday through Friday, as required, to maintain horticulturally acceptable growth and color, and to encourage deep rooting. Daily watering should be avoided wherever possible, in favor of scheduling applications every other night or twice each week. Additional irrigations shall be performed in the event of unusually hot/dry weather conditions (as are present during Santa Ana conditions, or other times of low humidity or high winds, or during a prolonged high temperature period during summer months).

   b) Landscaped improved banks and slopes (if any) shall be irrigated Monday through Friday as required to maintain horticulturally acceptable growth and color, and to encourage deep rooting.

   c) Shrub beds (if any) shall be irrigated as required to maintain horticulturally acceptable growth and color, and to promote deep rooting. Shrub areas shall be irrigated at a rate which keeps surface runoff to a minimum. The irrigation rate shall be adjusted to the needs of shrub types, seasons and weather conditions.

   d) Planted and seeded areas shall be irrigated as required to maintain ecologically acceptable growth, form and health, and to promote deep rooting. Planted and seeded areas shall be irrigated at a rate which keeps surface runoff to a minimum. The irrigation rate shall be adjusted to the needs of plant types, seasons and weather conditions.

4. Maintenance of Irrigation System. The Contractor shall keep controller and valve boxes (if any) clear of soil and debris and shall maintain the irrigation system at no additional cost to City, including replacement, repair, adjustment, raising or lowering, straightening and any other operation required for the continued proper operation of the system from the “cold” side of the water meter throughout the Revegetation Area. The Contractor shall also be responsible for maintaining the painted surfaces of irrigation and lighting controller cabinets as well as the corresponding automatic irrigation battery numbers on the lids of the automatic control valve boxes (if any). The Contractor shall be responsible for light bulb replacements in controller cabinets as necessary.

a) Repair or replacement includes: sprinkler system laterals (piping), sprinkler mains (pressure lines), vacuum breakers, sprinkler control valves, sprinkler controllers, sprinkler heads, sprinkler caps, sprinkler head risers, valve covers, boxes and lids (including electrical pull boxes and lids), valve sleeves and lids, quick coupler valves and hose bibs. Any replacement shall conform to the type and kind of existing system. Any deviation shall be approved in writing by City.

b) Contractor shall repair irrigation systems which are damaged or altered in any way, including by acts of God, vandalism, vehicular damage, or theft.

5. Operation of Automatic Irrigation Controllers. Where the operation of automatic irrigation controllers is required as part of this contract, Contractor shall: i) Not duplicate any coded City key furnished by City for access and operation of the controller; ii) surrender all keys furnished by City, promptly at the end of the Contract term, or at any time deemed necessary by City to prevent serious loss to City; iii) protect the security of City's property by keeping controller cabinet and building doors locked at all times; and iv) refrain from using premises behind locked doors for storage of materials, supplies, or tools except as approved by City.

B. Pruning Shrubs and Ground Cover Plants. **[*****This section should be split into a landscaping section and a revegetation section]** Contractor shall prune all shrubs and ground cover plants growing in the Revegetation Area as required to: i) maintain plants in a healthy, growing condition; ii) maintain plant growth within reasonable bounds; iii) prevent encroachment of passage ways, walks, streets, or view of signs; and iv) prevent encroachment in any manner deemed objectionable by City. The Contractor shall remove dead or damaged limbs with sharp pruning tools, with no stubs remaining. The Contractor shall seal any pruning cut which exceeds two inches in diameter with an approved pruning paint when required by City. The Contractor shall perform pruning to permit plants to grow naturally in accordance with their normal growth characteristics except where box hedging is required by City. The Contractor shall not shear, hedge, or severely prune plants, unless authorized by City. The Contractor shall not use growth regulators.

C. Tree Maintenance. **[*****This section talks only about tree issues. The same or similar discussion should be included for all container plants in revegetation situations.]** Contractor shall maintain all trees in the revegetation area in their natural shapes. The Contractor shall perform pruning to promote the best growth habits, appearance, and health of the tree, and to prevent encroachment which blocks vision or is in any manner deemed undesirable by City. The Contractor is responsible for tree pruning that can be accomplished with a twelve (12) foot pole saw by a worker standing on the ground. The Contractor shall not top trees.

1. Potential Hazards. The Contractor shall notify City within twenty-four (24) hours of any tree that shows signs of root heaving or leaning, or is in any manner a potential safety hazard. The Contractor shall immediately reestablish trees and shrubs that are uprooted due to storms, if possible. If trees or shrubs cannot be reestablished, Contractor shall remove them immediately (including roots) and fill the holes until replacement planting is complete.

2. Replacement. The Contractor shall completely remove and replace trees lost due to Contractor's faulty maintenance or negligence, as determined by City. The Contractor shall replace trees in kind and size as determined by City. If there is a difference in value between the tree lost and the replacement tree, City will deduct the difference from the Contract payment. The City shall determine the value of the tree lost using the latest International Society of Arboriculture (I.S.A.) guidelines for value determination.

3. Staking. The Contractor shall securely stake any newly planted trees and other trees needing support with two (2) "lodge pole" type stakes placed on opposite sides of the tree outside the rootball and secured to the tree with at least two flexible rubber tree ties. The Contractor shall regularly inspect tree ties and stakes and reposition them as necessary to ensure against girdling and abrasion.

D. Fertilization. **[*****Add options with instructions to PE. 1) refer to Reveg Plan, 2) include specific language directly in this document. We don't normally include fertilization in reveg situations, but do occasionally use it.]** Contractor shall fertilize the Revegetation Area as necessary to meet the success criteria specified in the Revegetation Plan at each of the milestones listed and on the last date of the Monitoring Program as set forth in the Work Schedule Prior to any fertilization, Contractor shall submit to City Material Safety Data Sheets and a schedule of application showing the site, date, and approximate time of fertilizer application [Fertilizer Schedule]. The Fertilization Schedule, regardless of its intensity, timing, or the number of sites covered daily or weekly, shall not excuse Contractor from performing any other Work regularly required under this contract. All fertilization shall first be approved by the Project Biologist.

1. Contractor shall notify City at least forty-eight (48) hours before beginning any fertilization. Fertilizer shall be delivered to the site only in the original unopened containers bearing the manufacturer's guaranteed analysis. Damaged packages shall not be accepted. The Contractor shall furnish City with duplicate signed, legible copies of all certificates and invoices for all fertilizer to be used for this contract. The invoices shall state the grade, amount and quantity received. Both the copy to be retained by City and Contractor's copy shall be signed by City, on site, before any fertilizer may be used.

2. Fertilizers, if necessary, shall be applied at the direction of the Project Biologist and according to manufacturer's product specifications.

3. If deemed necessary by City to achieve required results, Contractor shall apply other materials as directed by City, including i) iron chelate; ii) soil sulfur; iii) gypsum; or iv) surfactant enzymes such as Sarvon or Naiad.

4. Contractor shall adequately irrigate the fertilized area(s) immediately following the application of fertilizers and/or amendments to force fertilizer material to rest directly on the soil surface. Drip irrigated areas shall be adequately hand watered using quick coupler valves and hoses to dissolve fertilizer.

E. Weed Removal. **[*****This section should be split into a landscaping section and a revegetation section. This language is good for landscaping situations. Reveg situations are very different.]** Contractor shall completely remove weeds from the Revegetation Area, including all turf grass areas, shrub and ground cover areas, planters, tree wells, and cracks in paved areas, including sidewalks, parking lot, gutters and curbs, as shown on the Work Schedule. For the purposes of this Section, "Weed" means any undesirable or misplaced plant. The Contractor shall control Weeds by manual, mechanical, or chemical methods. The City or Project Biologist may restrict the use of chemical weed control in certain areas.

F. Disease and Pest Control. The Contractor shall regularly inspect the Revegetation Area for the presence of disease and insect or rodent infestation. The Contractor shall notify City within four (4) days if disease or insect or rodent infestation is discovered. In its notice to City, Contractor shall identify the disease, insect, or rodent and specify the control measures to be taken. Upon approval of City, Contractor shall implement the approved control measures, exercising extreme caution in the application of all sprays, dusts, or other materials utilized. The Contractor shall continue the approved control measures until the disease, insect, or rodent is controlled to the satisfaction of City.

1. All individuals who supervise the mixing and application of herbicides, pesticides, and rodenticides on behalf of Contractor shall possess valid Qualified Applicators Certificate for Category B issued to them by the State Department of Food and Agriculture.

2. Contractor shall utilize all safeguards necessary during disease, insect, or rodent control operations to ensure safety of the public and the employees of Contractor, in accordance with current standard practices accepted by the State of California Department of Food and Agriculture. If Contractor is unable to control the pest or disease, a pest control company will be hired and the cost shall be deducted from Contractor's monthly payment.

G. Plant Replacement. Except as provided in Section H below, Contractor shall notify City within four (4) days of the loss of plant material due to any cause.

1. Contractor shall at no cost to City replace any tree, shrub, ground cover, or other plant which is damaged or lost as a result of Contractor's faulty maintenance or negligence. The size and species of replacement plant materials shall be as directed by City.

2. If so directed by City, Contractor shall replace any plant damaged or lost that is not a result of Contractor's faulty maintenance or negligence. The size and species of replacement plant materials shall be as directed by City. The City will pay for materials and labor.

3. City may determine that certain plants should be replaced in order to ensure maximum ecological health and overall aesthetic appearance of planting in the Revegetation Area. When City determines such replacement should occur, Contractor shall replace the plants as directed by City. City will pay for materials and labor.

H. Damage Reports. The Contractor shall notify City within twenty-four (24) hours of any damage to the Work Area caused by accident, vandalism or theft.

I. Litter. The Contractor shall promptly dispose of all trash and debris at an appropriate City disposal site. The Contractor shall pay any and all fees associated with the disposal of debris or trash accumulated under the terms of this contract. The Contractor understands that disposal of refuse at City landfills is subject to a fee and that the Refuse Disposal Division can be contacted at (619) 573-1418 for fee information.

1. Contractor Generated Litter. The Contractor shall promptly remove all debris generated by Contractor's pruning, trimming, weeding, edging and other Work required by this contract. Immediately after working in streets, park walks, gutters, driveways, and paved areas, Contractor shall clean them in accordance with all applicable laws.

2. Third Party Generated Litter. Upon discovery Contractor shall remove all litter, including bottles, glass, cans, paper, cardboard, fecal matter, leaves, branches, metallic items, and other debris, from the Work site.

J. Monitoring: The City will hire a qualified Project Biologist to oversee all maintenance operations and conduct qualitative and quantitative biological monitoring of the revegetation area according to the schedule and methods described in the Revegetation Plan. The Project Biologist will be responsible for preparing and submitting monitoring reports according to the schedule and instructions in the Revegetation Plan. The Project Biologist will be an individual or team of individuals with 4-year degree(s) in botany, ecology, landscape architecture or a related field, and demonstrated experience in upland and riparian community restoration

EXHIBIT B

FIELD NOTIFICATION

[Inset a copy of the Engineer's Field Notification which establishes the commencement date of the monitoring program; see City Supplement, section 800-2.12]

EXHIBIT C

LICENSE DATA SHEET

State Contractor License Classification and Number:_____

Name of License Holder:_____

Expiration Date:_____

Pest Control Applicator's Name:_____

License Number:_____

Expiration Date:_____

Pest Control Advisor's Name:_____

License Number:_____

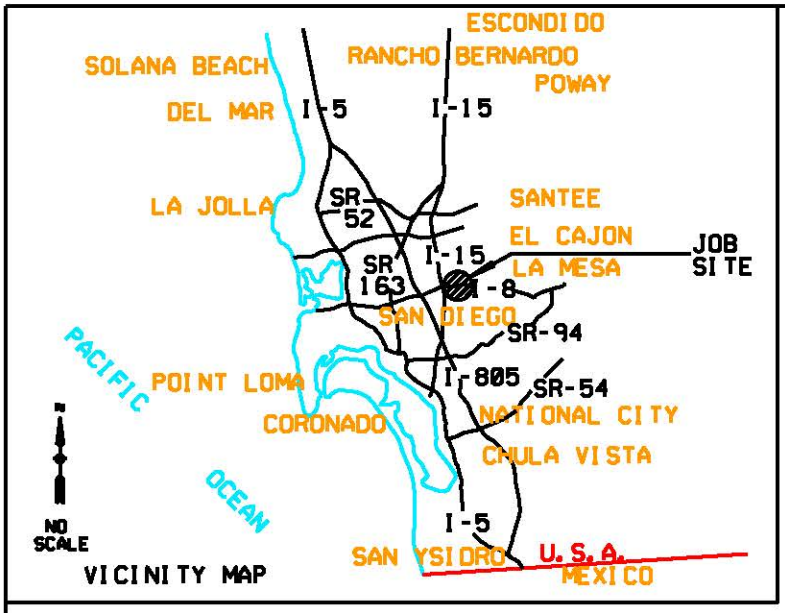
Expiration Date:_____

City of San Diego Business License Number:_____

Expiration Date:_____

APPENDIX E

LOCATION MAP

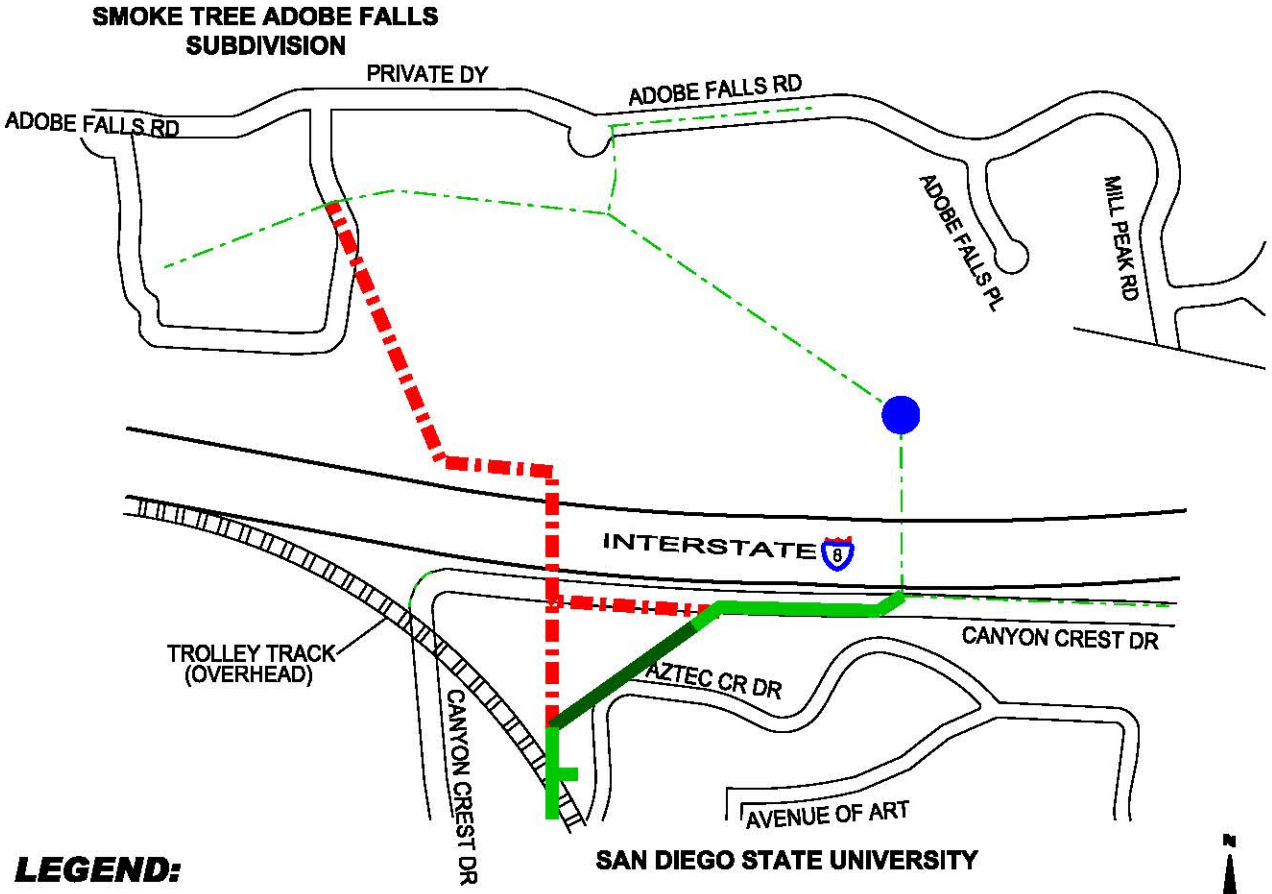


CITY OF SAN DIEGO

Engineering & Capital Projects Department

PUBLIC INFORMATION OFFICER
@ 619-533-4207

ALVARADO TRUNK SEWER PHASE III



LEGEND:

- PROPOSED SEWER MAIN – TRENCHLESS METHOD
- PROPOSED SEWER MAIN – OPEN TRENCH METHOD
- TO BE ABANDONED
- EXISTING SEWER TO REMAIN
- MANHOLE REPLACEMENT

NO SCALE

LOCATION MAP

COLLEGE AREA & NAVAJO • COUNCIL DISTRICT 7 • WBS # B-00481

APPENDIX F

AGREEMENT FOR APPLICATION OF EMULSION-AGGREGATE SLURRY

AGREEMENT FOR APPLICATION OF EMULSION-AGGREGATE SLURRY

RELATED TO **project name ALVARADO TRUNK SEWER PHASE III**

THIS Agreement for Application of Emulsion-Aggregate Slurry Related to **project name ALVARADO TRUNK SEWER PHASE III** [Agreement] is made and entered into by and between the City of San Diego [City] and [*Insert name of Contractor*] [Contractor] (collectively referred to herein as "the Parties").

RECITALS

A. WHEREAS, on or about [*Insert date*], the City and the Contractor entered into an agreement for the construction of **project name ALVARADO TRUNK SEWER PHASE III** [Contract], WBS or IO/Specification No. **B-00481.**

B. WHEREAS, in accordance with the terms of the Contract, the City and the Contractor agreed that the slurry sealing work described in Section 302-4, *Emulsion-Aggregate Slurry* and 600-3, *Rubberized Emulsion – Aggregate Slurry* would not be performed during the months of November, December, January, February, and/or March [Winter Months].

C. WHEREAS, work progressed in accordance with the Contract such that the slurry sealing work would, in the absence of the Parties' agreement to the contrary, be performed during the Winter Months.

D. WHEREAS, the City and the Contractor desire to enter into this Agreement in order to fulfill their obligations under 302-4, *Emulsion-Aggregate Slurry* and 600-3, *Rubberized Emulsion – Aggregate Slurry* of the Contract.

NOW, THEREFORE, in consideration of the mutual obligations of the Parties as set forth in the above Recitals, which are incorporated herein by this reference, the City and the Contractor agree as follows:

ARTICLE I - WORK TO BE PERFORMED

1.1 Performance of Work.

The Contractor agrees to perform all slurry sealing work as set forth in Sections 302-4 and 600-3of the Contract and ***sheet 31650-05-D of the Project's plans*** [Slurry Work], which is/are incorporated by this reference as though fully set forth herein. The Slurry Work shall be performed in accordance with the Schedule of Work, attached hereto as "Exhibit A" and incorporated herein by this reference, or as otherwise agreed to by the Parties in a written change to the Schedule of Work. Unless otherwise specified, the time of completion of this Agreement shall be expressed in Working Days.

For the purposes of this Agreement:

a) References in the specified sections to the "Agency" shall mean the City and the "Work" shall mean the Slurry Work.
b) References to the specified sections shall mean sections of the GREENBOOK (Standard Specifications for Public Works Construction), the City Supplement, and Supplementary Special Provisions under the editions specified in the Contract.

1.2 Working Day.

See the City Supplements, Section 1-2, TERMS AND DEFINITIONS. The Engineer will make a daily determination of each Working Day to be charged against the Agreement time. These determinations will be discussed and the Contractor will be furnished a periodic statement showing allowable number of Working Days of Agreement time, including any adjustments, at the beginning of the reporting period. The statement will also indicate the number of Working Days charged during the reporting period and the number of Working Days of Agreement time remaining. If the Contractor does not agree with the statement, it shall file a written protest within 15 days after receipt, setting forth the facts of the protest. Otherwise, the statement will be deemed to have been accepted.

1.3 Prosecution of Slurry Work.

Section 6-2, *Prosecution of Work* is incorporated into this Agreement by this reference as though fully set forth herein.

1.4 Project Site Maintenance.

Section 7-8 of the Contract, *Project Site Maintenance* is incorporated into this Agreement by this reference as though fully set forth herein.

1.5 Protection and Restoration of Existing Improvements.

Section 7-9 of the Contract, *Protection and Restoration of Existing Improvements* is incorporated into this Agreement by this reference as though fully set forth herein.

1.6 Public Convenience and Safety.

Section 7-10 of the Contract, *Public Convenience and Safety* is incorporated into this Agreement by this reference as though fully set forth herein.

1.7 Completion, Acceptance, and Guarantee.

The Engineer will inspect the Slurry Work in accordance with Section 302-4 and 600-3 of the Contract. The Contractor shall provide the Engineer with written notice that the Slurry Work has been completed. If the Engineer determines that the Slurry Work has been completed to the Engineer's reasonable satisfaction and is ready for acceptance, the Engineer will accept the completed Work by sending written notice to the Contractor specifying the date of acceptance. All Slurry Work shall be subject to the warranty requirements of the Contract as specified in Section 6-8, COMPLETION, ACCEPTANCE, AND WARRANTY.

1.8 Payment to Contractor.

Upon completion of the Slurry Work, the City will pay the Contractor for slurry work, bonds, insurance, and traffic control I accordance with the applicable sections of the Contract.

1.9 Delays and Extensions of Time.

Section 6-6, *Delays and Extensions of Time* is incorporated into this Agreement by this reference as though fully set forth herein.

1.10 Liquidated Damages.

Section 6-9, *Liquidated Damages* is incorporated into this Agreement by this reference as though fully set forth herein.

ARTICLE II - BOND/INSURANCE/INDEMNIFICATION

2.1 Faithful Performance Bond.

Prior to execution of this Agreement, the Contractor shall provide the City with a faithful performance bond [Bond] in the amount of $[*insert amount of Contractor's bid item for slurry work], guaranteeing faithful performance of all Slurry Work, within the time prescribed in this Agreement, in a manner satisfactory to City, and that all materials and workmanship will be free from original or developed defects. The Bond must remain in effect until the end of all warranty periods set forth in this Agreement. The Bond shall comply with Section 2-4, BONDS of the Contract.

2.2 Insurance.

Section 7-3, *Liability Insurance* is incorporated into this Agreement by this reference as though fully set forth herein. At all times during the term of this Agreement, the Contractor shall maintain insurance coverage required by Section 7-3, LIABILITY INSURANCE of the Contract for:

a. Commercial General Liability.
b. Commercial Automobile Liability.
c. Worker's Compensation.

All policies must be primary and non-contributing to any insurance that may be carried by the City, as reflected in an endorsement, which shall be submitted to the City. The policies shall not be canceled, non-renewed, or materially changed except after 30 days prior written notice by the Contractor or the insurance carrier to the City by certified mail, except for non-payment of premium, in which case 10 days notice shall be provided.

2.3 Indemnification.

Section 7-15, *Indemnification And Hold Harmless Agreement* is incorporated into this Agreement by this reference as though fully set forth herein.

ARTICLE III - DEFAULT/TERMINATION

3.1 Default by Contractor.

Section 6-4, *Default by Contractor* is incorporated into this Agreement by this reference as though fully set forth herein.

3.2 Termination of Agreement.

Section 6-5, *Termination of Contract* is incorporated into this Agreement by this reference as though fully set forth herein.

ARTICLE IV - CONTRACTOR OBLIGATIONS

4.1 Compliance with the City's Equal Opportunity Contracting Program.

The Contractor and each Subcontractors shall comply with the City's Equal Opportunity Contracting Program requirements which the Contractor acknowledges receiving in conjunction with the Contract.

4.2 Non-Discrimination Ordinance.

The Contractor shall not discriminate on the basis of race, gender, 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 Section shall be considered a material breach of this Agreement and may result in contract termination, debarment, or other sanctions. This language shall be in contracts between the Contractor and Subcontractors, and Suppliers.

4.3 Compliance Investigations.

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. 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 sections 22.3501-22.3517.) 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 Ordinance* apply only to violations of the *Nondiscrimination Ordinance*.

4.4 Drug-Free Workplace.

The Contractor agrees to comply with the City's Drug-Free Workplace requirements set forth in Council Policy 100-17, adopted by Council Resolution No. R-277952 and incorporated into this Agreement by this reference. The Contractor has certified to the City that it will provide a drug-free workplace by submitting a Contractor Certification for a Drug-Free Workplace form.

The Contractor further certifies that any subcontract for this Agreement shall contain language that binds the Subcontractor to comply with the drug-free workplace requirements of this Agreement, as required by Sections 2.A.(1) through (3) of Council Policy 100-17. The Contractor and Subcontractors shall be individually responsible for their own drug-free work place program.

4.3 Compliance with Controlling Law.

The Contractor shall comply with all laws, ordinances, regulations, and policies of the federal, state, and local governments applicable to this Agreement, including the California Labor Code. In addition, the Contractor shall comply immediately with all directives issued by the City or its authorized representatives under authority of any laws, statutes, ordinances, rules, or regulations. The laws of the State of California shall govern and control the terms and conditions of this Agreement.

ARTICLE V - GENERAL PROVISIONS

5.1 Jurisdiction, Venue, and Attorney's Fees.

The venue for any suit or proceeding concerning this Agreement, the interpretation or application of any of its terms, or any related disputes shall be in the County of San Diego, State of California. The prevailing party in any such suit or proceeding shall be entitled to a reasonable award of attorney's fees in addition to any other award made in such suit or proceeding.

5.2 Successors in Interest.
This Agreement and all rights and obligations created by this Agreement shall be in force and effect whether or not any parties to the Agreement have been succeeded by another entity, and all rights and obligations created by this Agreement shall be vested and binding on any party's successor in interest.

5.3 Integration.
This Agreement and the exhibits and references incorporated into this Agreement fully express all understandings of the Parties concerning the matters covered in this Agreement. No change, alteration, or modification of the terms or conditions of this Agreement, and no verbal understanding of the Parties, their officers, agents, or employees shall be valid unless made in the form of a written change agreed to in writing by both Parties or an amendment to this Agreement agreed to by both Parties. All prior negotiations and agreements are merged into this Agreement.

5.4 No Waiver.
No failure of either the City or the Contractor to insist upon the strict performance by the other of any covenant, term or condition of this Agreement, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Agreement, shall constitute a waiver of any such breach or of such covenant, term or condition. No waiver of any breach shall affect or alter this Agreement, and each and every covenant, condition, and term hereof shall continue in full force and effect to any existing or subsequent breach.

5.5 Severability.
The unenforceability, invalidity, or illegality of any provision of this Agreement shall not render any other provision of this Agreement unenforceable, invalid, or illegal.

5.6 Drafting Ambiguities.
The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms and conditions of this Agreement, and the decision of whether or not to seek advice of counsel with respect to this Agreement is a decision, which is the sole responsibility of each Party. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in the drafting of the Agreement.

5.7 City Acts/Approvals.
Whenever an act or approval is required by the City in accordance with the terms of this Agreement, that the Engineering and Capital Projects Department Director or duly designated representative shall perform act or approval.

5.8 Signing Authority.
The representative for each Party signing on behalf of a corporation, partnership, joint venture or governmental entity hereby declares that authority has been obtained to sign on behalf of the corporation, partnership, joint venture, or entity and agrees to hold the other Party or Parties hereto harmless if it is later determined that such authority does not exist.

IN WITNESS WHEREOF, this Agreement is executed by the City of San Diego, by and through its Engineering and Capital Projects Department Director in accordance with Resolution No. [*Insert resolution number authorizing underlying construction contract*], and by Contractor.

THE CITY OF SAN DIEGO

Dated: _____ By:_____
[*Insert name and title*]

CONTRACTOR

Dated: _____ By:_____
[*Insert name and title*]

I HEREBY APPROVE the form and legality of the foregoing Agreement this _____ day of _____, 20___ .

JAN I GOLDSMITH, City Attorney

By: _____
Deputy City Attorney

EXHIBIT A

SCHEDULE OF WORK

[*Insert Schedule Showing Time (in Working Days) in Which Work is to be Performed*]

APPENDIX G

TUNNEL CLASSIFICATION PERMIT

State of California

Department of Industrial Relations

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
MINING AND TUNNELING UNIT

San Bernardino Office R5D3

Underground Classification

C127-073-11T

CITY OF SAN DIEGO

(NAME OF TUNNEL OR MINE AND COMPANY NAME)

600 B Street, Suite 800 San Diego, CA 92101-4502

of

(MAILING ADDRESS)

ALVARADO TRUNK SEWER PHASE III

at

(LOCATION)

*****POTENTIALLY GASSY*****

has been classified as

(CLASSIFICATION)

as required by the California Labor Code Section 7955.

The Division shall be notified if sufficient quantities of flammable gas or vapors have been encountered underground. Classifications are based on the California Labor Code Part 9, Tunnel Safety Orders and Mine Safety Orders.

A 493.12-foot long tunnel bore with a diameter between 48-inches and 72-inches (to be determined by the Contractor) underneath a 100-foot high slope adjacent to Parking Lot X within the campus of San Diego State University between Construction Stations 16+10.00 and 21+03.12, San Diego, San Diego County.

This classification shall be conspicuously posted at the place of employment.

Date June 20, 2011

Lacy Pittman

for Jim Henze, Senior Engineer

cc: File

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
MINING AND TUNNELING UNIT
464 West Fourth Street, Suite 354
San Bernardino, CA, 92401

Telephone (909) 383-6782
FAX (909) 388-7132

June 20, 2011

Mr. Jericho Gallardo
City of San Diego
Engineering and Capital Projects Department
Right-Of-Way Division
600 B Street, Suite 800
San Diego, CA 92101-4502

Subject: Underground Classification C127-73-11T
Alvarado Trunk Sewer Phase III

Dear Mr. Gallardo

The information provided to this office relative to the subject project has been reviewed. On the basis of this analysis, an Underground Classification of Potentially Gassy has been assigned to the tunnel bore identified on your submittal. Please retain copies for your records and deliver true and correct copies of the Classification to the contractor(s) engaged in the work (for posting at the jobsite).

A Pre-job Conference with the Division is required prior to commencing any activity associated with construction of tunnels. Also, be advised that, whenever an employee enters any bore or shaft being constructed under 30-inches in diameter, the Mining and Tunneling Unit then has immediate jurisdiction over that job. Please contact us prior to entering such spaces.

If you have any questions, please contact this office.

Sincerely,

Lacy Pittman

for Jim Henze, Senior Engineer

APPENDIX H

BIOLOGICAL SURVEY REPORT

BIOLOGICAL SURVEY REPORT FOR THE ALVARADO TRUNK SEWER PHASE III PROJECT

PREPARED FOR:

City of San Diego
600 B Street, Suite 800, MS908A
San Diego, CA 92101
Contact: Ms. Carrie Purcell

PREPARED BY:

ICF International
9775 Businesspark Avenue, Suite 200
San Diego, CA 92131
Contact: Erin Schorr
858.578.8964

January 2011

ICF International. 2011. Biological Survey Report for the Alvarado Trunk Sewer Phase III Project. October. (ICF 877.09.) San Diego, CA. Prepared for City of San Diego, San Diego, CA.

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Attachment B **Wildlife Species Observed Within the Alvarado Trunk Sewer Survey Area**
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Acronyms and Abbreviations

ACOE	U.S. Army Corps of Engineers
AMSL	above mean sea level
CDFG	California Department of Fish and Game
City	City of San Diego
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSS	coastal sage scrub
EPA	U.S. Environmental Protection Agency
ft.	feet
I-8	Interstate-8
LF	linear feet
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MHs	manholes
MSCP	Multiple Species Conservation Program
PEP	Plant Establishment Period
SDSU	San Diego State University

Summary

ICF International (ICF) was retained to conduct biological surveys and to prepare a report for the proposed Alvarado Trunk Sewer Phase III Project. The project proposes to re-align the existing trunk sewer system by installing approximately 2,058 linear feet of new pipe, rehabilitating approximately 239 linear feet of pipe, and abandoning approximately 2,477 linear feet of existing trunk sewer occurring between Alvarado Canyon and San Diego State University (SDSU). New sewer line installation would occur through a combination of open cut trenching (66 linear feet of 8-inch pipe and 731 linear feet of 15-inch pipe) and tunneling (493 linear feet of 15-inch pipe and 768 linear feet of 36-inch pipe) to minimize impacts to sensitive biological resources. The portion of the project site occurring within Alvarado Canyon would result in impacts to sensitive habitats.

Implementation of the proposed project would result in impacts related to abandonment of existing manholes, manhole replacement/relocation, jack-and-bore work areas (i.e. jacking pit areas and receiver pits), temporary access roads, and staging areas. Impacts associated with abandonment of individual manholes would occur within a 5-foot radius (centered on each manhole). Replacement of manhole 316 would require a 225 square-foot (SF; 15 ft. x 15 ft.) work area. Jack-and-bore activities would require a 400 SF (16 ft. x 25 ft.) area for the receiver pit and a 360 SF (12 ft. x 30 ft.) area for the jacking pit; abandonment of manhole 320 and relocation slightly to the south (then to be referred to as manhole 2) would not result in impacts beyond the identified 400 SF receiving pit. In addition, a temporary 10-foot-wide access road would be created in order to provide vehicular access to manholes in the southwestern portion of Alvarado Canyon. Crossing of Alvarado Canyon Creek and the unnamed tributary that runs north to south near MHs 84-88 would be required in order to complete the proposed project. It is assumed that steel plates would be used to span Alvarado Canyon Creek and this unnamed drainage and allow for vehicular access to work areas south of Alvarado Canyon Creek and west of the unnamed drainage channel. Vehicular access to or near all other manholes would be via existing dirt access roads and other areas that were previously disturbed during emergency repairs conducted in October 2002 (City of San Diego 2004). Where existing dirt roads do not currently provide access all the way to the manholes (e.g., MHs 84, 89, 90, 91, 92, and 94), the surrounding vegetation is open enough to allow for pedestrian access to conduct the work. Therefore additional impacts related to access would not occur. One staging area has been proposed within a vegetated area of Alvarado Canyon. The entire project site is located within the City of San Diego's Multiple Species Conservation Program and outside of the City's Multi-Habitat Planning Area.

The proposed project would result in impacts to a total of 0.401 acre, including 0.005 acre of Diegan coastal sage scrub (Tier II), 0.002 acre of disturbed Diegan coastal sage scrub (Tier II), 0.20 acre of coastal sage-chaparral scrub (Tier II), 0.045 acre of baccharis scrub (Tier II), 0.022 acre of disturbed riparian woodland, 0.230 acre of non-native grassland (Tier III B), 0.041 acre of disturbed habitat (Tier IV), and 0.036 acre of ornamental areas (Tier IV).

In order to avoid impacts to sensitive biological resources beyond those discussed in this report, orange snow fencing would be installed around individual manholes and would be used to clearly delineated access roads prior to project activities. In addition, individuals of San Diego marsh-elder (*Iva hayesiana*) located in proximity to MH 94 would be flagged prior to project activities.

All mitigation for project impacts would occur off site. Mitigation for proposed project impacts (using the established mitigation ratios for impacts outside the MHPA and mitigation inside the MHPA) would include: 0.007 acre of Diegan coastal sage scrub (Tier II), 0.020 acre of coastal sage-

chaparral scrub (Tier II), 0.045 acre of baccharis scrub (Tier II), 0.044 acre of disturbed riparian woodland, and 0.115 acre of non-native grassland (Tier III B). Mitigation for impacts to upland habitats could be fulfilled through payment into the City's Habitat Acquisition Fund or off-site preservation of habitats; the final decision on which option to utilize to fulfill the required mitigation will be made in consultation with the City of San Diego Development Services Department. Mitigation for impacts to wetland habitats are proposed to occur through the use of Public Utilities grouped mitigation sites [such as Camino del Rio North for wetland creation credits (a minimum ratio of 1:1 is required to be in the form of creation) and/or Rancho Mission Canyon for wetland enhancement credits].

In addition, all temporary impact areas (e.g., areas impacted as a result of the abandonment of existing manholes, manhole replacement, jack-and-bore work areas, staging areas, and the temporary access road) would be restored upon completion of the proposed work for erosion control purposes. These restored areas would not count towards mitigation requirements and would include 0.022 acre of wetland habitats, 0.343 acre of upland habitats, and 0.036 acre of ornamental areas. Temporary impacts to 0.046 acre or ornamental areas at manholes 161 and 162, which are not discussed in this report, would also be restored for erosion control. Thus, the total acreage of ornamental areas to be restored is 0.082 acre (0.036 + 0.046).

The following five sensitive plant species were detected within the survey area during the biological surveys: spineshrub (*Adolphia californica*; CNPS list 2), Palmer's sagewort (*Artemisia palmeri*; CNPS list 4), San Diego marsh-elder (*Iva hayesiana*; CNPS list 2), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*; CNPS list 4), and San Diego sunflower (*Viguiera laciniata*; CNPS list 4). Impacts to sensitive species are not anticipated to occur as a result of the proposed project; therefore, mitigation measures are not required.

The least Bell's vireo, a covered species under the City's MSCP, is considered to have moderate potential to occur within the study area. The proposed project would not result in direct impacts to suitable/occupied habitat for the least Bell's vireo (i.e., southern cottonwood-willow riparian forest). Potential impacts to the federally and state endangered least Bell's vireo can be avoided by completing all project activities occurring in the vicinity of potential habitat (including driving of vehicles) during the period from September 16 through March 14 (i.e., outside the breeding season for this species). If project activities are proposed to occur during the breeding season for this species (March 15 through September 25), protocol surveys by a qualified biologist would be required. Established survey protocol for this species consists of a minimum of eight surveys conducted a minimum of 10 days apart between April 10 and July 31. If this species is not identified within the project site during the protocol surveys, no additional measures would be required. However, if this species is determined to be present within the project area, no clearing or grubbing of occupied least Bell's vireo habitat will be allowed between March 15 and September 15. Furthermore, no project activities will be allowed within any portion of the site where activities would result in noise levels exceeding 60 dB (decibels) Leq (or the ambient noise level if they already exceed 60 dB Leq) at the edge of the occupied habitat. If necessary, noise attenuation measures, such as berms or noise walls, can be implemented to ensure that noise level will be maintained within the allowable level.

The coastal California gnatcatcher, a covered species under the City's MSCP, is also considered to have moderate potential to occur within the study area. However, because the project site is located outside of the MHPA there are no restrictions on impacting this species' habitat during its breeding season (City of San Diego 1997c).

In addition, conducting work activities during the breeding season (January through September) could result in impacts to nesting birds protected by the Migratory Bird Treaty Act and similar provisions of the Fish and Game Code. If vegetation removal is to be conducted during the breeding season, a pre-construction survey must be conducted to determine if any protected birds are nesting within or immediately adjacent to any vegetation that will be removed within the impact areas. The pre-construction nesting bird survey would be conducted by a qualified biologist no more than three days prior to commencing project activities. If a nest is found, a no-work buffer zone placed around the nest until the adults are no longer using it or the young have fledged. The specific buffer width will be determined by a qualified biologist at the time of discovery. These will vary based on site conditions and type of work to be conducted.

Introduction

Project Location and Description

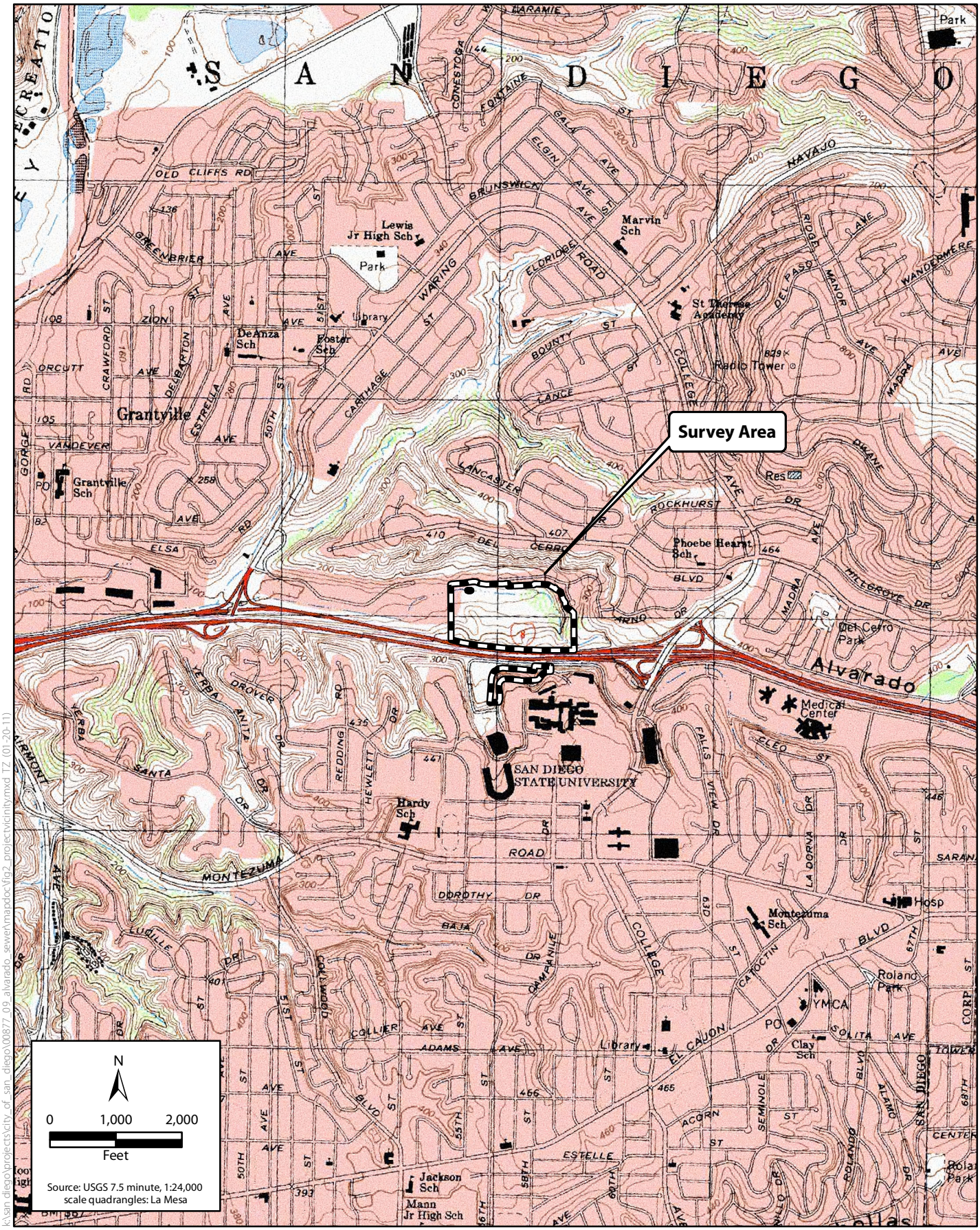
The City of San Diego (City) has proposed to redirect the flow of an existing trunk sewer occurring between Adobe Falls Road and Canyon Crest Drive. The project proposes to re-align the existing trunk sewer system by installing approximately 2,058 linear feet (LF) of new pipe, rehabilitating approximately 239 LF of pipe, and abandoning approximately 2,477 LF of existing trunk sewer occurring between Alvarado Canyon and SDSU (Figures 1 and 2). New sewer line installation would occur through a combination of open cut trenching (66 linear feet of 8-inch pipe and 731 linear feet of 15-inch pipe) and tunneling (493 linear feet of 15-inch pipe and 768 linear feet of 36-inch pipe) to minimize impacts to sensitive biological resources. The portion of the project site occurring within Alvarado Canyon would result in impacts to sensitive habitats. Portions of the project site occurring along Adobe Falls Road, along Canyon Crest Drive, and south of Canyon Crest Drive would result in impacts to ornamental and developed areas, which would not be considered significant. Although the biological survey included these areas, this report only addresses findings and proposed impacts and mitigation for areas within Alvarado Canyon. Thus, although impacts to ornamental and developed areas are anticipated along existing roads and in areas south of Canyon Crest Drive they have not been quantified in this report. In accordance with City regulations, temporary impacts to ornamental areas would be replaced in-kind and maintained for a period of no less than 90 days (City of San Diego 1997a).

Implementation of the proposed project would result in impacts from abandonment of existing manholes (MHs), manhole replacement/relocation, jack-and-bore work areas (i.e. jacking pit areas and receiver pits), temporary access roads, and staging areas. Impacts associated with abandonment of individual manholes (with the exception of MH 87, which would be slightly reduced along the northern boundary to avoid impacts to mule fat scrub) would occur within a 5-foot radius (centered on each manhole) and would consist of filling the opening with slurry, sealing the opening, and removing the top structure. Replacement of manhole 316 would require a 225 square-foot (SF; 15 ft. x 15 ft.) work area. Jack-and-bore activities (to avoid impacts to the low flow of Alvarado Creek) would require a 400 SF (16 ft. x 25 ft.) area for the receiver pit and a 360 SF (12 ft. x 30 ft.) area for the jacking pit; abandonment of manhole 320 and relocation slightly to the south (then to be referred to as manhole 2) would not result in impacts beyond the identified 400 SF receiving pit. In addition, a temporary 10-foot-wide access road would be created in order to provide vehicular access to manholes in the southwestern portion of Alvarado Canyon. It is assumed that steel plates would be used to span the unnamed drainage in this area (just west of MHs 87 and 88) and allow for



k:\san diego\projects\city_of_san_diego\00877_09_alvarado_sewer\mapdoc\fig1_regionallocation.mxd TZ (01-20-11)

Figure 1
Regional Location
Alvarado Trunk Sewer Phase III



k:\san diego\projects\city_of_san_diego\00877_09_alvarado_sewer\mapdoc\fig2_projectvicinity.mxd TZ (01-20-11)

Figure 2
Project Location
Alvarado Trunk Sewer Phase III

vehicular access to this area. Vehicular access to or near all other manholes would be via existing access roads and disturbed areas. Where existing dirt roads do not currently provide access all the way to the manholes (e.g., MHs 84, 89, 90, 91, 92, and 94), the surrounding vegetation is open enough to allow for pedestrian access to conduct the work. Therefore additional impacts related to access would not occur. One staging area has been proposed within habitat in Alvarado Canyon and others are available in existing developed areas such as the Adobe Falls Road cul-de-sac.

The proposed project is located within the Urban Area of the City of San Diego Multiple Species Conservation Program (MSCP; City of San Diego 1997b). The MSCP is a conservation program designed to facilitate the implementation of a regional habitat preserve while allowing the issuance of take permits at the local level. The entire project site is located within the City's MSCP and outside of the City's Multi-Habitat Planning Area (MHPA; City of San Diego 1997b). Existing development occurs between the project area and the MHPA; therefore, the project area is not adjacent to the MHPA and a discussion of the MHPA Land Use Adjacency Guidelines is not included in this report.

Physical Characteristics

The project site is situated within an urban canyon supporting native and non-native vegetation. I-8 traverses the southern slope of the canyon. The portion of the project site occurring south of I-8 is located within the SDSU campus. Alvarado Canyon Creek flows into the southeastern portion of Alvarado Canyon via a culvert and flows along the eastern and northern portions of the canyon. In addition, three unnamed drainages occur within Alvarado Canyon. Alvarado Canyon Creek and the unnamed drainages converge in the northern portions of the canyon and flow into a concrete lined channel that transports surface flows downstream towards Mission Valley and the San Diego River. The project site is relatively flat along the east-west trending portion of Alvarado Canyon Creek and moderately sloping and increasing in elevation towards the south. A few unpaved access roads and disturbed areas occur within the canyon, many of which were created during emergency repairs conducted in October 2002 (City of San Diego 2004).

Elevation within the project site ranges from approximately 140 feet (ft.) above mean sea level (AMSL) at the bottom of the canyon to 300 ft. AMSL in the southern portion of the project site. Soils within the study area include Olivenhain-Urban land complex (2-9 and 9-30 percent slopes) and Riverwash (USDA 1973). Surrounding land uses include SDSU to the south, Smoke Tree Adobe Falls Subdivision to the north and northwest and private homes to the north, and east.

Project Assumptions

- All impacts related to the sewer abandonment are temporary.
- Temporary impacts resulting from abandonment of individual manholes will occur within a 5-foot radius centered on each manhole, with the exception of MH 87. The work area for MH 87 will be reduced slightly to the north to avoid impacts to mule-fat scrub.
- Access (vehicular and pedestrian) to manholes 85, 86, 87 and 88 would require the creation of a 10-foot-wide temporary access road.
- Vehicular access to or near all other manholes would be via existing access roads and disturbed areas and no additional impacts would be required for access. Where existing dirt roads do not currently provide access all the way to the manholes (e.g., MHs 84, 89, 90, 91, 92, and 94), the

surrounding vegetation is open enough to allow for pedestrian access to conduct the work. Therefore, additional impacts related to access would not occur.

- South of the Adobe Falls Road cul-de-sac, the existing dirt access road crosses Alvarado Canyon Creek (Figure 3). This portion of the access road is mapped as "Disturbed Riparian Woodland" due to the canopy of trees encroaching over this portion of the road; however, vehicular access along this portion of the road would not result in impacts to vegetated areas. Steel plates may also be used in this crossing of Alvarado Canyon Creek to avoid impacts to jurisdictional waters (Figure 4).
- Steel plates would be used to allow for vehicular access across the unnamed drainage in the southwestern portion of Alvarado Canyon (just east of MHs 87 and 88) thereby avoiding impacts to vegetation within the drainage (Figure 4).

Methods and Survey Limitations

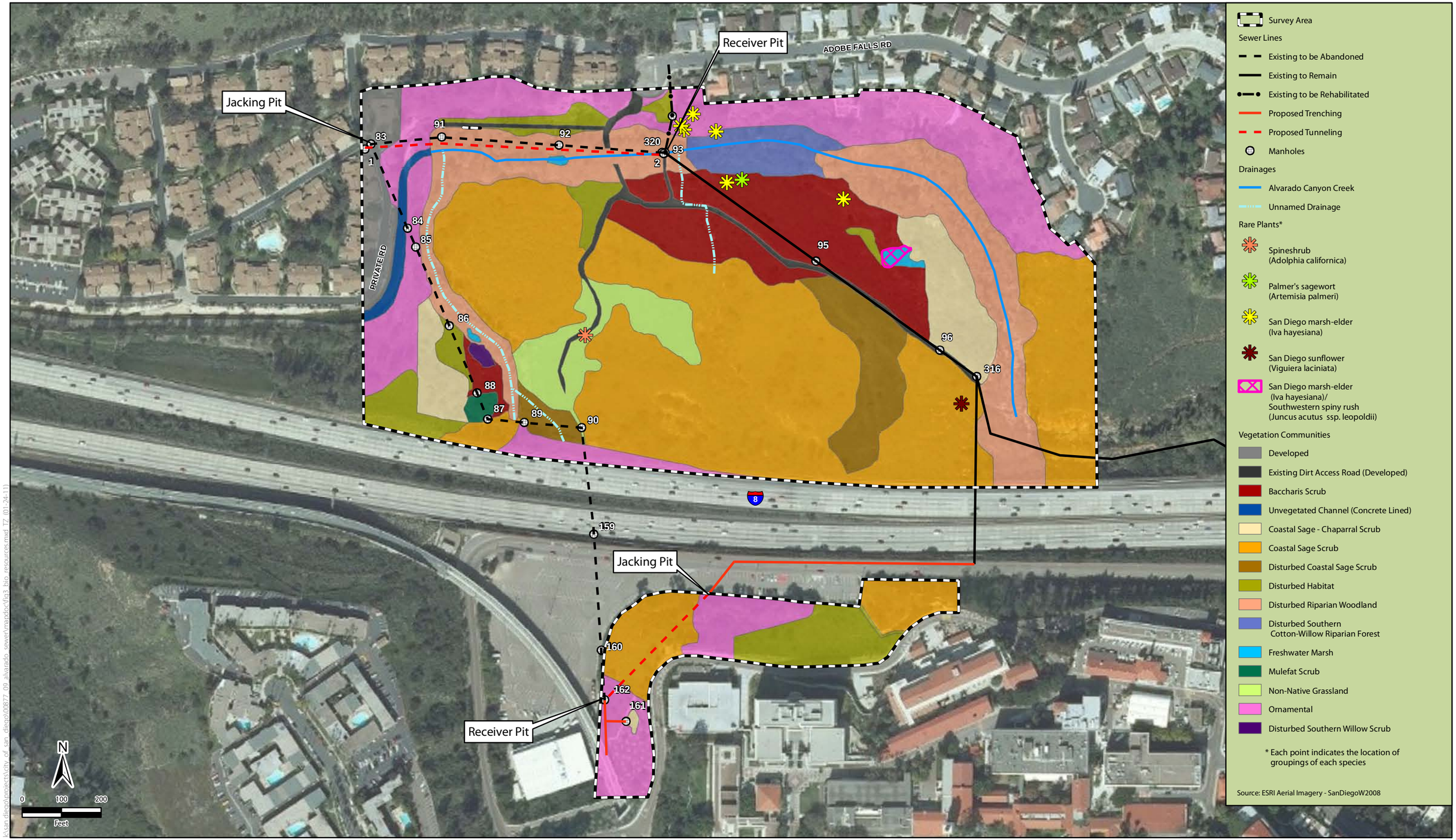
ICF biologists M. Alfaro and E. Eidson conducted a general biological survey of the site on December 7, 2009 between the hours of 8:30 a.m. and 01:45 p.m. Weather conditions experienced during the survey consisted of air temperature of 65 degrees Fahrenheit, precipitation ranging from light drizzle to steady rain, and 2-10 mile per hour winds. The study area included the proposed project site and undeveloped areas surrounding the project site. The biological survey was conducted on foot and included all accessible portions of the study area. Due to the depth and quick flow of water within Alvarado Canyon Creek and drainage, access to some portions of the study area was limited. During the survey, vegetation communities occurring within the study area were mapped onto an aerial photograph and all plant and wildlife species detected were recorded. Plant species were identified in the field or later in the laboratory with the aid of voucher specimens. Several recently germinated grass species occurring on site could not be identified to species or genus due to the absence of identifiable features. Wildlife species were identified in the field by direct visual observation with the aid of binoculars or indirectly by detection of calls, tracks, burrows, or scat. A wetland delineation was conducted by ICF biologist D. Teel on December 2, 2009.

Some sensitive resources (e.g. nocturnal species) may not have been detected due to the time of day that the survey was conducted. Also, due to rainy weather, conditions for detecting wildlife species were not optimal. Annual plant species also would not have been detected as the survey was conducted during a time of year when annual plants would not be present above ground. Prior to conducting the general field survey, a 9-quad search of the California Natural Diversity Database (CNDDB; La Mesa, National City, Point Loma, San Vicente Reservoir, El Cajon, Jamul Mountains, Poway, Del Mar, and La Jolla Quads) was conducted to identify sensitive species historically known to occur in the general vicinity of the project site.

Results

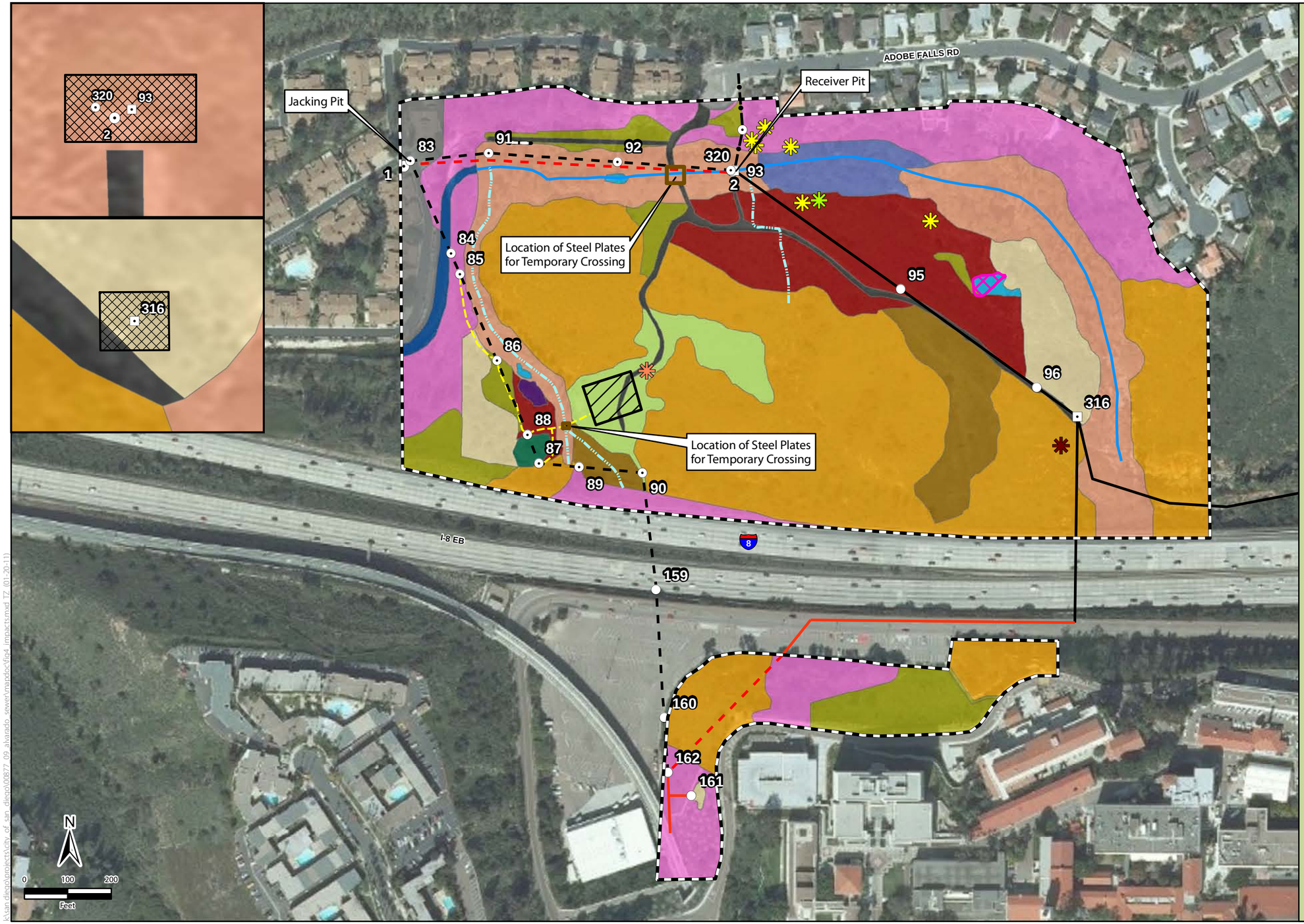
Botany

Vegetation communities mapped within the study area include: Diegan coastal sage scrub (Tier II), disturbed Diegan coastal sage scrub (Tier II), coastal sage-chaparral scrub (Tier II), baccharis scrub (Tier II), disturbed southern cottonwood-willow riparian forest, disturbed southern willow scrub,



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Figure 3
Biological Resources
Alvarado Trunk Sewer Phase III



Survey Area
Proposed Temporary Access Road (10' width)

Sewer Lines
- Existing to be Abandoned
- Existing to Remain
- Existing to be Rehabilitated
- Proposed Trenching
- Proposed Tunneling

Manholes
- Manholes to be Impacted (5' radius)
- Manholes to be Impacted (Various areas; see insets)
- Manholes Not Impacted
- Staging Area - Proposed

Vegetation Communities
- Developed
- Existing Dirt Access Road (Developed)
- Baccharis Scrub
- Unvegetated Channel (Concrete Lined)
- Coastal Sage - Chaparral Scrub
- Coastal Sage Scrub
- Disturbed Coastal Sage Scrub
- Disturbed Habitat
- Disturbed Riparian Woodland
- Disturbed Southern Cotton-Willow Riparian Forest
- Freshwater Marsh
- Mulefat Scrub
- Non-Native Grassland
- Ornamental
- Disturbed Southern Willow Scrub

Drainages
- Alvarado Canyon Creek
- Unnamed Drainage

Rare Plants*
- Spineshrub (Adolphia californica)
- Palmer's sagewort (Artemisia palmeri)
- San Diego marsh-elder (Iva hayesiana)
- San Diego sunflower (Viguiera laciniata)
- San Diego marsh-elder (Iva hayesiana)/ Southwestern spiny rush (Juncus acutus ssp. leopoldii)

* Each point indicates the location of groupings of each species

Source: ESRI Aerial Imagery - SanDiegoW2008

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Figure 4
Proposed Impacts
Alvarado Trunk Sewer Phase III

mule-fat scrub, coastal freshwater marsh, disturbed riparian woodland, non-native grassland (Tier III B), disturbed habitat (Tier IV), ornamental areas (Tier IV), and developed areas, including unpaved access roads (Figure 3). A complete list of plant species observed within the survey area is provided in Attachment A.

Diegan coastal sage scrub

Diegan coastal sage scrub (CSS), including disturbed CSS, is a Tier II vegetation community typically characterized by low, woody subshrubs that grow up to one meter in height (Holland 1986). The abundance of non-native species and the sparse distribution of typically dominant shrub species are the characteristics that distinguish disturbed CSS from undisturbed CSS. Dominant species within CSS on site included black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), lemonadeberry (*Rhus integrifolia*), and coastal sagebrush (*Artemisia californica*). San Diego sunflower (*Viguiera laciniata*) was also detected in this vegetation community. Non-native species detected within disturbed CSS included black mustard (*Brassica nigra*), thistle (*Circium* sp.), and non-native grasses.

On-site, coastal sage scrub is predominated by native species and provides suitable habitat for several wildlife species. Furthermore, it supports San Diego sunflower (CNPS List 4). Diegan coastal sage scrub is considered to be of moderate ecological value. Disturbed coastal sage scrub supports an abundance of non-native species but is contiguous to undisturbed coastal sage scrub and is also considered to be of moderate ecological value.

Coastal sage-chaparral scrub

Coastal sage-chaparral scrub, a Tier II vegetation community, consists of a mixture of herbaceous, suffrutescent, and shrubby species that forms a community with features of both coastal sage scrub and chaparral. It appears to be a post-fire successional community. Dominant species within the site included lemonadeberry, laurel sumac (*Malosma laurina*), chaparral broom (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), and toyon (*Heteromeles arbutifolia*).

On-site, this vegetation community is predominated by native species and provides suitable habitat for several wildlife species. Coastal sage-chaparral scrub is considered to be of moderate ecological value.

Baccharis scrub

Baccharis scrub, a Tier II vegetation community, is considered to be a disturbed phase of coastal sage scrub dominated by broom baccharis (*Baccharis sarothroides*). The structure of this vegetation community is similar to that of coastal sage scrub. Dominant plant species within baccharis scrub included broom baccharis, black sage, wild teasel (*Dipsacus fullonum*), and thistle. Palmer's sagewort (*Artemisia palmeri*) and San Diego marsh-elder (*Iva hayesiana*) were also detected in this vegetation community. Portions of baccharis scrub occurring near Alvarado Canyon Creek in the northern portion of the site also supported scattered mule-fat (*Baccharis salicifolia*) individuals.

On-site, this vegetation community is predominated by native species and provides suitable habitat for several wildlife species. Furthermore, this habitat supports Palmer's sagewort (CNPS List 4) and San Diego marsh elder (CNPS List 2). Baccharis scrub is considered to be of moderate ecological value.

Disturbed southern cottonwood-willow riparian forest

Disturbed southern cottonwood-willow riparian forest is a tall, open, broad-leafed winter-deciduous riparian forest typically occurring along creeks and rivers. The abundance of non-native species characterizes this vegetation community as "disturbed". Dominant plant species detected within this vegetation community included arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), Mexican fan palm (*Washingtonia robusta*), Canary Island date palm (*Phoenix canariensis*), western cottonwood (*Populus fremontii* var. *fremontii*), mule-fat, sycamore (*Populus racemosa*), and giant reed (*Arundo donax*). Southern cottonwood-willow riparian forest occurs in association with a portion of Alvarado Canyon Creek.

On-site, this vegetation community occurs adjacent to disturbed wetland habitat and is comprised of native and non-native species. It provides potentially suitable habitat for riparian bird species, including the federally and state endangered least Bell's vireo. Furthermore, Palmer's sagewort (CNPS List 4) and San Diego marsh-elder (CNPS List 2) occur in close proximity to this habitat. Disturbed southern cottonwood-willow riparian forest is considered to be of moderate ecological value.

Disturbed southern willow scrub

Disturbed southern willow scrub is described as dense, broad-leafed, winter-deciduous riparian thickets dominated by several *Salix* species, mule-fat and occasionally by western cottonwood. It is typically found on loose, sandy, or fine gravelly alluvium deposited near stream channels. This vegetation community is considered "disturbed" due to its small size and the lack of connectivity to other native wetland habitats. Dominant plant species observed within the study area included arroyo willow and red willow.

On-site this vegetation community consists of a small patch of young willow individuals occurring adjacent to disturbed wetland habitat. This habitat may provide suitable nesting habitat for bird species. The disturbed southern willow scrub onsite is considered to be of low ecological value.

Mule-fat scrub

Mule-fat scrub is described as a depauperate, tall, herbaceous riparian scrub strongly dominated by mule-fat. This early seral community is maintained by frequent flooding. It is usually found in intermittent stream channels with fairly coarse substrate and moderate depth to the water table. On site, dominant plant species included mule-fat, yerba mansa (*Anemopsis californica*), and broom baccharis.

On-site this vegetation community consists of a small patch of mule-fat individuals surrounded by upland habitat. This habitat may provide suitable nesting habitat for bird species. The mule-fat scrub onsite is considered to be of low ecological value.

Coastal freshwater marsh

Coastal freshwater marsh is dominated by perennials and emergent monocots up to 4-5 m tall, often forming completely closed canopies. Freshwater marsh habitats are found in areas permanently flooded by fresh water, lacking significant current from water. Prolonged saturation in these types of habitats allows for the accumulation of deep, peaty soils. Dominant plants observed on site

included San Diego marsh-elder, broad-leaf cattail (*Typha latifolia*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), wild celery (*Apium graveolens*), and prickly ox-tongue (*Picris echioides*).

On-site, this vegetation community consists of three relatively small areas comprised of mostly native species, including southwestern spiny rush (CNPS List 4) and San Diego marsh-elder (CNPS List 2). Coastal freshwater marsh is considered to be of low to moderate ecological value.

Disturbed riparian woodland

Disturbed riparian woodland describes a riparian woodland that is dominated by non-native tree species. Dominant species occurring in disturbed riparian woodland include Mexican fan palm, giant reed, arroyo willow, red willow, selloa pampas grass (*Cortaderia selloana*), Canary Island date palm, Brazilian pepper tree (*Schinus terebinthifolius*), ash (*Fraxinus* sp.), and Goodding's black willow (*Salix gooddingii*).

On-site, this vegetation community is predominated by non-native tree species and a few willow individuals and supports limited habitat for wildlife species. Disturbed riparian woodland is considered to be of low ecological value.

Non-native grassland

Non-native grassland, a Tier III B vegetation community, consists of a dense to sparse cover of annual grasses with flowering culms measuring approximately one meter high, which may include numerous native wildflowers, particularly in years of high rainfall (Holland 1986). These annuals germinate with the onset of the rainy season and set seeds in the late spring or summer. Non-native grassland on site is dominated by non-native grasses that could not be identified to species or genus due to the absence of identifiable features. Forbs detected within the non-native grassland on site included filaree (*Erodium* sp.), doveweed (*Croton setigerus*), black mustard, and thistle. Spineshrub (*Adolphia californica*) was also detected in this vegetation community.

On site, this vegetation community provides suitable raptor foraging habitat and supports California adolphia (CNPS List 2). Non-native grassland is considered to be of moderate ecological value.

Disturbed habitat

Disturbed habitat (Tier IV) describes areas on site that are subject to high levels of disturbance and are consequently dominated by non-native forbs. Disturbed habitat is dominated by thistle and black mustard. These areas onsite are considered to be of low ecological value.

Ornamental areas

Ornamental areas (Tier IV) describe landscaped areas associated with the I-8 right-of-way and private residences. Dominant plant species in ornamental areas on site included golden wattle (*Acacia pycnantha*), eucalyptus (*Eucalyptus* sp.), Mexican fan palm, Canary Island date palm, Peruvian pepper tree (*Schinus molle*), and pine (*Pinus* sp.). San Diego marsh-elder was also detected in this vegetation community. These areas, predominated by ornamental, non-native species which may provide suitable nesting habitat for bird species, are considered to be of low ecological value.

Developed areas

Developed areas on site consist of private homes, paved roads, I-8, and infrastructure and parking lots associated with SDSU. Unpaved access roads also occur within the canyon. Developed areas are not considered to have ecological value.

Wildlife

Several bird species were observed in the study area during the biological survey including: American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western scrub-jay (*Aphelocoma californica*), wrentit (*Chamaea fasciata*), yellow-rumped warbler (*Dendroica coronata*), California towhee (*Pipilo crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis goldfinch*).

Indicators, such as tracks and scat, were used to determine the presence of Audubon's cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), and woodrat (*Neotoma* sp.). A complete list of wildlife species detected within the study area is provided as Attachment B.

Sensitive Species and Habitats

Plant and animal species are considered sensitive if they have been listed as such by federal or state resource agencies or by special interest groups such as the California Native Plant Society (CNPS). The California Department of Fish and Game (CDFG) publishes comprehensive lists for sensitive plants and animals through the CNDDB. The CDFG also publishes the CNDDB RareFind, a computerized inventory of information on the location and condition of California's rare, threatened, endangered and sensitive plants, animals and natural communities.

Sensitive Plants

Prior to performing the field surveys, a CNDDB search was conducted to identify sensitive plant species historically reported as occurring in the project vicinity and surrounding areas. The CNDDB reported 19 federally- or state-listed plant species including: San Diego thornmint (*Acanthomintha ilicifolia*), San Diego ambrosia (*Ambrosia pumila*), Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), coastal dune milkvetch (*Astragalus tener* var. *titi*), Encinitas baccharis (*Baccharis vanessae*), Nevin's barberry (*Berberis nevinii*), Dunn's mariposa lily (*Calochortus dunnii*), Orcutt's spineflower (*Chorizanthe orcuttiana*), salt-marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*), Otay tarplant (*Deinandra conjugens*), short-leaved dudleya (*Dudleya brevifolia*), San Diego button-celery (*Eryngium aristulatum* var. *parishii*), Mexican flannelbush (*Fremontodendron mexicanum*), willowy monardella (*Monardella viminea*), spreading navarretia (*Navarretia fossalis*), California Orcutt's grass (*Orcuttia californica*), Gander's ragwort (*Packera ganderi*), San Diego mesa mint (*Pogogyne abramsii*), and Otay mesa mint (*Pogogyne nudiuscula*) (CNDDB 2009). In addition, the CNPS reported several non-listed sensitive species potentially occurring within the project vicinity. All plant species reported by the CNDDB and CNPS as historically occurring in the vicinity of the site are discussed in Attachment C.

Five sensitive plant species were detected in the study area (Figure 3), including spineshrub, Palmer's sagewort, San Diego marsh-elder, southwestern spiny rush, and San Diego sunflower. These five sensitive plant species are discussed below.

Spineshrub (Adolphia californica)

CNPS List 2.1

Spineshrub is often found intermixed in coastal sage scrub but also occurs in chaparral and grasslands typically at elevations ranging from 145 to 2, 400 ft. AMSL. Several individuals of spineshrub were detected in the study area within the non-native grassland that is in close proximity to the Diegan coastal sage scrub. Plants afforded the list 2 designation are considered to be rare, threatened, or endangered in California, but more common elsewhere.

Palmer's Sagewort (*Artemisia palmeri*)

CNPS: List 4.2

Palmer's sagewort is a perennial shrub that typically occurs in chaparral, coastal sage scrub and riparian habitats at elevations below 2,000 ft. Surveys detected one population of this species in the baccharis scrub located adjacent to the disturbed southern cottonwood-willow riparian forest in the study area. Plants afforded the list 4 designation are considered to be of limited distribution or infrequent in California but are not considered "rare" in the state.

San Diego Marsh-Elder (*Iva hayesiana*)

CNPS: List 2.2

San Diego marsh-elder is a perennial wetland shrub that typically occurs in creeks or intermittent streambed habitats. Appropriate habitat for this species consists of low growing shrubs with an open canopy with sandy alluvial embankments. Survey results detected several populations of San Diego marsh-elder in the baccharis scrub and ornamental areas adjacent to the southern cottonwood-willow riparian forest and disturbed riparian woodland within the study area, and also in the coastal freshwater marsh. Plants afforded the list 2 designation are considered to be rare, threatened, or endangered in California, but more common elsewhere.

Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*)

CNPS: List 4.2

Southwestern spiny rush is a perennial shrub that is typically found in alkaline meadows, coastal salt marshes, and riparian marshes below 3,000 ft. Several individuals of southwestern spiny rush were observed in the coastal freshwater marsh in the study area. Plants afforded the list 4 designation are considered to be of limited distribution or infrequent in California but are not considered "rare" in the state.

San Diego Sunflower (*Viguiera laciniata*)

CNPS List 4.2

San Diego sunflower is associated with arid Diegan coastal sage scrub at a variety of elevations and soil types. In San Diego County, its distribution is primarily south of Highway 78 to the international border with Mexico. Approximately four individuals of San Diego sunflower were detected in the eastern portion of the site in the Diegan coastal sage scrub located in the study area. Plants afforded

the list 4 designation are considered to be of limited distribution or infrequent in California but are not considered "rare" in the state.

Sensitive Wildlife

Prior to the field surveys, a search was conducted of the CNDDB to identify sensitive wildlife species historically reported as occurring in the project vicinity and surrounding areas. The search revealed 15 species of federally or state listed species including: arroyo toad (*Anaxyrus californicus*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), western snowy plover (*Charadrius alexandrinus nivosus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), Quino checkerspot butterfly (*Euphydryas editha quino*), California black rail (*Laterallus jamaicensis coturniculus*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), California brown pelican (*Pelecanus occidentalis californicus*), coastal California gnatcatcher (*Polioptila californica californica*), light-footed clapper rail (*Rallus longirostris levipes*), California least tern (*Sterna antillarum browni*), least Bell's vireo (*Vireo bellii pusillus*), and pacific pocket mouse (*Perognathus longimembris pacificus*) (CNDDB 2009). No sensitive species were observed in the survey area during any of the biological surveys. Sensitive species reported by the CNDDB with moderate to high potential for occurrence on site are discussed below. In addition, the CNDDB also reported several state species of special concern as historically occurring in the vicinity of the project site. All species reported by the CNDDB are discussed in Attachment D.

Coastal California gnatcatcher (*Polioptila californica californica*)

Federal Status: Threatened
State Status: Species of Concern

The coastal California gnatcatcher is a small gray bird with a black tail, and a very distinctive "mew" call, similar to the voice of a kitten. During the breeding season, male gnatcatchers develop a black cap that distinguishes them from the females. This resident species occurs on the coastal slopes of southern California from the Los Angeles basin south to Baja California, Mexico (Atwood 1980) and is strongly associated with coastal sage scrub vegetation. Much of the coastal sage scrub in San Diego County has been fragmented by development and agricultural activities, especially along the coast. Habitat fragmentation results in poor long-term survival of native bird species (Soule et al. 1988).

Coastal California gnatcatcher was not detected during the biological survey; however, moderate potential remains for the gnatcatcher to occur in the Diegan coastal sage scrub occurring within the study area. According to a record in the CNDDB, this species was detected within the study area in 2002.

Least Bell's vireo (*Vireo bellii pusillus*)

Federal Status: Endangered
State Status: Endangered

The least Bell's vireo is a small, sub-tropical, migratory songbird that is dependent upon riparian vegetation for breeding. The California distribution of least Bell's vireos includes San Diego, Santa Barbara, and Riverside counties. This species inhabits riparian habitats dominated by willow and mule-fat.

The disturbed southern cottonwood-willow riparian forest and disturbed southern willow scrub occurring within the study area provide potentially suitable habitat for this species. The biological survey was conducted during a time of year when least Bell's vireo would not be present in San Diego County.

Sensitive Habitats

A sensitive habitat is one that is considered rare within the region, supports sensitive plants or animals, or provides connectivity between sensitive habitats. Under the City's Biology Guidelines (City of San Diego 1997c), wetlands, Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, coastal sage-chaparral scrub, baccharis scrub, and non-native grassland are considered sensitive habitats that require various levels of mitigation when impacted.

In southern California, wetland habitats are limited, but provide important functions as wildlife habitat and for water quality. Southern cottonwood-willow riparian forest, disturbed southern willow scrub, coastal freshwater marsh, mule-fat scrub, and disturbed riparian woodland are considered sensitive wetland habitats.

Diegan coastal sage scrub is a community that is known to support the federally threatened coastal California gnatcatcher. Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, coastal sage-chaparral scrub, and baccharis scrub are considered to be uncommon upland (Tier II) habitats by the City of San Diego.

Non-native grassland is also considered to be a sensitive habitat by the City of San Diego. Non-native grassland provides habitat for numerous wildlife species including foraging habitat for raptors. This habitat is considered a common upland (Tier III B) community by the City of San Diego.

Nesting Birds

Trees and shrubs occurring along the entire project site (including areas situated within the SDSU campus) provide suitable nesting habitat for migratory birds and raptors protected under the Federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, which prohibit the take or destruction of migratory birds/raptors, their nests, and/or eggs.

Jurisdictional Wetlands and Waters

Wetland habitats occur within the study area in association with or adjacent to Alvarado Canyon Creek and the unnamed drainages. Wetlands in the City of San Diego are subject to jurisdiction by the CDFG pursuant to Section 1600 of the California Fish and Game Code; and the U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA) pursuant to Section 404 of the Clean Water Act. In California, the Regional Water Quality Control Board assumes the responsibility of the U.S. EPA through issuance of a Section 401 Water Quality Certification. Within the impact area, mule-fat scrub and portions of disturbed riparian woodland would be considered wetland habitats by CDFG. A complete discussion of jurisdictional areas along the project site is provided in the wetland delineation report (Attachment E).

All areas of disturbed southern cottonwood-willow riparian forest, disturbed southern willow scrub, mule-fat scrub, coastal freshwater marsh, and disturbed riparian woodland meet the City's

definition of a wetland as they support naturally occurring wetland vegetation and/or exhibit wetland hydrology.

Impacts

According to the Environmentally Sensitive Lands Regulations in the City of San Diego's Land Development Code Biology Guidelines, impacts to wetland habitat must be avoided and unavoidable impacts should be minimized to the maximum extent possible (City of San Diego 1997c). Typically, impacts to wetlands are considered unavoidable when the project involves essential public facilities (essential roads, sewer lines, water lines, etc.) where no feasible alternative exists that would reduce impacts to wetlands.

The work corridor has been designed to avoid impacts to sensitive habitats to the maximum extent feasible while still allowing for the completion of this project. In addition, as the project does not propose the permanent placement of any structures within wetlands, project impacts are considered temporary and would result in the removal of existing structures (e.g., above-ground portions of the manholes) thus allowing for natural recruitment of vegetation within these areas. The new section of sewer between MHs 83 and 93 will be installed using tunneling to avoid and minimize impacts to sensitive habitats and jurisdictional waters.

For manhole abandonment, only the above ground portion of the manhole cones would be removed, thereby avoiding trenching and minimizing impacts to areas surrounding the manholes. As several of the manholes to be abandoned or redesign are located within sensitive habitats (including wetlands), complete avoidance of sensitive habitats (including wetlands) is not feasible. Access to the manholes and abandonment/redesign on manholes would both require impacts to sensitive habitats. The only alternative that would avoid all impacts to wetland habitats would be the "No Project" alternative, which is not considered feasible.

Habitats

Impacts to vegetation communities resulting from the proposed project within Alvarado Canyon would consist of a total of 0.401 acre, including 0.022 acre of wetland habitats, 0.302 acre of upland habitats, and 0.077 acre of other upland habitats (Table 1, Figure 4).

Impacts to Wetland Habitats

Disturbed southern cottonwood-willow riparian forest

A total of 0.91 acre of disturbed southern cottonwood-willow riparian forest, a wetland habitat of moderate ecological value, exists within the survey area. Disturbed southern cottonwood-willow riparian forest would not be impacted by the proposed project.

Disturbed southern willow scrub

A total of 0.06 acre of disturbed southern willow scrub, a wetland habitat of low ecological value, exists within the survey area. Disturbed southern willow scrub would not be impacted by the proposed project.

Mule-fat scrub

A total of 0.11 acre of mule-fat scrub, a wetland habitat of low ecological value, exists within the survey area. Mule-fat scrub would not be impacted by the proposed project.

Coastal Freshwater marsh

A total of 0.12 acre of coastal freshwater marsh, a wetland habitat of moderate ecological value, exists within the survey area. Coastal freshwater marsh would not be impacted by the proposed project.

Disturbed riparian woodland

A total of 5.73 acres of disturbed riparian woodland, a wetland habitat of low ecological value, exist within the survey area. A total of 0.022 acre of disturbed riparian woodland would be impacted by the proposed project.

Impacts to Sensitive Upland Habitats

Diegan coastal sage scrub

A total of 16.02 acres of Diegan coastal sage scrub (Tier II habitat of high ecological value) and 1.66 acres of disturbed Diegan coastal sage scrub (Tier II habitat of moderate ecological value) exist within the survey area. A total of 0.005 acre of Diegan coastal sage scrub and 0.002 acre of disturbed Diegan coastal sage scrub would be impacted by the proposed project.

Coastal sage-chaparral scrub

A total of 1.79 acres of coastal sage-chaparral scrub, a Tier II habitat of moderate ecological value, exist within the survey area. A total of 0.020 acre of coastal sage-chaparral scrub would be impacted by the proposed project.

Baccharis scrub

A total of 3.89 acres of baccharis scrub, a Tier II habitat of moderate ecological value, exist within the survey area. A total of 0.045 acre of baccharis scrub would be impacted by the proposed project.

Table 1. Biological Impacts and Mitigation Requirements

Vegetation Community	Survey Area (acres)	Impacts (acres)			Mitigation (acres)	
		Manhole Abandonment/Replacement/ Jack-and-Bore	Access road/ Staging Area	Subtotal	Mitigation Ratio (inside MHPA)	Mitigation Requirement (inside MHPA)
Wetlands						
Disturbed southern cottonwood-willow riparian forest	0.91	0.0	0.0	0.0	3:1	0.0
Disturbed southern willow scrub	0.06	0.0	0.0	0.0	2:1	0.0
Freshwater marsh	0.12	0.0	0.0	0.0	2:1	0.0
Mule-fat scrub	0.11	0.0	0.0	0.0	2:1	0.0
Disturbed riparian woodland	5.73	0.016	0.006	0.022	*2:1	0.044
Subtotal	**6.93**	**0.016**	**0.006**	**0.022**	**--**	**0.044**
Sensitive Uplands						
Coastal Sage Scrub (Tier II)	16.02	0.0003	0.005	0.005	1:1	0.005
Disturbed Coastal Sage Scrub (Tier II)	1.66	0.0003	0.002	0.002	1:1	0.002
Coastal sage-chaparral scrub (Tier II)	1.79	0.005	0.015	0.020	1:1	0.020
Baccharis scrub (Tier II)	3.89	0.002	0.043	0.045	1:1	0.045
Non-native grassland (Tier IIIB)	1.42	0.0015	0.228	0.230	0.5:1	0.115
Subtotal	**24.78**	**0.009**	**0.293**	**0.302**	**--**	**0.187**
Other Uplands						
Disturbed habitat	2.44	0.002	0.039	0.041	N/A	N/A
Ornamental areas	7.53	0.006	0.030	**0.036	N/A	N/A
Subtotal	**9.97**	**0.008**	**0.069**	**0.077**	**N/A**	**N/A**
TOTALS	**41.68**	**0.033**	**0.368**	**0.401**	**--**	**0.231**

* CDFG could regulate impacts to these riparian vegetation communities and could require additional mitigation. Final mitigation requirements for impacts to jurisdictional wetlands/waters will be outlined in the project-specific permits obtained from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and CDFG.

** Impacts to 0.046 acre of ornamental areas will also occur south of Canyon Crest Drive.

Non-native grassland

A total of 1.42 acres of non-native grassland, a Tier III B habitat of moderate ecological value, exist within the survey area. A total of 0.230 acre of non-native grassland would be impacted by the proposed project.

Impacts to Other Upland Habitats

Disturbed habitat

A total of 2.44 acres of disturbed habitat, a Tier IV habitat of low ecological value, exist within the survey area. A total of 0.041 acre of disturbed habitat would be impacted by the proposed project.

Ornamental areas

A total of 7.53 acres of ornamental areas, a Tier IV habitat of low ecological value, exist within the survey area. A total of 0.036 acre of ornamental areas would be impacted by the proposed project.

Sensitive Species

Sensitive Plants

Five sensitive plant species were detected within the survey area during the biological survey including: spineshrub, Palmer's sagewort, San Diego marsh-elder, southwestern spiny rush, and San Diego sunflower. Due to the proximity (approximately 14 ft.) of San Diego marsh-elder to MH 94, individual plants would be flagged prior to manhole abandonment in order to avoid impacts to this species. It is anticipated that the proposed project would avoid all impacts to sensitive plant species.

Sensitive Wildlife

The least Bell's vireo, a covered species under the City's MSCP, is considered to have moderate potential to occur within the study area. The proposed project would not result in direct impacts to suitable habitat for the least Bell's vireo (i.e., disturbed southern cottonwood-willow riparian scrub and disturbed southern willow scrub). However, project activities have been proposed adjacent to areas supporting potentially suitable habitat.

The coastal California gnatcatcher, a covered species under the City's MSCP, is also considered to have moderate potential to occur within the study area. However, because the project site is located outside of the MHPA there are no restrictions on clearing of vegetation during the breeding season for this species (City of San Diego 1997c).

In addition, the project site provides suitable nesting habitat for bird species protected by the federal MBTA and the California Fish and Game Code. Loss of an active nest is considered a violation of the MBTA and the California Fish and Game Code. Raptor and migratory bird nests are considered sensitive and, if established on site, could be impacted by project activities (e.g. increased noise levels). The breeding season varies somewhat between bird species, and although the peak nesting season is March through August there is potential for raptors and other early nesting species such as hummingbirds to initiate nests as early as January.

Mitigation Recommendations

On-site mitigation is not considered feasible as the project is located within SDSU property and may be developed in the future.

In order to avoid impacts to sensitive biological resources beyond those discussed in this report, orange snow fencing would be installed around individual manholes and would be used to clearly delineated access roads prior to project activities. In addition, individuals of San Diego marsh-elder located in proximity to MH 94 would be flagged prior to project activities. Steel plates would be used to span Alvarado Canyon Creek and the unnamed drainage to minimize impacts and allow for vehicular access to work areas south of Alvarado Canyon Creek and west of the unnamed drainage channel along the western boundary of the survey area.

Specific measures to mitigate impacts to sensitive biological resources resulting from the proposed project are discussed below.

Habitats

Mitigation for impacts to upland habitats resulting from the proposed project could be accomplished by paying into the City's Habitat Acquisition Fund or off-site preservation of habitats; the final decision on which option to utilize to fulfill the required mitigation will be made in consultation with the City of San Diego Development Services Department.

In order to avoid a net loss of wetland functions and values, impacts to wetlands require mitigation in the form of creation at a minimum ratio of 1:1. The remaining mitigation requirements can be fulfilled through enhancement of existing wetlands. Mitigation requirements for wetlands are based on Table 2 of the City of San Diego's Land Development Code Biology Guidelines (City of San Diego 2009). Mitigation for the project's impacts to wetlands is proposed to be fulfilled through the use of Public Utilities grouped mitigation sites [such as Camino del Rio North for wetland creation credits (a minimum ratio of 1:1) and/or Rancho Mission Canyon for wetland enhancement credits].

In addition, all temporary impact areas (e.g., areas impacted as a result of the abandonment of existing manholes, manhole replacement, jack-and-bore work areas, staging areas, and the temporary access road) would be restored upon completion of the proposed work for erosion control purposes (Attachment F. Revegetation Plan). These restored areas would not count towards mitigation requirements and would include 0.022 acre of wetland habitats, 0.343 acre of upland habitats, and 0.036 acre of ornamental areas. Temporary impacts to 0.046 acre of ornamental areas at manholes 161 and 162, which are not discussed in this report, would also be restored for erosion control. Thus, the total acreage of ornamental areas to be restored is 0.082 acre (0.036 + 0.046). During the 120-day Plant Establishment Period (PEP), the revegetation contractor will be responsible for the maintenance of the revegetation areas for a minimum period of 120-days. Maintenance activities will include: weed control, erosion control, trash and debris removal, replacement planting and reseeding, site protection and signage, pest management, and vandalism. Non-permanently irrigated areas are to be maintained for a period no less than 25 months. Prior to the final approval, the City Manager may require corrective action including but not limited to, replanting and the repair of any soil erosion or slope slippage (City of San Diego 1997a).

Wetland Habitats

Disturbed Riparian Woodland

Impacts to 0.022 acre of disturbed riparian woodland would require 0.042 acre of mitigation, which could be accomplished using 0.022 acre of wetland creation credits at Camino del Rio North and 0.022 acre of wetland enhancement credits at Rancho Mission Canyon.

Sensitive Uplands

Impacts to a total of 0.302 acre of sensitive uplands would require 0.187 acre of mitigation, which could be accomplished through payment into the City's Habitat Acquisition Fund (for 0.187 acre) or off-site preservation of 0.072 acre of Tier II habitats and 0.115 acre of Tier IIIB habitats.

Diegan coastal sage scrub

Impacts to 0.005 acre of Diegan coastal sage scrub and 0.002 acre of disturbed Diegan coastal sage scrub, both Tier II habitats, would require a total of 0.007 acre of mitigation within the MHPA.

Coastal sage-chaparral scrub

Impacts to 0.020 acre of coastal sage-chaparral scrub, a Tier II habitat, would require 0.020 acre of mitigation within an MHPA.

Baccharis scrub

Impacts to 0.045 acre of baccharis scrub, a Tier II habitat, would require 0.045 acre of mitigation within the MHPA.

Non-native grassland

Impacts to 0.230 acre of non-native grassland, a Tier III B habitat, would require 0.115 acre of mitigation within the MHPA.

Other Upland Habitats

Impacts to Tier IV habitats (disturbed habitat, ornamental areas, and developed areas) are not considered significant in accordance with the City of San Diego Biology Guidelines and Environmentally Sensitive Lands Regulation. Therefore, no mitigation is required. However, ornamental vegetation within the project impact areas would be replaced in-kind and maintained for a period of no less than 90 days (City of San Diego 1997a).

Sensitive Species

Wildlife Species

Potential impacts to the federally and state endangered least Bell's vireo can be avoided by completing all project activities occurring in the vicinity of potential habitat (including driving of vehicles) during the period from September 16 through March 14 (i.e., outside the breeding season). If project activities are proposed to occur during the breeding season for this species (March 15 through September 25), protocol surveys by a qualified biologist would be required to determine

presence/absence of this species on site. Established survey protocol for this species consists of a minimum of eight surveys at least 10 days apart between April 10 and July 31. If this species is not identified within the project site during the protocol surveys, no additional measures would be required. However, if this species is determined to be present within the project area, no clearing or grubbing of occupied least Bell's vireo habitat would be allowed between March 15 and September 15. Furthermore, no project activities would be allowed within any portion of the site where activities would result in noise levels exceeding 60 dB (decibels) Leq (or the ambient noise level if they already exceed 60 dB Leq) at the edge of the occupied habitat. If necessary, noise attenuation measures, such as berms or noise walls, can be implemented to ensure that noise level would be maintained within the allowable level.

Impacts to nesting birds protected by the MBTA and similar provisions of the Fish and Game Code can occur if work is conducted during the breeding season (January through September). If impacts to vegetation are proposed to occur during the breeding season, a pre-construction survey must be conducted to determine if any protected birds are nesting within or immediately adjacent to any vegetation within the impact areas. The pre-construction nesting bird survey would be conducted by a qualified biologist no more than three days prior to commencing project activities. If a nest is found, a no-work buffer zone would be placed around the nest until the adults are no longer using it or the young have fledged. The specific buffer width would be determined by a qualified biologist at the time of discovery. These would vary based on site conditions and type of work to be conducted. If nesting birds are not detected during the pre-construction survey, no restrictions will be necessary on project activities.

Plants Species

The proposed project would not result in impacts to sensitive plant species; therefore, no mitigation measures are required.

Certification

The following people contributed in the preparation of this report:

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Attachment A
Plant Species List

Attachement A. Plant Species Detected Within the Alvarado Trunk Sewer Study Area

Scientific Name	Common Name	Special Status
SEED PLANTS: CONIFERS		
Pinaceae — Pine Family		
Pinus sp.	Ornamental Pine	
ANGIOSPERMS: MAGNOLIIDS- PIPERALES		
Saururaceae — Lizard's Tail Family		
Anemopsis californica	Yerba Mansa	
ANGIOSPERMS: MONOCOTS		
Arecaceae — Palm Family		
**Phoenix canariensis*	Canary Island Date Palm	
**Washingtonia robusta*	Mexican Fan Palm	
Cyperaceae — Sedge Family		
Schoenoplectus californicus	California Bulrush	
Juncaceae — Rush Family		
Juncus acutus ssp. leopoldii	Southwestern Spiny Rush	CNPS 4; outside study area
Juncus dubius	Mariposa Rush	
Poaceae — Grass Family		
**Arundo donax*	Giant Reed	
**Bromus sp.*	Brome	
**Cortaderia selloana*	Selloa Pampas Grass	
Distichlis spicata	Saltgrass	
Nassella sp.	Needlegrass	
**Pennisetum setaceum*	African Fountain Grass	
Typhaceae — Cattail Family		
Typha latifolia	Broad-leaf Cattail	
ANGIOSPERMS: EUDICOTS		
Adoxaceae — Adoxa Family		
Sambucus mexicana	Blue Elderberry	
Anacardiaceae - Sumac or Cashew Family		
Malosma laurina	Laurel Sumac	
Rhus integrifolia	Lemonadeberry	
**Schinus terebinthifolius*	Brazilian Pepper Tree	
Toxicodendron diversilobum	Western Poison-Oak	
Apiaceae — Carrot Family		
**Apium graveolens*	Common Celery	
**Foeniculum vulgare*	Sweet Fennel	

Scientific Name	Common Name	Special Status
Asteraceae — Sunflower Family		
Artemisia californica	Coastal Sagebrush	
Artemisia douglasiana	Douglas Mugwort	
Artemisia dracunculus	Tarragon, Dragon Sagewort	
Artemisia palmeri	Palmer's Sagewort	CNPS 4
Baccharis pilularis	Chaparral Broom, Coyote Brush	
Baccharis salicifolia	Mule-Fat, Seep-Willow	
Baccharis sarothroides	Broom Baccharis	
**Centaurea sp.*	Star-Thistle	
**Cirsium sp.*	Thistle	
Conyza canadensis	Horseweed	
Deinandra fasciculata	Fascicled Tarweed	
Encelia californica	California Encelia	
Gutierrezia sp.	Matchweed	
Isocoma menziesii	Spreading Goldenbush	
Iva hayesiana	San Diego Marsh-Elder	CNPS 2
**Picris echioides*	Bristly Ox-Tongue	
Pluchea odorata	Salt Marsh Fleabane	
Viguiera laciniata	San Diego Sunflower	CNPS 4
Brassicaceae — Mustard Family		
**Brassica nigra*	Black Mustard	
**Hirschfeldia incana*	Short-pod Mustard	
Cactaceae — Cactus Family		
**Opuntia ficus-indica*	Mission Prickly-Pear, Indian-Fig	
Opuntia littoralis	Coast Prickly-Pear	
Capparaceae — Caper Family		
Isomeris arborea	Bladderpod	
Caprifoliaceae — Honeysuckle Family		
Lonicera subspicata	Southern Honeysuckle	
Dipsacaceae — Teasel Family		
**Dipsacus sp.*	Teasel	
Euphorbiaceae — Spurge Family		
**Ricinus communis*	Castor Bean	
Fabaceae - Legume Family		
**Acacia pycnantha*	Golden Wattle	
Amorpha fruticosa	False Indigo	

Scientific Name	Common Name	Special Status
Lotus scoparius	Deerweed	
Grossulariaceae — Gooseberry Family		
Ribes sp.	Currant	
Lamiaceae — Mint Family		
**Marrubium vulgare*	Horehound	
Salvia mellifera	Black Sage	
Malvaceae — Mallow Family		
Malacothamnus sp.	Bushmallow	
Myrtaceae — Myrtle Family		
**Eucalyptus sp.*	Eucalyptus	
Phrymaceae — Hopseed Family		
Mimulus aurantiacus var. aridus	Jacumba Monkey Flower	
Mimulus aurantiacus	Coast Monkey Flower	
Plantaginaceae — Plantain Family		
**Plantago major*	Common Plantain	
Platanaceae — Plane Tree or Sycamore Family		
Platanus racemosa	Western Sycamore	
Polygonaceae — Buckwheat Family		
Eriogonum fasciculatum var. fasciculatum	Coast California Buckwheat	
Rhamnaceae — Buckthorn Family		
Adolphia californica	Spineshrub	CNPS 2
Rhamnus ilicifolia	Holly-leaf Redberry	
Rosaceae — Rose Family		
Heteromeles arbutifolia	Toyon, Christmas Berry	
**Prunus ilicifolia ssp. lyonii*	Catalina Island Cherry	
Salicaceae — Willow Family		
Populus fremontii ssp. fremontii	Western Cottonwood	
Salix gooddingii	Goodding's Black Willow	
Salix laevigata	Red Willow	
Salix lasiolepis	Arroyo Willow	
Scrophulariaceae — Figwort Family		
Scrophularia californica ssp. floribunda	California Bee Plant/Figwort	
Tamaricaceae — Tamarisk Family		
**Tamarix sp.*	Tamarisk/Salt-Cedar	

Scientific Name	Common Name	Special Status

Legend

*=Non-native species

Special Status:

Federal
FE - listed as endangered under the federal Endangered Species Act.
FT - listed as threatened under the federal Endangered Species Act.

State
SE - listed as endangered under the California Endangered Species Act.
ST – listed as threatened under California Endangered Species Act.
SR – listed as rare under California Native Plant Protection Act..

CNPS List – California Native Plant Society
1B – Rare, threatened or endangered in California and elsewhere
2 – Rare, threatened or endangered in California but more common elsewhere
3 – May be rare but more research needed to determine true status
4 – Limited distribution and are uncommon but not presently rare or endangered

Attachment B
Wildlife Species Observed Within the Alvarado Trunk Sewer Survey Area

Attachment B. Wildlife Species Detected Within the Alvarado Trunk Sewer Study Area

Scientific Name	Common Name	Special Status
VERTEBRATES		
Birds		
Falco sparverius	American Kestrel	
Zenaida macroura	Mourning Dove	
Calypte anna	Anna's Hummingbird	
Sayornis nigricans	Black Phoebe	
Aphelocoma californica	Western Scrub-Jay	
Chamaea fasciata	Wrentit	
Dendroica coronata	Yellow-rumped Warbler	
Pipilo crissalis	California Towhee	
Melospiza melodia	Song Sparrow	
Zonotrichia leucophrys	White-crowned Sparrow	
Carpodacus mexicanus	House Finch	
Carduelis psaltria	Lesser Goldfinch	
Mammals		
Sylvilagus audubonii	Desert Cottontail	
Neotoma sp.	Woodrat	
Canis latrans	Coyote	

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened
CSC = Species of Special Concern
FPS = California Fully Protected Species

Attachment C
Sensitive Plant Species with Potential to Occur

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
San Diego thornmint *Acanthomintha ilicifolia*	FT, SE, CNPS List 1B, NE	Prefers friable or broken clay soils.Grassy openings in chaparral and coastal sage scrub, valley and foothill grassland, vernal pools.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
California adolphia *Adolphia californica*	CNPS List 2	Chaparral, coastal scrub, and valley and foothill grassland.	Yes	Detected in Diegan coastal sage scrub within the study area.
Shaw's agave *Agave shawii*	FSC, CNPS List 2, NE	Coastal bluff scrub and coastal sage scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego bur-sage *Ambrosia chenopodiifolia*	CNPS List 2	Coastal sage scrub.	No	Low potential for occurrence. Although potentially suitable habitat occurs this shrub would have been detected if present.
Singlewhorl burrobush *Ambrosia monogyra*	CNPS List 2	Chaparral, Sonoran desert scrub, and riparian scrub.	No	Low potential for occurrence. Although potentially suitable habitat occurs this shrub would have been detected if present.
San Diego ambrosia *Ambrosia pumila*	FE, CNPS List 1B, NE	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools, often in disturbed areas. Can occur in creek beds, seasonally dry drainages, and floodplains.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Aphanisma *Aphanisma blitoides*	FSC, CNPS List 1B, NE	Beach dunes and coastal bluffs.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Del Mar manzanita *Arctostaphylos glandulosa* ssp. *crassifolia*	FE, CNPS List 1B	Low- growing chaparral with eroding sandstone as substrate	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Otay manzanita *Arctostaphylos otayensis*	CNPS List 1B	Chaparral or woodlands on volcanic rock outcrops.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego sagewort *Artemisia palmeri*	CNPS List 4	Creeks and drainages.	Yes	Detected in disturbed southern cottonwood-willow riparian forest within the study area.
Dean's milk-vetch *Astragalus deanei*	CNPS List 1B	Open shrubby slopes, typically associated with coastal sage scrub, chaparral, and sandy washes.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Coastal dunes milk-vetch *Astragalus tener* var. *titi*	FE, SE, CNPS List 1B, NE	Coastal bluff scrub, coastal dunes, and coastal prairie	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Coulter's saltbush *Atriplex coulteri*	CNPS List 1B	In San Diego, sea-bluff habitat is preferred. Alkaline or clay soils, open sites and, coastal scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
South coast saltscale *Atriplex pacifica*	CNPS List 1B	Occurs in xeric, often disturbed coastal bluff scrub, coastal sage scrub, coastal dunes, and playas.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	CNPS List 1B	Coastal bluff scrub and alkaline soils in coastal scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Encinitas baccharis *Baccharis vanessae*	FT, SE, CNPS List 1B, NE	Maritime chaparral and sandstone cismontane woodland	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Nevin's barberry *Berberis nevinii*	FE, SE, CNPS List 1B	Chaparral, cismontane woodland, coastal scrub, and sandy or gravelly soils within riparian scrub.	No	Low potential for occurrence. Although potentially suitable habitat occurs this shrub would have been detected if present.
Golden-spined cereus *Bergerocactus emoryi*	CNPS List 2	Maritime succulent scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego goldenstar *Bloomeria clevelandii*	CNPS List 1B	Occurs on clay soils that tend to be vernally moist, openings in chaparral and in grasslands that contain vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Orcutt's brodiaea *Brodiaea orcuttii*	CNPS List 1B	Occurs on clay soils that tend to be vernally moist, in grasslands, near streams and adjacent to vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Tecate cypress *Callitropsis forbesii*	CNPS List 1B	Coniferous forest and southern mixed chaparral. Tends to follow moist canyons and drainages down slope to relatively low elevations.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Dunn's mariposa-lily *Calochortus dunnii*	SR, CNPS List 1B	Rocky openings in chaparral or grassland/chaparral ecotone.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Lakeside ceanothus *Ceanothus cyaneus*	CNPS List 1B	Closed-cone coniferous forest, dry shrubby slopes.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Otay Mountain ceanothus *Ceanothus otayensis*	CNPS List 1B	Xeric chamise chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Wart-stemmed ceanothus *Ceanothus verrucosus*	CNPS List 2	Chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Southern tarplant *Centromadia parryi* ssp. *australis*	CNPS List 1B	Vernal pools, vernally mesic valley and foothill grassland, and the margins of marshes and swamps.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	CNPS List 1B	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	CNPS List 1B	Sandy coastal bluff scrub and coastal dunes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Orcutt's spineflower *Chorizanthe orcuttiana*	FE, SE, CNPS List 1B	Coastal chaparral openings in chamise, with loose sandy substrate	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	CNPS List 1B	Clay lenses largely devoid of shrubs. Occasionally seen on the periphery of vernal pool habitat and the periphery of montane meadows near vernal seeps or on gravelly or stony clay loams.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Delicate clarkia *Clarkia delicata*	CNPS List 1B	Oak woodlands and chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Summer holly *Comarostaphylis diversifolia* spp. *diversifolia*	CNPS List 1B	Southern mixed chaparral, usually on mesic north-facing slopes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Salt-marsh bird's-beak *Cordylanthus maritimus* ssp. *maritimus*	FE, SE, CNPS List 2	Tidal salt marshes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Orcutt's bird's beak *Cordylanthus orcuttianus*	CNPS List 2	Seasonally dry drainages, uplands adjacent to riparian habitats, and coastal sage scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Sea dahlia *Coreopsis maritima*	CNPS List 2	Coastal scrub and coastal bluff scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
San Diego sand aster *Corethrogyne filaginifolia* var. *incana*	CNPS List 1B	Coastal scrub, coastal bluff scrub, and chaparral.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Del Mar Mesa sand aster *Corethrogyne filaginifolia* var. *linifolia*	CNPS List 1B	Openings in maritime chaparral, sandy soils in coastal scrub, and coastal bluff scrub.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
Otay tarplant *Deinandra conjugens*	FT, SE, CNPS List 1B	Fractured clay soils or lightly vegetated coastal sage scrub.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
Short leaved dudleya *Dudleya brevifolia*	SE, CNPS List 1B, MSCP Covered Species	Openings in maritime chaparral and coastal scrub on sandstone.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Variegated dudleya *Dudleya variegata*	FSC, CNPS List 1B, NE	Dry hillsides and mesas of San Diego County. Associated with coastal sage scrub or grassland habitat.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Sticky dudleya *Dudleya viscida*	CNPS List 1B	Coastal bluff scrub, chaparral, and cismontane woodland. Also associated with rocky soils in coastal scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Palmer's goldenbush *Ericameria palmeri* var. *palmeri*	CNPS List 1B	Along coastal drainages in chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego button-celery *Eryngium aristulatum* var. *parishii*	FE, SE, CNPS List 1B, NE	Vernal Pools or mima mound areas, coastal sage scrub, valley and foothill grassland	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Sand-loving wallflower *Erysimum ammophilum*	CNPS List 1B	Maritime chaparral, coastal dunes and sandy openings in coastal scrub.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Cliff spurge *Euphorbia misera*	CNPS List 2	Coastal bluff scrub, coastal scrub and rocky soils in Mojavean desert scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
San Diego barrel cactus *Ferocactus viridescens*	CNPS List 2	Sandy to rocky areas, chaparral, coastal scrub, valley and foothill grassland, and vernal pools.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
Palmer's frankenia *Frankenia palmeri*	CNPS List 2	Coastal dunes, playas, and coastal marshes and swamps.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Mexican flannelbush *Fremontodendron mexicanum*	FE, SR, CNPS List 1B	Closed cone coniferous forest and southern mixed chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Desert bedstraw *Galium proliferum*	CNPS List 2	Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Campbell's liverwort *Geothallus tuberosus*	CNPS List 1B	Mesic coastal scrub and vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Mission Canyon bluecup *Githopsis diffusa* ssp. *filicaulis*	CNPS List 3	Sandy opening in chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Palmer's grapplinghook *Harpagonella palmeri*	CNPS List 4	Openings on clay soils and burns; coastal and desert.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Beach goldenaster *Heterotheca sessiliflora* ssp. *sessiliflora*	CNPS List 1B	Coastal chaparral, coastal scrub and coastal dunes.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Ramona horkelia *Horkelia truncata*	CNPS List 1B	Openings in chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	CNPS List 1B	Coastal sage scrub intermixed with grassland, and chaparral.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
San Diego marsh-elder *Iva hayesiana*	CNPS List 2	Creeks or intermittent streambeds. sandy alluvial embankments with cobbles are frequently utilized.	Yes	Detected in disturbed southern cottowood-willow riparian forest within the study area.
Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	CNPS list 4	Coastal and riparian marshes along with alkaline meadows.	Yes	Detected outside of the study area in freshwater marsh.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	CNPS List 1B	Tidal marsh, swamps, playas, or the periphery of vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Heart-leaved pitcher sage *Lepechinia cardiophylla*	CNPS List 1B	Closed-coned coniferous forest, cismontane woodland, and chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Gander's pitcher sage *Lepechinia ganderi*	CNPS List 1B	Chaparral, coastal sage, foothill and valley grassland, and closed-coniferous forest; metavolcanic soils.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	CNPS List 1B	Openings in chaparral and coastal sage scrub. Typically found in relatively dry, exposed locales.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Nuttall's lotus *Lotus nuttallianus*	CNPS List 1B	Sandy soils in coastal scrub and coastal dunes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Felt-leaved monardella *Monardella hypoleuca* ssp. *lanata*	CNPS List 1B	Chaparral and cismontane woodland.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Willowy monardella *Monardella viminea*	FE, SE, CNPS List 1B, MSCP Covered Species	Riparian scrub/forest, usually at sandy locales in seasonally dry washes.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Little mousetail *Myosurus minimus* ssp. *apus*	CNPS List 3	Vernal pools and adjacent grasslands.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Mud nama *Nama stenocarpum*	CNPS List 2	Muddy embankments of ponds and lakes, marshes, and swamps.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Spreading navarretia *Navarretia fossalis*	FT, CNPS List 1B, NE	Vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Prostrate vernal pool navarretia *Navarretia prostrata*	CNPS List 1B	Meadows and seeps, coastal scrub, vernal pools, and alkaline soils in valley and foothill grassland.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	CNPS List 1B	Coastal dunes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Slender cottonheads *Nemacaulis denudate* var. *gracilis*	CNPS List 2	Coastal dunes, desert dunes, and Sonoran desert scrub.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Snake cholla *Opuntia californica* var. *californica*	CNPS List 1B, NE	Chaparral, and coastal scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
California Orcutt grass *Orcuttia californica*	FE, SE, CNPS List 1B, NE	Vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Short-lobed broomrape *Orobanche parishii* ssp. *brachyloba*	CNPS List 4	Coastal bluff scrub, coastal dunes, and sandy soils in coastal scrub.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
Gander's ragwort *Packera ganderi*	SR, CNPS List 1B	Chamise chaparral, usually in gabbroic soils in interior region.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Brand's star phacelia *Phacelia stellaris*	Federal candidate, CNPS List 1B	Coastal dunes and coastal scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Torrey pine *Pinus torreyana* ssp. *torreyana*	CNPS List 1B	Closed-coned coniferous forest, and sandstone soils in chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego mesa mint *Pogogyne abramsii*	FE, SE, CNPS List 1B, NE	Vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name ***Scientific Name***	**Sensitivity** **Code & Status**	**Habitat** **Preference/Requirements**	**Verified** **On-site**	**Rationale**
Otay mesa mint *Pogogyne nudiuscula*	FE, SE, CNPS List 1B, NE	Vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Nuttall's scrub oak *Quercus dumosa*	CNPS List 1B	Coastal chaparral, sandy or clayey coastal scrub.	No	Low potential for occurrence. Suitable soils for this species do not occur within the study area.
Munz's sage *Salvia munzii*	CNPS List 2	Chaparral and coastal sage scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
San Miguel savory *Satureja chandleri*	CNPS List 1B	Rocky slopes with chamise chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Chaparral ragwort *Senecio aphanactis*	CNPS List 2	Dry alkaline flats in chaparral, cismontane woodlands and coastal sage scrub.	No	Low potential for occurrence. Suitable alkaline flats do not occur within the study area.
Bottle liverwort *Sphaerocarpos drewei*	CNPS List 1B	Chaparral and openings in coastal scrub.	No	Moderate potential for occurrence. Potentially suitable habitat occurs within the study area.
Purple stemodia *Stemodia durantifolia*	CNPS List 2	Sonoran desert scrub and sandy dry canyon bottoms or drainages.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Laguna Mountains jewel-flower *Streptanthus bernardinus*	CNPS List 4	Chaparral and lower montane coniferous forest.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Oil nestraw *Stylocline citroleum*	CNPS List 1B	Coastal scrub, chenopod scrub, and clay soils in valley and foothill grassland.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Estuary seablite *Suaeda esteroa*	CNPS List 1B	Coastal marshes and swamps.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Parry's tetracoccus *Tetracoccus dioicus*	CNPS List 1B	Chamise chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Coastal triquetrella *Triquetrella californica*	CNPS List 1B	Coastal bluff scrub and coastal scrub.	No	Low potential for occurrence. Marginal habitat occurs within the study area.

Common Name *Scientific Name*	Sensitivity Code & Status	Habitat Preference/Requirements	Verified On-site	Rationale
San Diego sunflower	CNPS List 4	Arid Diegan coastal sage scrub at various elevations and soil types.	Yes	Detected in Diegan coastal sage scrub within the study area.

Status:

Federal

FE = listed as endangered under the federal Endangered Species Act.

FT = listed as threatened under the federal Endangered Species Act.

State

SE = listed as endangered under the California Endangered Species Act.

ST = listed as threatened under California Endangered Species Act.

SR = listed as rare under California Endangered Species Act.

CNPS List—California Native Plant Society

1B = Rare, threatened or endangered in California and elsewhere

2 = Rare, threatened or endangered in California but more common elsewhere

3 = May be rare but more research needed to determine true status

4 = Limited distribution and are uncommon but not presently rare or endangered

City of San Diego

NE Narrow Endemic

References

Special Status information from CDFG 2006a and San Diego County 2006. Nomenclature and plant descriptions from Abrams 1923 and 1944, Abrams and Ferris 1960, Beauchamp 1986, Hickman 1993, McAuley 1996, Munz 1974, Roberts 1989, Skinner and Pavlik 1994.

Attachment D
Sensitive Wildlife Species with Potential to Occur

Common Name *Scientific Name*	Sensitivity Code & Status	Habitat Preference/Requirements	Verified On-site (Yes/No)	Rationale
Invertebrates				
San Diego fairy shrimp *Branchinecta sandiegoensis*	FE	Vernal pools. All known localities are below 701m (2,300 ft) and are within 64km (40 miles) of the Pacific Ocean.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Quino checkerspot butterfly *Euphydryas editha quino*	FE	Coastal habitats of sage scrub and chaparral, inland in open meadows, sage scrub, chaparral, oak woodland, juniper woodland and semi-desert scrub. Habitats must have open areas with low growing and sparse vegetation.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Riverside fairy shrimp *Streptocephalus woottoni*	FE	Vernal pools.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Amphibians and Reptiles				
Arroyo toad *Anaxyrus californicus*	FE	Prefers sandy banks with willows, cottonwoods, or sycamores.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Orangethroat whiptail *Aspidoscelis hyperythra*	CSC	Dense stands of sage scrub, chamise chaparral, and floodplain areas.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Northern red-diamond rattlesnake *Crotalus ruber ruber*	CSC	Rocky brushlands.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Coastal horned lizard *Phrynosoma blainvillii*	CSC	Prefers friable, rocky, or shallow sandy soils in coastal sage scrub and chaparral in arid and semi-arid climates.	No	Low potential for occurrence. Suitable habitat does not occur within the study area.
Coronado skink *Plestiodon skiltonianus interparietalis*	CSC	Forest, open woodland and grassy areas. Usually found under leaf litter, logs, or rocks.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	CSC	Grasslands, chaparral, sandy and rocky areas on the lower slopes of mountains.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name *Scientific Name*	Sensitivity Code & Status	Habitat Preference/Requirements	Verified On-site (Yes/No)	Rationale
Western spadefoot *Spea hammondii*	CSC	Prefers sandy or gravelly soil in grasslands, open chaparral, and pine-oak woodlands.	No	Low potential for occurrence. Suitable habitat and soils for this species does not occur within the study area.
Two-striped garter snake *Thamnophis hammondii*	CSC	Most commonly found in or near permanent water; occasionally in small and intermittent streams with rocky beds.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Birds				
Burrowing owl *Athene cunicularia*	CSC	Grasslands, agricultural fields and coastal dunes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	CSC	Coastal sage scrub that supports prickly pear and/or coast cholla cactus.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Western snowy plover *Charadrius alexandrinus nivosus*	FT, CSC	Inhabits barren sandy beaches and flats.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	SE	Moist thickets, willows, overgrown pastures and orchards.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Yellow warbler *Dendroica petechia brewsteri*	CSC	Mature riparian woodlands.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE, SE	Dense riparian woodlands.	No	Low potential for occurrence. Marginal habitat occurs within the study area.
Least bittern *Ixobrychus exilis*	CSC	Coastal lowland and brackish lagoons, lakes, ponds, and streams inland.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name *Scientific Name*	Sensitivity Code & Status	Habitat Preference/Requirements	Verified On-site (Yes/No)	Rationale
California black rail *Laterallus jamaicensis coturniculus*	ST	Coastal salt marshes; rarely freshwater marshes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area. Species has been extirpated from San Diego County since 1983 and last known breeding location was in 1954 (Unitt 2004).
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	SE, MSCP Covered Species	Coastal marshes dominated by pickleweed.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
California brown pelican *Pelecanus occidentalis californicus*	FE, SE	Open salt water, bays, and beaches.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Coastal California gnatcatcher *Polioptila californica californica*	FT, CSC, MSCP Covered Species	Prefer open scrubby habitats such as coastal sage scrub and some forms of chaparral.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Light-footed clapper rail *Rallus longirostris levipes*	FE, SE, MSC Covered Species	Coastal salt marsh.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
California least tern *Sterna antillarum browni*	FE, SE, MSCP Covered Species	Nests in colonies on beaches and sandbars.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Least Bell's vireo *Vireo bellii pusillus*	FE, SE, MSCP Covered Species	Riparian thickets either near water or in dry portions of river bottoms; nests along margins of bushes and forages low to the ground; may also be found using mesquite and arrow weed in desert canyons.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Mammals				
Dulzura pocket mouse *Chaetodipus californicus femoralis*	CSC	Coastal and montane regions on chaparral slopes.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.

Common Name *Scientific Name*	Sensitivity Code & Status	Habitat Preference/Requirements	Verified On-site (Yes/No)	Rationale
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	CSC	Coastal sage, chaparral, and grasslands in western San Diego County. Prefers rocky and gravelly soils.	No	Low potential for occurrence. Suitable soils may not be present within the study area.
Western mastiff bat *Eumops perotis californicus*	CSC	Central California to central Mexico; rocky areas within open shrub/ grassland and cultivated fields, as well as chaparral and chaparral/oak interfaces.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Western red bat *Lasiurus blossevillii*	CSC	Roosts primarily in trees, less often in shrubs. Roost sites are often in edge habitat adjacent to streams, fields, or urban areas.	No	Moderate potential for occurrence. Suitable habitat occurs within the study area.
Western yellow bat *Lasiurus xanthinus*	CSC	Roosts in trees within valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
San Diego desert woodrat *Neotoma lepida intermedia*	CSC	Rocky areas in sage scrub, oak and chaparral.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	CSC	Roosts in rocky areas with relatively high cliffs, usually using rock crevices for day-roosts.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Big free-tailed bat *Nyctinomops macrotis*	CSC	Prefers rugged rocky terrain. Roosts in buildings, caves, and occasionally in holes in trees.	No	Low potential for occurrence. Suitable habitat for this species does not occur within the study area.
Pacific pocket mouse *Perognathus longimembris pacificus*	FE, CSC	Open ground with fine sandy soil.	No	Low potential for occurrence. Fine, sandy soils are not present within the study area. The project site is outside known range for this species.

Attachment E
Wetland Delineation Report for the Alvarado Trunk Sewer Phase III Project

JURISDICTIONAL DELINEATION REPORT FOR THE ALVARADO TRUNK SEWER PHASE III PROJECT

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January 2011

ICF International. 2011. Jurisdictional Delineation Report for the Alvarado Trunk Sewer Phase III Project. October. (ICF 877.09.) San Diego, CA. Prepared for City of San Diego, San Diego, CA.

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Acronyms and Abbreviations

AMSL	above mean sea level
BMPs	Best Management Practices
CDFG	California Department of Fish and Game
CFR	Code of Federal Regulations
City	City of San Diego
CVREP	Carmel Valley Restoration and Enhancement Project
CWA	Clean Water Act
EPA	Environmental Protection Agency
ESL	Environmentally Sensitive Lands
FAC	facultative
FACW	facultative wetland
ft	feet
JDs	jurisdictional determinations
LF	linear feet
MHPA	Multi-Habitat Planning Area
MSCP	Multiple Species Conservation Program
OBL	obligate
OHWM	ordinary high water mark
RPWs	relatively permanent waters
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SDSU	San Diego State University
SPs	sample points
SWPPP	Storm Water Pollution Prevention Plan
TNWs	traditional navigable waters
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USSC	U.S. Supreme Court

Chapter 1
Introduction

This report provides regulatory information, methods, and results for a routine-level delineation of jurisdictional waters and wetlands present within the Alvarado Trunk Sewer Phase III project survey area.

The purpose of the delineation is to assess the limits of federal and state jurisdiction, within and adjacent to the proposed project site, to support the resource-agency permitting process. This jurisdictional delineation report describes the resources subject to regulation by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Game (CDFG), and City of San Diego (City).

1.1 Site Location and Project Description

The City has proposed to redirect the flow of an existing trunk sewer occurring between Adobe Falls Road and Canyon Crest Drive. The project proposes to re-align the existing trunk sewer by installing approximately 2,058 linear feet (LF) of new pipe, rehabilitating approximately 239 LF of pipe, and abandoning approximately 2,477 LF of existing trunk sewer occurring between San Diego State University (SDSU) and the Smoke Tree Adobe Falls Subdivision within Alvarado Canyon (Figures 1 and 2). New sewer line installation would occur through a combination of open cut (66 LF of 8-inch pipe and 731 LF of 15-inch pipe) and tunneling (493 LF of 15-inch pipe and 768 LF of 36-inch pipe) to minimize impacts to sensitive biological resources. The portion of the project site occurring within Alvarado Canyon would result in impacts to sensitive habitats and jurisdictional waters.

Implementation of the proposed project would result in temporary impacts resulting from abandonment of existing manholes, manhole replacement/relocation, jack-and-bore work areas (i.e. jacking pit areas and receiver pits), temporary access roads, and staging areas. Impacts associated with abandonment of individual manholes (with the exception of MH 87, which would be slighted reduced along the northern boundary to avoid impacts to mule fat scrub) would occur within a 5-foot radius (centered each manhole) and would consist of filling the opening with slurry, sealing the opening, and removing the top structure. Jack-and-bore activities would require a 400-square foot (SF; 16' x 25') area for the receiver pit and 360-SF (12' x 30') area for the jacking pit; abandonment of manhole 320 and relocation slightly to the south (then to be referred to as manhole 2) would not result in impacts beyond the identified 400 SF receiving pit. In addition, a temporary 10-foot-wide access road would be created in order to provide vehicular access to manholes in the southwestern portion of Alvarado Canyon. It is assumed that steel plates would be used to span the unnamed drainage in this area (just west of MHs 87 and 88) and allow for vehicular access to this area. Vehicular access to or near all other manholes would be via existing access roads and disturbed area. Where existing dirt roads do not currently provide access all the way to the manholes (e.g., MHs 84, 89, 90, 91, 92, and 94), the surrounding vegetation is open enough to allow for pedestrian access to conduct the work. Therefore, additional impacts related to access would not occur. One staging area has been proposed within habitat in Alvarado Canyon and others are available in disturbed/developed areas such as the cul-de-sac at the end of Adobe Falls Road.

The proposed project is located within the Urban Area of the City of San Diego Multiple Species Conservation Program (MSCP). The MSCP is a conservation program designed to facilitate the implementation of a regional habitat preserve while allowing the issuance of take permits at the local level. The entire project site is located within the City's MSCP and outside of the City's Multi-Habitat Planning Area (MHPA).

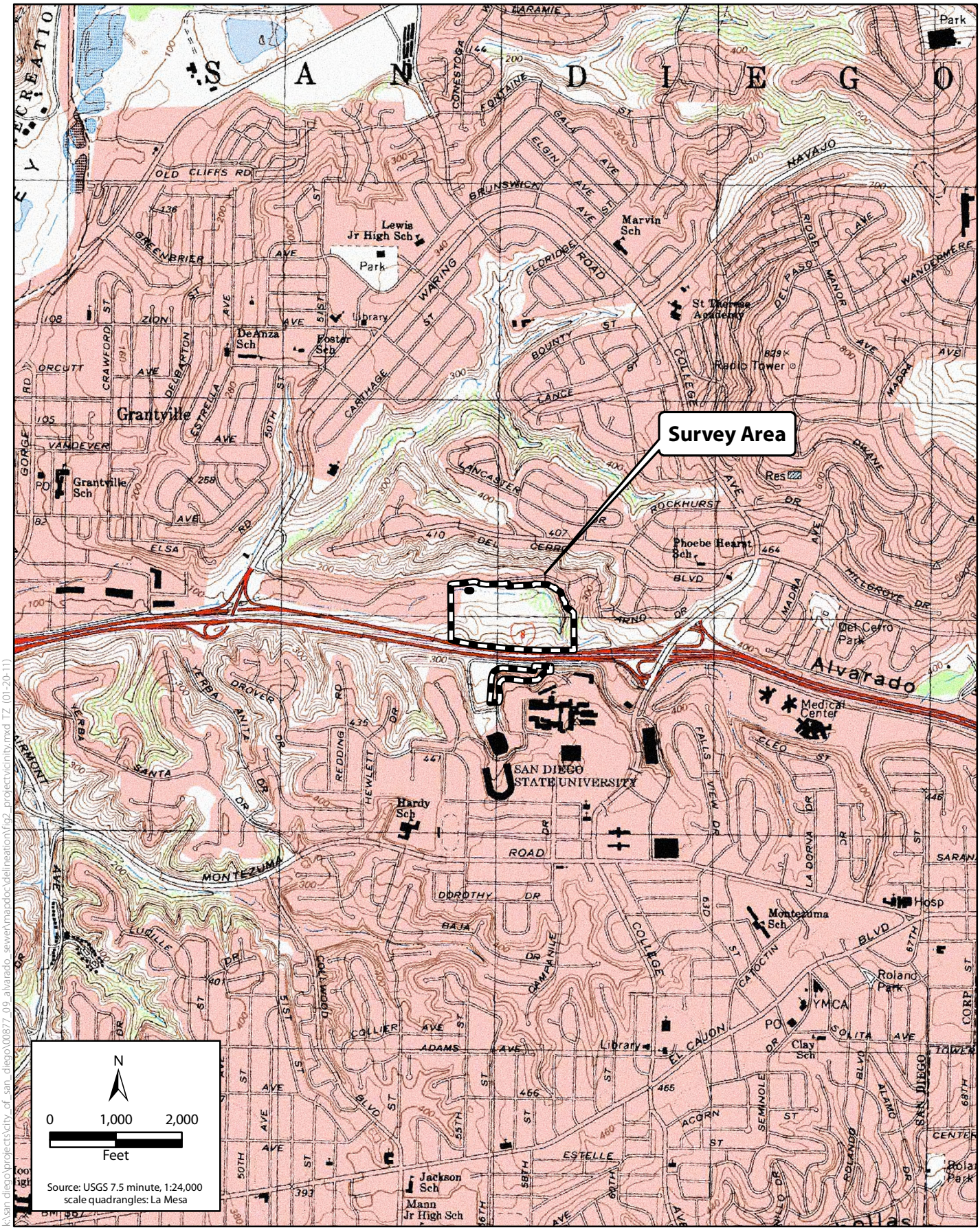
1.1.1 Project Assumptions

- All impacts related to the sewer abandonment are temporary.
- Temporary impacts will occur within a 5-foot radius around each manhole, with the exception of MH 87. The work area for MH 87 will be reduced slightly to the north to avoid impacts to mule fact scrub.
- Access (vehicular and pedestrian) to manholes 85, 86, 87, and 88 would require the creation of a 10-foot-wide temporary access road.
- Vehicular access to or near all other manholes would be via existing access roads and disturbed area and no additional impacts would be required for access. Where existing dirt roads do not currently provide access all the way to the manholes (e.g., MHs 84, 89, 90, 91, 92, and 94), the surrounding vegetation is open enough to allow for pedestrian access to conduct the work. Therefore, additional impacts related to access would not occur.
- South of the Adobe Falls Road cul-de-sac, the access road crosses Alvarado Canyon Creek (Figure 3). This portion of the access road is mapped as "Disturbed Riparian Woodland" due to the canopy of trees encroaching over this portion of the road; however, vehicular access along this portion of the road would not result in impacts to vegetated areas. Steel plates may be used in this crossing of Alvarado Canyon Creek to avoid impacts to jurisdictional waters (Figure 4).
- Steel plates would be used to allow for vehicular access across the unnamed drainage in the southwestern portion of Alvarado Canyon (just east of MHs 87 and 88) thereby avoiding impacts to the drainage (Figure 4).
- A Storm Water Pollution Prevention Plan (SWPPP) would be developed for the project, and application of Best Management Practices (BMPs) and erosion control measures would be utilized during construction and operation of the project to avoid direct or indirect impacts on all jurisdictional resources adjacent to the work areas.



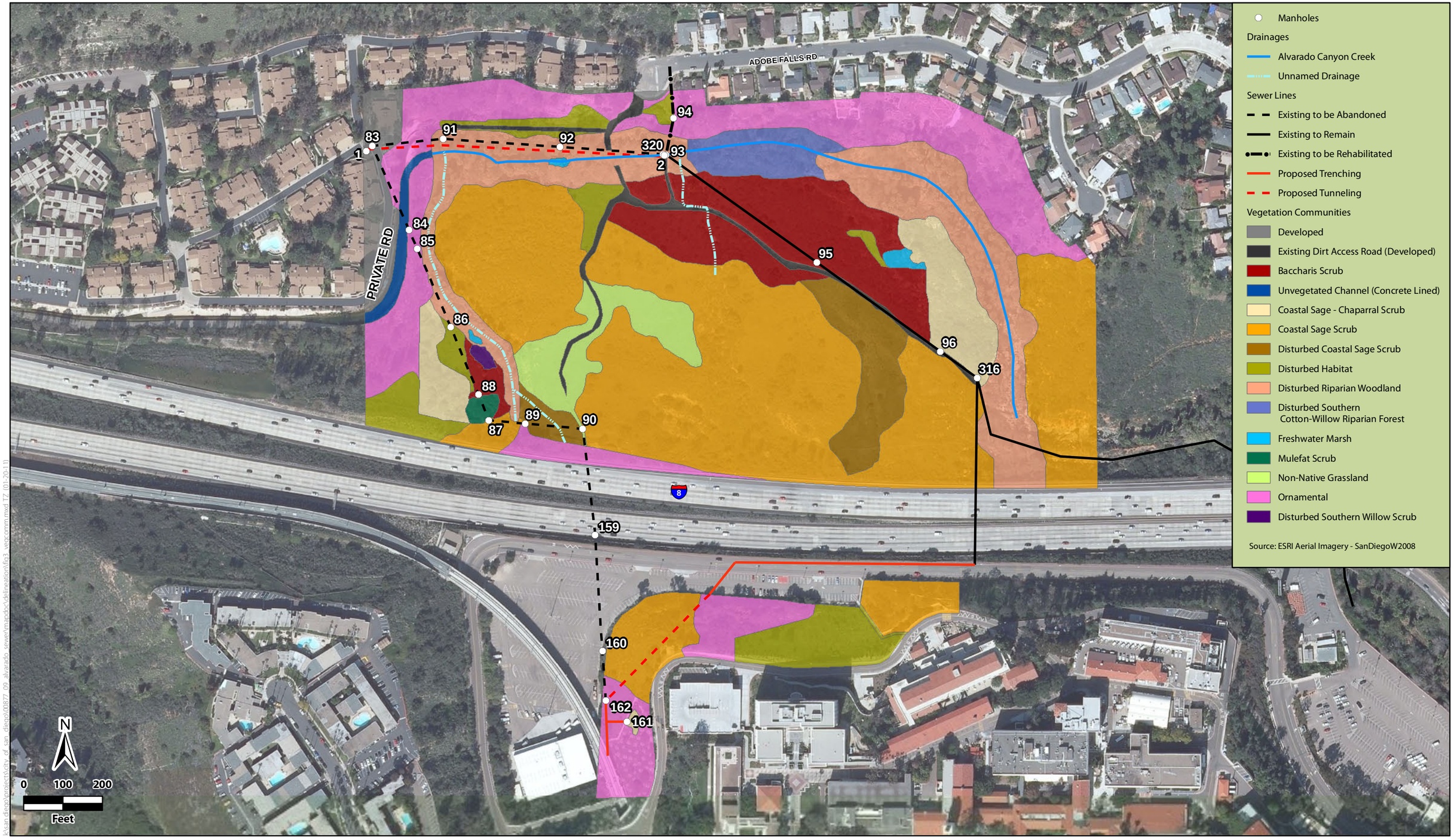
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Figure 1
Regional Location
Alvarado Trunk Sewer Phase III Wetland Delineation



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Figure 2
Project Location
Alvarado Trunk Sewer Phase III Wetland Delineation



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Figure 3
Vegetation Communities
Alvarado Trunk Sewer Phase III Wetland Delineation



Figure 4
Jurisdictional Areas and Impacts Map
Alvarado Trunk Sewer Phase III Wetland Delineation

Chapter 2
Environmental Setting

The general topography, hydrology, wetland characteristics, and mapped soils within the survey area are summarized below.

2.1 Topography and Land Use

The project site is situated within an urban canyon supporting native and non-native vegetation. Alvarado Canyon Creek flows into the southeastern portion of Alvarado Canyon via a culvert and flows along the eastern and northern portions of the canyon. In addition, an unnamed drainage flows into the southwestern portion of the canyon via a culvert. The majority of this drainage has a natural channel. Alvarado Canyon Creek and the drainage converge in the northwestern portion of the canyon and flow into a concrete lined channel that transports surface flows downstream towards Mission Valley and the San Diego River. The project site is relatively flat along the east-west trending portion of Alvarado Canyon Creek and moderately sloping and increasing in elevation towards the south. A few unpaved access roads occur within the canyon.

Elevation within the project site ranges from approximately 140 feet (ft.) above mean sea level (AMSL) at the bottom of the canyon to 300 ft. AMSL in the southern portion of the project area. Soils on the property include Olivenhain-Urban land complex (2-9 and 9-30 percent slopes) and Riverwash (USDA 1973).

Surrounding land uses include SDSU to the south, Smoke Tree Adobe Falls Subdivision to the north and northwest and private homes to the north, and east. The undeveloped portion of the canyon supports native and non-native habitats.

2.2 Hydrology

The main water features within the project site are Alvarado Canyon Creek and an unnamed tributary that flows into the creek from the south; two other unnamed drainage features (ephemeral drainages) occur within the project area, one small feature that runs south from near MH 93 and one small feature that runs southeast from near MH 88. Approximately 2,600 feet of Alvarado Canyon Creek and the unnamed tributary have a natural cobble substrate and support riparian plant species, both native and non-native species. Both of these features flow into a concrete-lined channel on the western extent of the project site, which eventually merges with the San Diego River, approximately 1.6 miles to the west. Alvarado Canyon Creek and the unnamed tributary convey intermittent flows. The source of water is from both urban runoff and Lake Murray Reservoir, 1.6 miles to the east. Both channels convey substantial storm flows during rain events. These substantial storm flows were observed by the biologists during the biological survey performed on December 7, 2009. Portions of the site were not accessible due to high water within Alvarado Canyon Creek and its tributary to the southwest.

2.3 Soils

The project site occurs in soils mapped as Olivenhain-cobbly loam (2-9 percent slope), riverwash, and Olivenhain-urban land complex (9-30 percent slope). Olivenhain cobbly loam is found on the north facing slope north of Interstate 8. Olivenhain-cobbly loam is a well-drained, moderately deep to deep cobbly loam that has a very cobbly clay subsoil. These soils formed in old gravelly and cobbly alluvium (Bowman 1973). Riverwash is mapped along Alvarado Canyon Creek which is located at the bottom of the north facing slope on-site. Riverwash occurs in intermittent stream channels and is typically comprised of sand, gravel, or cobble and is excessively drained and rapidly permeable (Bowman 1973). Olivenhain-urban land complex is found on the north side of Alvarado Canyon Creek. This complex occurs on marine terraces, at elevations of 100 to 600 feet. The landscape has been altered through cut and fill operations and leveling for building sites. This complex is made up of cobbly loamy alluvium (Bowman 1973). Results of field soil pits dug and examined for the jurisdictional determination were consistent with the soils mapped by Bowman.

Chapter 3
Regulatory Background

3.1 USACE Section 404 Regulations

The discharge (temporary or permanent) of dredged or fill material into Waters of the United States, including wetlands, typically requires prior authorization from the USACE, pursuant to Section 404 of the Clean Water Act (CWA).

3.1.1 Waters of the United States

Waters of the United States, as defined in the Code of Federal Regulations (CFR) 328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sandflats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, a Water of the United States (with at least intermittently flowing water or tidal influences) is demarcated by the ordinary high water mark (OHWM), defined in CFR 328.3[e] as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Typically, in this region, the OHWM is indicated by the presence of an incised streambed with defined bank shelving. If adjacent wetlands are present, the jurisdiction extends to the limit of wetlands (defined by presence of hydrophytic vegetation, hydric soils, and hydrology). Finally, note that where an OHWM is present, ephemeral waters are also explicitly defined in USACE regulations as Waters of the United States.

3.1.2 Wetlands

According to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (USACE 1987) and the recently published *Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement* (*Arid West Manual*, USACE 2008), three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation)
2. soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils)
3. permanent or periodic inundation or soil saturation, at least seasonally (wetland hydrology).

Wetland vegetation is normally characterized by vegetation in which more than 50% of the cover of dominant plant species is composed of obligate wetland, facultative wetland, or facultative species that occur in wetlands.

3.1.3 Solid Waste Agency of Northern Cook County (SWANCC) v United States Army Corps of Engineers

In 1986, in an attempt to clarify the reach of its jurisdiction, the USACE stated that Section 404(a) extends to intrastate waters:

> (a) Which are or would be used as habitat by birds protected by Migratory Bird Treaties; or (b) Which are or would be used as habitat by other migratory birds which cross state lines; or (c) Which are or would be used as habitat for endangered species; or (d) Used to irrigate crops sold in interstate commerce" (51 Fed. Reg. 41217).

In 2001, the U.S. Supreme Court (USSC), in its judgment on the *SWANCC* case, held that 33 CFR Section 328.3(a) (3) (1999), as clarified and applied to the SWANCC site pursuant to the Migratory Bird Rule 51 Fed. Reg. 41217 (1986), exceeded the authority granted to the USACE under Section 404(a) of the CWA. Therefore, the USACE may not rely on the Migratory Bird Rule to establish a significant nexus to interstate or foreign commerce. In additional language, the USSC majority opinion reasoned that these types of waters required some nexus to navigable waters. Although no formal guidance was issued by the USACE interpreting the extent to which the *SWANCC* decision would limit jurisdictional determinations, in practice, the USACE considers intrastate waters as Waters of the United States where there is an appropriate connection to a navigable water or other clear interstate commerce connection.

3.1.4 Rapanos v United States and Carabell v United States Army Corps of Engineers

In 2006, the USSC again issued an opinion as to what extent the USACE had jurisdiction over certain waters under Section 404 of the CWA. The *Rapanos-Carabell* consolidated decisions addressed the question of jurisdiction over attenuated tributaries to Waters of the United States, as well as wetlands adjacent to those tributaries. In a plurality decision, five of the nine justices remanded both cases to the lower courts for re-evaluation. However, those five justices were not in alignment as to what the test for determining jurisdiction should be.

Justices Scalia, Roberts, Thomas, and Alito filed an opinion that held that "waters of the United States" include only those relatively permanent, standing, or continuously flowing bodies of water "forming geographic features" that are described in ordinary phrasing as "streams, oceans, river and lakes," (i.e., with surface water connection to navigable waters). By describing "waters" as "relatively permanent," the court does not exclude streams, rivers, or lakes that might dry up in extraordinary circumstances such as drought, or seasonal rivers, which contain continuous flow during some months of the year but no flow during dry months (*Rapanos et ux., et al. v United States*, 547 U.S. 04-1034 2006).

Justice Kennedy, in a separate opinion, concurred with Scalia, Roberts, Thomas, and Alito in their judgment that the USACE had potentially exceeded its authority. However, he concluded that Congress enacted the CWA to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (U.S. Code (USC) 33 Section 1250(a)), and it pursued that objective by restricting dumping and filling in "waters of the United States" (Sections 1311(a), 1362(12)). The rationale for CWA wetlands regulation is that wetlands can perform critical functions related to the integrity of other waters, such as pollutant trapping, flood control, and runoff storage (33 CFR Section 320.4(b)(2)). Accordingly, tributaries and adjacent wetlands possess the requisite nexus

and thus come within the statutory phrase "navigable waters," if the tributaries and adjacent wetlands, alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters understood as navigable in the traditional sense. In summary, the CWA's jurisdiction reaches tributaries and other waters and wetlands with a significant nexus to waters that are in fact navigable or could reasonably be made so. In addition, the USACE must establish a significant nexus on a case-by-case basis when seeking to regulate wetlands based on adjacency to non-navigable tributaries, in order to avoid unreasonable applications of the CWA.

The USACE and Environmental Protection Agency (EPA) issued guidance related to the *Rapanos* decision on June 5, 2007. The guidance identifies those waters over which the agencies (USACE and EPA) will assert jurisdiction categorically and on a case-by-case basis, based on the reasoning of the *Rapanos* opinions. In summary, the USACE will continue to assert jurisdiction over:

1. traditional navigable waters (TNWs) and their adjacent wetlands.
2. non-navigable tributaries of TNWs that are relatively permanent (e.g., tributaries that typically flow year-round or have a continuous flow at least seasonally) and wetlands that directly abut such tributaries (e.g., not separated by uplands, berm, dike, or similar feature).

   Note: relatively permanent waters (RPWs) do not include ephemeral tributaries, which flow only in response to precipitation, and intermittent streams, which do not typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
3. non-RPWs if determined (on a fact-specific analysis) to have a significant nexus with a TNW, including nonnavigable tributaries that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary. Absent a significant nexus, jurisdiction is lacking.

A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW. Principal considerations when evaluating significant nexus include volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands. Certain ephemeral waters in the arid west are distinguishable from the geographic features described above where such ephemeral waters are tributaries and have a significant nexus to downstream traditional navigable waters. For example, these ephemeral tributaries may serve as a transitional area between the upland environment and the traditional navigable water. These ephemeral tributaries may provide habitat for wildlife and aquatic organisms in downstream traditional navigable waters and support nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality.

Swales or erosional features (e.g., gullies and small washes characterized by low volume, infrequent, or short duration flow) are generally not Waters of the United States because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters. In addition, ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not Waters of the United States because they are not tributaries or they do not have a significant nexus to downstream TNWs. Even when not jurisdictional under Section 404 of the CWA, these features may still be jurisdictional at

state or local levels, such as under Section 401 of the CWA, the Porter-Cologne Act, and/or Section 1602 of the California Fish and Game Code.

Prior to the *Rapanos* guidance, the USACE required the districts to request concurrence for only those jurisdictional determinations (JDs) where the district was planning to assert jurisdiction over a non-navigable, intrastate, isolated water and/or wetland. The agencies now require that all determinations for non-navigable, isolated waters be evaluated for the USACE and EPA headquarters review prior to the district making a final decision on the JD.

For this project a federal nexus is assumed based on the connection and proximity of Alvarado Canyon Creek to the San Diego River (TNW).

3.1.5 USACE-Regulated Activities

USACE-regulated activities under Section 404 involve a discharge of dredged or fill material including, but not limited to, grading, placing of riprap for erosion control, pouring concrete, laying sod, and stockpiling excavated material into Waters of the United States. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, some drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

3.2 Regional Water Quality Control Board Section 401 and Porter-Cologne Act Regulations

The Regional Water Quality Control Board (RWQCB) regulates activities within state and federal waters under Section 401 of the federal CWA and the state Porter-Cologne Act.

3.2.1 Section 401 of the Clean Water Act

Section 401 of the CWA requires that "any applicant for a Federal permit for activities that involve a discharge to Waters of the United States, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act." Therefore, in California, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification or waiver from the RWQCB.

3.2.2 Porter-Cologne Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" (Water Code 13260(a)), pursuant to provisions of the state Porter-Cologne Act. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code 13050 (e)).

3.2.3 RWQCB-Regulated Activities

Under Section 401 of the CWA, the RWQCB regulates at the state level all activities that are regulated at the federal level by the USACE. Under the Porter-Cologne Act, the RWQCB regulates all such

activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by the USACE due to a lack of connectivity with a navigable water body or lack of an OHWM.

3.3 CDFG Section 1602 Regulations

The California Fish and Game Code mandates that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks, and (2) existing fish or wildlife resources. Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function hydrologically as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction.

Water features such as vernal pools and other seasonal swales, where the defined bed and bank are absent and the feature is not contiguous or closely adjacent to other jurisdictional features, are generally not asserted to fall within state jurisdiction. The state generally does not assert jurisdiction over human-made water bodies, unless they are located where such natural features were previously located or (importantly) where they are contiguous with existing or prior natural jurisdictional areas.

3.3.1 CDFG-Regulated Activities

Under current California Fish and Game Code Sections 1600–1616, the CDFG has authority to regulate work that will substantially divert or obstruct the natural flow of, change, or use any material from the bed, channel, or bank of any river, stream, or lake. The CDFG also has authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a section 1602 Lake or Streambed Alteration Agreement (SAA) and is applicable to all projects involving state or local government discretionary approvals.

3.4 City of San Diego Subarea Plan Regulations

Many of the species included in the MSCP (i.e. Covered Species) are dependent on wetlands for habitat and foraging. The definition of wetlands in the Environmentally Sensitive Lands Regulations (ESL) is intended to differentiate uplands (terrestrial areas) from wetlands, and furthermore to differentiate naturally occurring wetland areas from those created by human activities. Except for areas created for the purposes of wetland habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, it is not the intent of the City to regulate artificially created wetlands in historically non-wetland areas unless they have been delineated as wetlands by the USACE, and/or the CDFG. For the purposes of the ESL, artificially created lakes such

as Lake Hodges, artificially channeled floodways such as the Carmel Valley Restoration and Enhancement Project (CVREP) and previously dredged tidal areas such as Mission Bay should be considered wetlands under the ESL regulations. The following provides guidance for defining wetlands regulated by the City's Land Development Code (San Diego 2004).

Problem areas can occur when delineating wetlands due to previous human activities or naturally occurring events. Areas lacking naturally occurring wetland vegetation communities are still considered wetlands if hydric soil or wetland hydrology is present and past human activities have occurred to remove the historic vegetation or catastrophic or recurring natural events preclude the establishment of wetland vegetation. Examples include agricultural grading in floodways, dirt roads bisecting vernal pools, channelized streambeds, areas of scour within streambeds, and coastal mudflats and salt pannes that are unvegetated due to tidal duration. The USACE Wetland Delineation Manual (1987) provides technical information on hydric soils and wetland hydrology.

Areas lacking wetland vegetation communities, hydric soils and wetland hydrology due to non-permitted filling of previously existing wetlands, will be considered a wetland under the ESL and regulated accordingly. The removal of the fill and restoration of the wetland may be required as a condition of project approval.

Areas that contain wetland vegetation, soils or hydrology created by human activities in historically non-wetland areas do not qualify as wetlands under this definition unless they have been delineated as wetlands by the USACE, and/or the CDFG. Artificially created "wetlands" consist of the following: wetland vegetation growing in brow ditches and similar drainage structures outside of natural drainage courses, wastewater treatment ponds, stock watering, desiltation and retention basins, water ponding on landfill surfaces, road ruts created by vehicles and artificially irrigated areas which would revert to uplands if the irrigation ceased. Areas of historic wetlands can be assessed using historic aerial photographs, existing environmental reports (EIRs, biology surveys, etc.), and other collateral material such as soil surveys.

3.4.1 City of San Diego Regulated Activities

Under the ESL, impacts to wetlands should be avoided and a wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland (San Diego 2004). Unavoidable impacts should be minimized to the maximum extent practicable. Whether or not an impact is unavoidable will be determined on a case-by-case basis. Examples of unavoidable impacts include those necessary to allow reasonable use of a parcel entirely constrained by wetlands, roads where the only access to the developable portion of the site results in impacts to wetlands, and essential public facilities (essential roads, sewer, water lines, etc.) where no feasible alternative exists. For vernal pools, avoidance of a sufficient amount of the watershed necessary for the continuing viability of the ponding area is also required. Unavoidable impacts will need to be mitigated in accordance with Section III.B.1.a. of these guidelines (San Diego 2004).

Chapter 4
Methodology

4.1 Project Research

Prior to the field visits, a 200-scale (1" = 200') aerial photograph of the project site was prepared and compared with the La Mesa USGS 7.5-minute topographic quadrangle. The USDA soil survey map (Bowman 1973) was also reviewed to identify the soil series that are mapped at each storm drain.

4.2 Field Investigation

ICF International (ICF) biologist Daylon Teel conducted a routine jurisdictional delineation on December 2, 2009, within the survey area, which includes a 50-foot buffer around each manhole where proposed work will be performed (Figure 4). Conditions at the time of the survey consisted of clear skies, with a temperature of approximately 62 degrees Fahrenheit and 0 to 5 mph winds.

All features identified during the field visit were recorded through a routine-level jurisdictional delineation. Wetlands and non-wetland jurisdictional Waters of the United States were identified during the jurisdictional delineation.

ICF's methods for delineating federal wetlands follow the guidelines set forth by the USACE in the *Arid West Manual* (USACE 2006). The routine onsite determination method can be used to gather field data at potential wetland areas for most projects. Visual observations of vegetation types and hydrology are used to locate areas for evaluation. Then, at each evaluation area, several parameters are considered to determine whether the sample point is within a wetland.

Three criteria normally must be fulfilled in order to classify an area as a jurisdictional USACE wetland: (1) a predominance of hydrophytic vegetation, (2) the presence of hydric soils, and (3) the presence of wetland hydrology. Details of the application of these techniques are described below.

- **Hydrophytic Vegetation.** The hydrophytic vegetation criterion is satisfied at a location if greater than 50% of all the dominant species present within the vegetation unit have a wetland indicator status of obligate (OBL), facultative wetland (FACW), or facultative (FAC) (USACE 1987). An *OBL indicator status* refers to plants that have a 99% probability of occurring in wetlands under natural conditions. A *FACW indicator status* refers to plants that usually occur in wetlands (67 to 99% probability) but are occasionally found elsewhere. A *FAC indicator status* refers to plants that are equally likely to occur in wetlands or elsewhere (estimated probability 34 to 66% for each). The wetland indicator status used for this report follows the *National List of Plant Species that Occur in Wetlands: California (Region 0)* (U.S. Fish and Wildlife Service 1988).
- **Hydric Soils.** The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper 18

inches of the soil profile. Reducing conditions are most easily assessed using soil color. Soil colors were evaluated using the *Munsell Soil Color Charts* (Kollmorgen Corporation 1975).

- **Wetland Hydrology.** The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987, 2006).

Areas meeting all three of these parameters are generally designated as USACE wetlands. If the delineator cannot confirm the presence of all three parameters, but nevertheless strongly believes the area to be a wetland, supporting arguments can be added to the delineation data sheet or report to support the conclusion that the feature should be regulated as a wetland by the USACE.

Chapter 5
Jurisdictional Delineation Results and Conclusions

The following section describes the jurisdictional areas identified within the project area as well as those within the identified project impact areas. The spatial locations of jurisdictional features delineated and the sample point collection points are shown in Figure 4. Site photographs, including sample points, are presented in Appendix A. The jurisdictional features observed during this routine-level delineation are also characterized in USACE Arid West wetland delineation data sheets presented in Appendix B.

5.1 Jurisdictional Resources

5.1.1 USACE Wetlands

The USACE wetlands observed within the project area are limited to:

- three patches of freshwater marsh (one within Alvarado Canyon Creek found south of manhole 92, one within the main tributary drainage channel southeast of manhole 86, and one isolated patch located east of MH 95), and
- a stand of southern willow scrub adjacent to the main tributary drainage channel near manhole 88 (shown on Figure 4).

The USACE wetlands shown on Figure 4 sample point (SPs) 9 and 4 are characterized by freshwater marsh dominated by cattails (*Typha latifolia*, OBL) and California tule (S*cirpus californicus*, OBL). Hydrological indicators included surface water running within the channel during the survey. No soil pits were dug at these locations due to a restrictive layer of cobble present in the drainage. However, soils were assumed because of the dominance of OBL freshwater marsh plant species and the presence of primary indicators of hydrology.

The USACE wetlands adjacent to the tributary south of Alvarado Canyon Creek near sample point 8 consisted of disturbed southern willow scrub dominated by arroyo willow (*Salis lasiolepis*, FACW), coyote bush (*Baccharis pilularis*, NI), pampas grass (*Cortederia selloana*, NI), mule fat (FACW), and yerba mansa (OBL). Hydrology indicators included standing water. Hydric soils were indicated by the presence of a depleted matrix. This wetland is believed to be supported by the tributary and its hydrology is thus directly influenced by the tributary.

All other sample points analyzed did not meet all three parameters needed to indicate USACE wetland. If points were taken within a drainage feature (including Alvarado Canyon Creek and its southern tributary) where hydrology indicators were observed but no hydric soil indicators and/or hydrophytic vegetation were present, then that feature or portion of a feature was deemed a non-wetland Water of United States.

5.1.2 USACE/RWQCB Non-Wetland Waters of the United States

Waters determined to be USACE non-wetland Waters of the United States consists of portions of Alvarado Canyon Creek and its southern tributary, and two ephemeral drainage channels that exist within the upland portion of the project site (Figure 4).

5.1.3 CDFG Jurisdiction

Resources determined to be jurisdictional under CDFG include all areas that are jurisdictional under USACE, and all riparian canopy associated with any of the drainage features observed within the project area (Figure 4). These areas include the streambed (bank to bank) and the vegetation associated with Alvarado Canyon Creek and its southern tributary, and the two ephemeral drainage channels shown on Figure 4. Riparian habitats that likely fall under CDFG jurisdiction are represented by sample points 1, 3, and 5. Only the hydrophytic vegetation criteria were met at these three sample points.

Additionally, CDFG would likely take jurisdiction of a small patch of mule fat scrub in the southern portion of the project site and a small patch of freshwater marsh located east of MH 95 (Figure 4). The patch of mule fat scrub vegetation is represented by SP 6 and consisted of mule fat scrub dominated by mule fat (*Baccharis salicifolia*, FACW), yerba mansa (*Anemopsis californica*, OBL), and cattails. Hydrology indicators included saturation in the top 12 inches. A depleted matrix within the soils indicated the presence of hydric soils. Although this area meets all three criteria to be jurisdictional as a USACE wetland, this area is located on an upland slope out of the range of influence from Alvarado Canyon Creek or its southern tributary. Although this area is considered isolated from USACE regulated waters it would likely fall under the jurisdiction of CDFG.

5.1.4 City of San Diego Jurisdiction

Resources determined to be wetlands under the City's ESL regulations within the project area include Alvarado Canyon Creek and its southern tributary, the two ephemeral channels discussed above, and the isolated patches of mule fat scrub and freshwater marsh vegetation (Figure 4).

5.2 Jurisdictional Impacts Analysis

Table 5-1 shows the jurisdictional impacts that would occur from the Alvarado Trunk Sewer Phase III project. These impacts occur within a 5-foot radius around manholes 91, 92, and 320; as a result of the jack-and-bore activities at MH 93; and as a result of the proposed temporary access road necessary to access manholes 84, 85, 86, 87, and 88. Steel plates would be used to allow for a vehicular crossing of the tributary that runs north to south near MHs 84-88, which would avoid impacts to USACE jurisdiction. However, the access road east and west of the plates would result in impacts to CDFG jurisdiction (riparian vegetation/canopy).

Table 5-1 Summary of Anticipated Jurisdictional Impacts by the Proposed Project

Vegetation Community	USACE and RWQCB				CDFG	
	Non-wetland Waters		Wetlands			
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
Disturbed Riparian Woodland	-	0.0 acre	-	-	-	*0.022 acre
Total	-	0.0 acre	--	--		*0.022 acre

*Encompasses all City of San Diego jurisdictional wetlands within the project impact areas.

5.3 Conclusions

The proposed project would result in temporary impacts to CDFG jurisdictional resources (i.e., riparian vegetation associated with Alvarado Canyon Creek and its tributary). Permits/approvals from CDFG and the City would be required prior to construction. Mitigation for these impacts will be determined through consultation with CDFG and the City of San Diego Development Services Department and will likely consist of the use of existing Public Utilities grouped mitigation sites.

Chapter 6
References

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Chapter 7
List of Preparers

7.1 ICF International

Daylon Teel	Author, Biologist
Korey Klutz	Primary Reviewer, Senior Biologist
Erin Schorr	Reviewer, Senior Biologist
Teal Zeisler	GIS Specialist

Appendix A
Photographs



Photo 1 – Sample point 1 at manhole 91.



Photo 2 – Sample point 2 within stream, south of manhole 91.



Photo 3 – Sample point 3, south of manhole 91.



Photo 4 – Sample point 4 near manhole 92.



Photo 5 – Sample point 5, near manholes 320 and 93.


Photo 6 – Sample point 6, along foot path to manhole 89.



Photo 7 – Sample point 7, near manhole 88



Photo 8 – Sample point 8 within southern willow scrub.



Photo 9 – Sample point 9, freshwater marsh near manhole 87 and 88.



Photo 10 – Sample point 10, baccharis scrub.

Appendix B
Wetland Delineation Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09

Applicant/Owner: City of San Diego State: CA Sampling Point: 1

Investigator(s): Dudek Section, Township, Range: T16S, R2W

Landform (hillslope, terrace, etc.): Canyon Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): C Lat: 32°46'55"N Long: 117°4'35"W Datum: NAD83

Soil Map Unit Name: Riverwash NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation —, Soil —, or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation —, Soil —, or Hydrology — naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks: CDFG Jurisdiction

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Arundo donax	45	Y	FACW
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: Dist Riparian

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2						Silty Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Caliche

Depth (inches): 6

Hydric Soil Present? Yes _____ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: no hydrology indicators

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09

Applicant/Owner: City of San Diego State: CA Sampling Point: 2

Investigator(s): Dudek Tnt Section, Township, Range: T16S, R2W

Landform (hillslope, terrace, etc.): Canyon Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): C Lat: 32°46'54.854"N Long: 117°4'34.526"W Datum: NAD83

Soil Map Unit Name: Riverwash NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	Is the Sampled Area within a Wetland? Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: Unvegetated channel under canopy of NWI/OR, NWW

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No _____

Remarks: No veg present in channel

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: cobbl.

Depth (inches): 0

Hydric Soil Present? Yes ____ No X

Remarks: unable to dig due to cobble

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ____ Depth (inches): 8

Water Table Present? Yes ____ No X Depth (inches): —

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): —

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09

Applicant/Owner: City of San Diego State: CA Sampling Point: 3

Investigator(s): Taylor Ind Section, Township, Range: T16S, R2W

Landform (hillslope, terrace, etc.): Canyon Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): C Lat: 32°46'54"N Long: 117°04'34"W Datum: NAD83

Soil Map Unit Name: Riverwash NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: CDFG Jurisdiction

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	70	Y	FACW
2. Schinus terebinthifolius	20	Y	NI
3. Salix gooddingii	5	N	OBL
4.			
Total Cover:	95		
Sapling/Shrub Stratum			
1. Washingtonia robusta	10	Y	FACW
2. Salix gooddingii	5	Y	OBL
3.			
4.			
5.			
Total Cover:	15		
Herb Stratum			
1. Arundo donax	5	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	5		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: Canopy of Dist Rip

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2						Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: non-hydric soils

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 41
Investigator(s): Dayton Taft Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): Drop Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR): C Lat: 32°46'54.938"N Long: 117°4'36.574"W Datum: NAD83
Soil Map Unit Name: Olivenhain-Urban NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: MH 92 next to lower terrace.

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	35	Y	FACW
2. Schinus terebinthifolius	10	Y	NL
3.			
4.			
Total Cover:	45		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Arundo donax	30	Y	FACW
2. Ricinus communis	2	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	32		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species —	x 1 =
FACW species 2	x 2 = 4
FAC species —	x 3 =
FACU species 1	x 4 = 4
UPL species —	x 5 =
Column Totals: 3 (A)	8 (B)

Prevalence Index = B/A = 2.6

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: NNV

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2						Silty Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 4

Hydric Soil Present? Yes ____ No X

Remarks: unable to dig past 4in due to cobble

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- X Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): ____

Water Table Present? Yes ____ No ____ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ____ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: NH in lower terrain. Signs of hydrology

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado trunk sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 5
Investigator(s): Dudek Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): Canyon Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): C Lat: 32°46'54.588"N Long: 117°4'28.442"W Datum: NAD83
Soil Map Unit Name: Olivenhain-Urban NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation —, Soil —, or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation —, Soil —, or Hydrology — naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: Outside OHWM. CDFG, across thru existing road (see GPS)

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	25	Y	FACW
2. Salix lasiolepis	10	Y	FACW
3.			
4.			
Total Cover:	35		
Sapling/Shrub Stratum			
1. Sabinea frutescens	15	Y	NI
2. Baccharis pilularis	8	Y	NI
3.			
4.			
5.			
Total Cover:	23		
Herb Stratum			
1. Arundo donax	25	Y	FACW
2. Artemisia douglasiana	15	Y	FACW
3. Foeniculum vulgare	2	N	FACU
4.			
5.			
6.			
7.			
8.			
Total Cover:	42		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species —	x 1 =
FACW species 4	x 2 = 8
FAC species	x 3 =
FACU species 1	x 4 = 4
UPL species	x 5 =
Column Totals: 5 (A)	12 (B)

Prevalence Index = B/A = 2.4

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1						SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 4

Hydric Soil Present? Yes ____ No X

Remarks: unable to dig further than 4 in due to rock

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- X Drift Deposits (B3) (**Riverine**) ?
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): ____

Water Table Present? Yes ____ No ____ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ____ Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No sign of hydrology

US Army Corps of Engineers

Arid West – Version 11-1-2006

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 6
Investigator(s): Dudek Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): concave Slope (%): 0-4
Subregion (LRR): Lat: 32°46'48"N Long: 117°4'32"W Datum: NAD83
Soil Map Unit Name: Olivenhain-Cobbly Loam NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
DP located in channel w/ upland veg

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Baccharis pilularis	35	Y	—
2. Salvia mellifera	10	Y	—
3.			
4.			
5.			
Total Cover:	45		
Herb Stratum			
1. Brassica nigra	30	Y	—
2. Bromus madritensis	20	Y	NI
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	50		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3						L	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): —

Water Table Present? Yes _____ No _____ Depth (inches): —

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): —

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-08
Applicant/Owner: City of San Diego State: CA Sampling Point: 7
Investigator(s): Taylor Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): C Lat: 32°46'47.842"N Long: 117°4'33.6"W Datum: NAD83
Soil Map Unit Name: Olivenhain-Cobbly loam NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	Is the Sampled Area within a Wetland? Yes ____ No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks: MH on edge of wet + wetland. Some FAMN sp w/ MFS, Sup from urban runoff

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Baccharis salicifolia	45	Y	FACW
2. Baccharis pilularis	25	Y	NI
3.			
4.			
5.			
Total Cover: 70			
Herb Stratum			
1. Typha latifolia	35	Y	OBL
2. Anemopsis californica	25	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover: 60			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/2		7.5YR 5/8				Sandy Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Hydric Soils present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 4

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Saturation in upper 12

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 8
Investigator(s): Dayton Tait Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0-2
Subregion (LRR): C Lat: 32°46'49.507"N Long: 117°4'33.645"W Datum: NAD83
Soil Map Unit Name: Olivenhain-Cobbly Loam NWI classification: —
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	Is the Sampled Area within a Wetland? Yes ____ No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:
DP is in adjacent wetland. Surface water connects w/ main drainage when flooding

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	35	Y	FACW
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Baccharis salicifolia	15	Y	FACW
2. Baccharis pilularis	10	Y	NI
3.			
4.			
5.			
Total Cover:	35		
Herb Stratum			
1. Cortaderia selloana	15	Y	—
2. Animopsis californica	15	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	30		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2		7.5Y 5/8	2	C	M	SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: PF is in a swale adjacent to main channel. understory vegetation layer over

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 9
Investigator(s): Blythe Tull Section, Township, Range: T16S, R2W
Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 0-2
Subregion (LRR): C Lat: 32°46'49"N Long: 117°04'33"W Datum: NAD83
Soil Map Unit Name: Olivenhain Cobbly Loam NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks: FwM

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	15	Y	FACW
2. Washingtonia robusta	5	Y	FACW
3.			
4.			
Total Cover:	15		
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Sueda californica	45	Y	OBL
2. Typha latifolia	35	Y	OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover:	80		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/1						SL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 6

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: pl dry

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Alvarado Trunk Sewer City/County: San Diego Sampling Date: 12-2-09
Applicant/Owner: City of San Diego State: CA Sampling Point: 10
Investigator(s): D Taylor Section, Township, Range: T16S R2W
Landform (hillslope, terrace, etc.): upland Local relief (concave, convex, none): Convex Slope (%): 0-4
Subregion (LRR): C Lat: 32°46'51.858"N Long: 117°4'23.7564" Datum: NAD 83
Soil Map Unit Name: Olivenhain cobbly loam NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
upland area. Baccharis scrub

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Baccharis pilularis	40	Y	NL
2.			
3.			
4.			
5.			
Total Cover: 40			
Herb Stratum			
1. Brassica nigra	25	Y	NL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover: 25			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)
Total Number of Dominant Species Across All Strata: ____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
__ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y 4/2						SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: Compacted

Depth (inches): 6

Hydric Soil Present? Yes _____ No X

Remarks: Non-hydric soil present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: no sign of hydro

US Army Corps of Engineers

Arid West – Version 11-1-2006

Appendix C
Jurisdictional Delineation Forms

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:California County/parish/borough: San Diego City: San Diego
Center coordinates of site (lat/long in degree decimal format): Lat. 117.074979° **N**, Long. 32.781183° **W**.
Universal Transverse Mercator: 492988.4E, 36270471.66N
Name of nearest waterbody:
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Diego River
Name of watershed or Hydrologic Unit Code (HUC):

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 12/2/2009

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or .4 acres.
      Wetlands: .01 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
      Elevation of established OHWM (if known):140-180ft.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **Adjacent wetland with no connection to non-rpw (isolated)**.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 440**square miles**
Drainage area: **Pick List**
Average annual rainfall: 11.04 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **1-2** river miles from TNW.
Project waters are **1-2** river miles from RPW.
Project waters are **1-2** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Alvarado Canyon Creek flows directly into San Diego River which flows into the Pacific Ocean.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: Alvarado Canyon Creek flows from Lake Murray through culverts and into a concrete lined channel that eventually flows into the San Diego River.

Tributary properties with respect to top of bank (estimate):
Average width: 15 feet
Average depth: 5 feet
Average side slopes: **4:1 (or greater).**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☒ Concrete
☒ Cobbles	☒ Gravel	☐ Muck
☒ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☒ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☒ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☒ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☒ physical markings;
☐ physical markings/characteristics	☒ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Water was flowing at time of survey, clear..
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☒ Riparian corridor. Characteristics (type, average width): southern willow scrub, disturbed riparian, 50ft.
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **1**

Approximately (0.06) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Recieves flow from Murray Reservoir. water flowing during non-typical time of year.
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: **3,000** linear feet**15-30**width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: **adjacent drainage that flows into Alvarado Creek and epemeral drainages..**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **.**

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: wetlands within Alvarado Creek.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:California County/parish/borough: San Diego City: San Diego
Center coordinates of site (lat/long in degree decimal format): Lat. 117.074979° **N**, Long. 32.781183° **W**.
Universal Transverse Mercator: 492988.4E, 36270471.66N
Name of nearest waterbody:
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Diego River
Name of watershed or Hydrologic Unit Code (HUC):

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 12/2/2009

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
      Elevation of established OHWM (if known):140-180ft.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **Adjacent wetland with no connection to non-rpw (isolated)**.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 440**square miles**
Drainage area: **Pick List**
Average annual rainfall: 11.04 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☒ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **1-2** river miles from TNW.
Project waters are **1-2** river miles from RPW.
Project waters are **1-2** aerial (straight) miles from TNW.
Project waters are **1-2** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Alvarado Canyon Creek flows directly into San Diego River. Tribuary 1 flows into Alvarado Canyon Creek.

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☒ Manipulated (man-altered). Explain: Alvarado Canyon Creek flows from Lake Murray through culverts and into a concrete lined channel that eventually flows into the San Diego River.

Tributary properties with respect to top of bank (estimate):
Average width: 15 feet
Average depth: 5 feet
Average side slopes: **4:1 (or greater).**

Primary tributary substrate composition (check all that apply):

☒ Silts	☐ Sands	☐ Concrete
☒ Cobbles	☒ Gravel	☐ Muck
☒ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☒ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☒ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☒ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☒ physical markings;
☐ physical markings/characteristics	☒ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Water was flowing at time of survey, clear..
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☒ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **1**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: No flow during survey, water flow from culvert.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: **.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **wetland is located within Alvarado Creek.**

☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: wetland is located within drainage.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.03**acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☒ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 0.02acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:California County/parish/borough: San Diego City: San Diego
Center coordinates of site (lat/long in degree decimal format): Lat. 117.074979° **N**, Long. 32.781183° **W**.
Universal Transverse Mercator: 492988.4E, 36270471.66N
Name of nearest waterbody:
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Diego River
Name of watershed or Hydrologic Unit Code (HUC):

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): 12/2/2009

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☒ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
      Elevation of established OHWM (if known):140-180ft.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **Adjacent wetland with no connection to non-rpw (isolated)**.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: 440**square miles**
Drainage area: **Pick List**
Average annual rainfall: 11.04 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **2** tributaries before entering TNW.

Project waters are **1-2** river miles from TNW.
Project waters are **1-2** river miles from RPW.
Project waters are **1-2** aerial (straight) miles from TNW.
Project waters are **1-2** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Upland vegetated drainages that flow into Alvarado Canyon Creek directly and indirectly.
Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: Alvarado Canyon Creek flows from Lake Murray through culverts and into a concrete lined channel that eventually flows into the San Diego River.

Tributary properties with respect to top of bank (estimate):
Average width: 2 feet
Average depth: 1 feet
Average side slopes: **4:1 (or greater).**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☒ Vegetation. Type/% cover: upland veg,	
☒ Other. Explain: Loamy sand.		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Ephemeral flow**
Estimate average number of flow events in review area/year: **6-10**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **1**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: No flow during survey, water flow from culvert.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☒ Other non-wetland waters: **0.2**acres.
Identify type(s) of waters: **ephemeral drainage.**

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **.**

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

Attachment F
Revegetation Plan

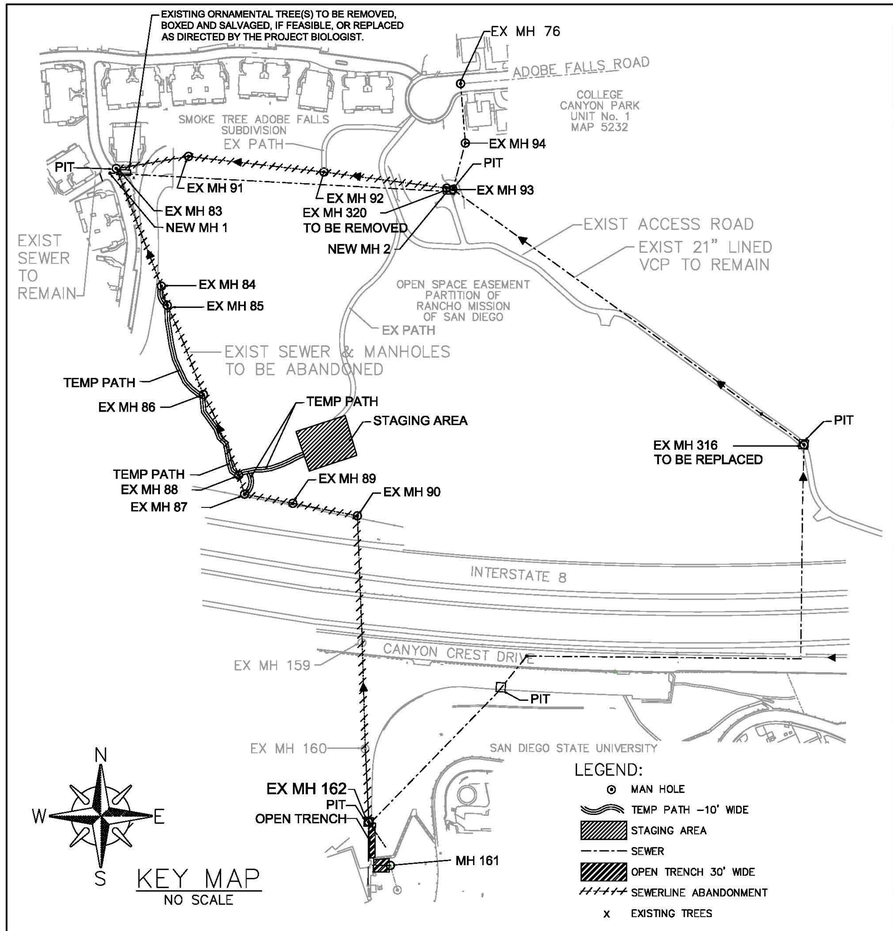


TABLE 1: Restoration Areas	
MANHOLE	**SEED MIX TO BE USED**
84	COASTAL SAGE SCRUB
85	COASTAL SAGE SCRUB
86	COASTAL SAGE SCRUB
87	COASTAL SAGE SCRUB
88	COASTAL SAGE SCRUB
89	COASTAL SAGE SCRUB
90	COASTAL SAGE SCRUB
91	SOUTHERN WILLOW SCRUB
92	SOUTHERN WILLOW SCRUB
93	SOUTHERN WILLOW SCRUB
94	EROSION CONTROL
161	EROSION CONTROL
162	EROSION CONTROL
316	COASTAL SAGE SCRUB
320	SOUTHERN WILLOW SCRUB
STAGING AREA	COASTAL SAGE SCRUB
TEMP PATH	COASTAL SAGE SCRUB, IF REQUIRED/DISTURBED
OPEN TRENCH	EROSION CONTROL

TABLE 2: Seed Mix for Coastal Sage Scrub (0.343 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Artemisia californica	Coastal sagebrush	3.0	0.91
Baccharis sarothroides	Broom baccharis	6.0	1.81
Encelia californica	California Encelia	4.0	1.21
Eriogonum fasciculatum	California buckwheat	6.0	1.81
Lotus scoparius	Deerweed	3.0	0.91
Malosma laurina (cleaned Scarified)	Laurel Sumac	2.2	0.66
Salvia mellifera	Black sage	1.5	0.45

TABLE 3: Seed Mix for Southern Willow Scrub (0.022 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Anemopsis californica	Yerba Mansa	2.0	0.44
Artemisia douglasiana	Douglas mugwort	2.0	0.44
Juncus acutus	Spiny Rush	4.0	0.88
Leymus condensatus	Giant Wild Rye	4.0	0.88
Oenothera elata ssp. hookeri	Great Marsh Evening-Primrose	1.0	0.22

TABLE 4: Seed Mix for Erosion Control (0.082 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Achillea millefolium	White Yarrow	0.43	0.02
Clarkia amoena	Farewell to Spring	1.20	0.04
Eschscholzia californica	California Poppy	1.70	0.06
Hordeum californicum	California Barley	4.80	0.17
Layia platyglossa	Tidytips	1.20	0.04
Linum lewisi	Blue Flax	3.40	0.12
Lipinus bicolor	Miniature Lupine	1.80	0.07
Lupinus succulentus	Arroyo Lupine	2.70	0.10
Melica californica	California Melic	3.90	0.14
Nassella pulchra	Purple Needlegrass	6.00	0.22
Vulpia microstachys	Small Fescue	5.10	0.18

** SEED TAGS SHALL BE SUBMITTED TO THE PROJECT BIOLOGIST PRIOR TO APPLICATION OF SEED.

** THE SEED MIX IS COMPRISED OF NATIVE PLANT SPECIES. ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE PROJECT BIOLOGIST PRIOR TO APPLICATION OF SEED.

** %PLS IS THE MINIMUM PERCENT PURE LIVE SEED PER POUND OF SEED. THE PERCENTAGE IS CALCULATED BY MULTIPLYING THE PERCENT SEED PURITY BY PERCENT SEED GERMINATION, WHICH SHALL BE THE METHOD USED BY THE PROJECT BIOLOGIST TO DETERIMINE SEED QUALITY, UNLESS THE BIOLOGIST SPECIFICALLY REQUEST THE %PLS METHOD TO BE USED.

** SOIL SHALL BE PRESOAKED WITHIN 3 DAYS OF SEEDING TO A DEPTH OF 3 INCHES, OR AS RECOMMENDED BY THE PROJECT BIOLOGIST.

GENERAL REVEGETATION NOTES:

1. REVEGETATION OF THE PROJECT AREA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF SAN DIEGO LANDSCAPE STANDARDS.
2. REVEGETATION SHALL BE PERFORMED IN ACCORDANCE WITH THE BIOLOGICAL IMPACT REPORT AND THIS REVEGETATION PLAN PREPARED FOR THIS PROJECT, DATED JANUARY 2011 AND PREPARED BY ICF INTERNATIONAL.
3. THE UPPER SIX-INCHES OF TOPSOIL FROM THE SITE SHALL BE SALVAGED, AS DIRECTED BY THE PROJECT BIOLOGIST. PROJECT BIOLOGIST SHALL ENSURE THAT SOIL WILL BE STOCKPILED WITHIN THE LIMITS OF THE PROJECT, NO MORE THAN THREE FEET HIGH WHEN POSSIBLE. BMPS, SILT FENCING, AND/OR COVER SHALL BE INSTALLED AROUND THE STOCKPILE TO PREVENT EROSION AND AS A BARRIER TO PRECLUDE ANY UNAUTHORIZED ACCESS, OR AS RECOMMENDED BY THE PROJECT BIOLOGIST.
4. PRIOR TO REVEGETATION AND/OR PLANT INSTALLATION, THE PROJECT BIOLOGIST SHALL DIRECT THE CONTRACTOR AND LANDSCAPE CONTRACTOR AS TO THE SALVAGED SOIL RELOCATION, RE-COMPACTION (70 TO 80 PERCENT), AND PREPARATION FOR REVEGETATION PURPOSES.
5. SEED MIX AND/OR CONTAINER STOCK USED FOR EROSION CONTROL AND ON SLOPES SHALL ACHIEVE 100 PERCENT (OR AS APPROVED BY THE PROJECT BIOLOGIST AND CITY REPRESENTATIVE BASED ON SITE CONDITIONS IF LESSER % COVERAGE) SOIL COVERAGE WITHIN 25 MONTHS OF BEING INSTALLED, AFTER THE 120 DAY PLANT ESTABLISHMENT PERIOD (PEP). AT THE END OF YEAR 1, PLANT COVERAGE SHALL MEET50% PERCENT COVERAGE, AS VERIFIED BY THE PROJECT BIOLOGIST (TABLE 8).
6. REVEGETATION OF MANUFACTURED SLOPES AND OTHER DISTURBED AREAS ADJACENT TO AREAS OF NATIVE VEGETATION SHALL BE ACCOMPLISHED IN A MANNER SO AS TO PROVIDE VISUAL AND HORTICULTURAL COMPATIBILITY WITH THE INDIGENOUS NATIVE PLANT MATERIALS.
7. INVASIVE, NON-NATIVE PLANT SPECIES INCLUDING BUT NOT LIMITED TO THOSE LISTED IN THE CITY'S LANDSCAPE STANDARDS ARE PROHIBITED.
8. REVEGETATION AND EROSION CONTROL TIMING - ALL REQUIRED REVEGETATION AND EROSION CONTROL SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS OF THE COMPLETION OF GRADING OR DISTURBANCE IN ORDER TO START THE 120 DAY PEP, OR AS RECOMMENDED BY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST.
9. ALL SLOPES 3:1 OR GREATER SHALL REQUIRE BIODEGRADABLE EROSION CONTROL BLANKET OR OTHER SLOPE PROTECTION METHODS AS RECOMMENDED BY THE PROJECT BIOLOGIST PRIOR TO THE INSTALLATION OF THE REVEGETATION, OR IN THE EVENT OF SLOPE OR RESTORATION FAILURE. ANY ABOVE GRADE EROSION CONTROL MEASURES SUCH AS BUT NOT LIMITED TO SILT FENCING, GRAVEL BAGS, FIBER ROLLS AND/OR HAY BALES SHALL BE REMOVED BY THE CONTRACTOR AND AS DIRECTED BY THE PROJECT BIOLOGIST FOLLOWING ACCEPTANCE OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD BY CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
10. 1:1 REPLACEMENT OF ORNAMENTALS (IN KIND) SHALL BE MONITORED AND MAINTAINED FOR A PERIOD OF NO LESS THAN 90 DAYS TO ENSURE SUCCESSFUL ESTABLISHMENT OF PLANTINGS PER CONTRACT SPECIFICATIONS.
11. ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR AT THE INSTALLATION OF ALL REVEGETATION PLANT MATERIALS THROUGH THE 120 DAY PEP, AND UNTIL THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD. FOLLOWING ACCEPTANCE OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST THE CONTRACTOR SHALL REMOVE ALL ORANGE FENCING.
12. CONTRACTOR SHALL REMOVE ALL TRASH AND/OR DEBRIS FROM THE REVEGETATION SITE PRIOR TO AND FOLLOWING THE REVEGETATION INSTALLATION, AND UNTIL THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD.

SEED MIXES:

1. THE NATIVE SEED MIXES IN TABLES 2 - 4 SHALL BE PLANTED IN COASTAL SAGE SCRUB, BACCHARIS SCRUB, COASTAL SAGE-CHAPARRAL SCRUB, NON-NATIVE GRASSLAND, AND DISTURBED HABITAT REVEGETATION AREAS IN ACCORDANCE WITH TABLE 1. THE SEED SHALL BE INSTALLED VIA HYDROSEED METHODS, UNLESS OTHERWISE DIRECTED BY THE PROJECT BIOLOGIST.
2. THE NATIVE SOUTHERN WILLOW SCRUB SEED MIX IN TABLE 3 SHALL BE PLANTED IN DISTURBED RIPARIAN WOODLAND AND MULE-FAT SCRUB REVEGETATION AREAS. THE SEED SHALL BE INSTALLED VIA HYDROSEED METHODS, UNLESS OTHERWISE DIRECTED BY THE PROJECT BIOLOGIST.
3. THE EROSION CONTROL SEED MIX IN TABLE 4 SHALL BE PLANTED IN THE ORNAMENTAL ASSOCIATED WITH MAN HOLES 94, 161, AND 162 OR AS DIRECTED BY PROJECT BIOLOGIST.
4. ALL SEEDS SHALL ORIGINATE FROM WITHIN A 25 MILE RADIUS OF THE PROJECT SITE OR CONTRACTOR TO PROVIDE EVIDENCE THAT THE SEED IS NOT AVAILABLE AND NOTIFY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.

HYDROSEEDING PROCEDURES

1. SEEDING SHALL OCCUR ONLY AFTER THE PROJECT BIOLOGIST HAS OBSERVED AND APPROVED THAT THE SITE HAS BEEN PROPERLY PREPARED.
2. IN AREAS PREVIOUSLY SUPPORTING NON-NATIVE GRASSLAND, SOILS WILL BE PREPARED AS RECOMMENDED BY PROJECT BIOLOGIST PRIOR TO APPLYING HYDROSEED.
3. FIBER MULCH OR BONDED FIBER MATRIX (BFM) SHALL BE APPLIED AT THE MINIMUM RATE OF 2,000 POUNDS PER ACRE.
4. FIBER MULCH OR BFM SHALL BE UNIFORMLY SPREAD AND "TACKED" WITH BINDER AT A MINIMUM RATE OF 160 LBSPER ACRE. THE BINDER SHALL BE AN ORGANIC DERIVATIVE OR PROCESSED ORGANIC ADHESIVE.
5. A WETTING AGENT CONSISTING OF ONE TON PER ACRE AGRICULTURAL GYPSUM (95% ALKYL POLYETHYLENE GLYCOL ETHER OR AS APPROVED BY THE BIOLOGIST) SHALL BE APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS OR RECOMMENDED BY THE BIOLOGIST.
6. EQUIPMENT USED FOR THE APPLICATION OF SLURRY SHALL HAVE A BUILT-IN AGITATION SYSTEM TO SUSPEND AND HOMOGENEOUSLY MIX THE SLURRY, THE SLURRY MIX SHALL BE DYED GREEN. THE EQUIPMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY.
7. HYDROSEED SHALL BE APPLIED BETWEEN OCTOBER 1 AND FEBRUARY 15 DURING RAINY SEASON. PROJECT BIOLOGIST SHALL RECOMMEND TEMPORARY IRRIGATION MEASURES AS NEEDED. CONTRACTOR SHALL PROPOSE METHODS OF IRRIGATION AND SHALL PROVIDE IRRIGATION LINES AND APPURTENANCES.
8. HYDROSEED APPLIED FEBRUARY 15 - OCTOBER 1 SHALL REQUIRE A COMPREHENSIVE IRRIGATION PLAN AND APPROVAL BY CITY REPRESENTATIVE AND PROJECT BIOLOGIST . CONTRACTOR SHALL PREPARE AND SUBMIT THE PLAN TO THE CITY FOR APPROVAL. CONTRACTOR SHALL PROVIDE ALL IRRIGATION LINES AND APPURTENANCE IN ACCORDANCE WITH THE PLAN AND MAKE ANY ADJUSTMENTS NECESSARY TO MET THE SUCCESS CRITERIA PER PROJECT BIOLOGIST RECOMMENDATIONS.

CONTAINER PLANT PROCEDURES:

1. IN ADDITION TO HYDROSEED IN TABLES 2, 3, AND 4, AND CONTAINER PLANTS LISTED IN TABLES 5 AND 6, CONTRACTOR SHALL SUPPLY AND PLANT UP TO 2000 (1) GALLON CONTAINER PLANTS PER ACRE OF NON-INVASIVE AND NATIVE PLANTS AT THE RECOMMENDATION AND UNDER THE DIRECTION OF THE PROJECT BIOLOGIST. PROJECT BIOLOGIST SHALL CONSIDER THE 120 DAY PEP, 25 MONTH MAINTENANCE AND MONITORING PERIOD, SUCCESS CRITERIA, IN THE EVENT THAT ADDITIONAL CONTAINER PLANTS ARE RECOMMENDED BY THE BIOLOGIST FOR INSTALLATION.
2. CONTAINER PLANTS SHALL BE PROCURED FROM A NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES. SOURCE FOR NATIVE PLANTS MATERIALS SHALL ORIGINATE WITHIN 25-MILES FROM THE COAST WITHIN SAN DIEGO COUNTY TO THE EXTENT PRACTICAL, OR AS DETERMINED BY THE PROJECT BIOLOGIST.
3. CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME AND IN A HEALTHY AND VIGOROUS CONDITION. THE PROJECT BIOLOGIST WILL REJECT PLANT MATERIAL DELIVERED PRIOR TO ITS PLANTING DATE. SPECIMENS SHOWING EVIDENCE OF DISEASE, MISHANDLING, DEFECTS OR DAMAGE, OVER OR UNDERWATERING, OR OTHER DEFICIENCY AT THE TIME OF DELIVERY WILL BE REJECTED.
4. CONTAINER PLANTS WILL BE PLACED FOR PLANTING BY THE PROJECT BIOLOGIST IN THE REVEGETATION AREAS. THE SUGGESTED CONTAINER PLANT INSTALLATION PROCEDURE SHALL BE AS DIRECTED BY THE PROJECT BIOLOGIST.

MAINTENANCE REQUIREMENTS:

1. REVEGETATION AREA SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN 25 MONTHS. ALL REVEGETATED AREAS SHALL BE MAINTAINED BY THE PERMITTEE UNTIL FINAL APPROVAL BY THE CITY. THE MAINTENANCE PERIOD BEGINS ON THE FIRST DAY FOLLOWING ACCEPTANCE (AT END OF 120 DAY PEP) AND MAY BE EXTENDED AT THE DETERMINATION OF THE CITY REPRESENTATIVE.
2. PRIOR TO FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUIRE CORRECTIVE ACTION INCLUDING BUT NOT LIMITED TO REPLANTING, THE PROVISION OR MODIFICATION OR IRRIGATION SYSTEMS, AND THE REPAIR OF ANY SOIL EROSION OR SLOPE SLIPPAGE, IN CONSULTATION WITH THE PROJECT BIOLOGIST.
3. THE 120 DAY PEP FOLLOWS HYDROSEED APPLICATION. THE PEP AND START OF 25 MONTHS MAINTENANCE AS WELL AS ACCEPTANCE FOLLOWING THE MAINTENANCE PERIOD IS DETERMINED BY CITY REPRESENTATIVE IN CONSULTATION WITH PROJECT BIOLOGIST.
4. WEEDING AND/OR HERBICIDE APPLICATION SHALL BE DONE REGULARLY BY THE CONTRACTOR. WEEDING SHALL BE DONE AT A MINIMUM OF BIWEEKLY UNTIL THE END OF THE 120 DAY PEP, AND MONTHLY THROUGHOUT THE 25 MONTHS OF MAINTENANCE. CONTRACTOR SHALL OBTAIN APPROVAL FROM CITY REPRESENTATIVE AND PROJECT BIOLOGIST PRIOR TO HERBICIDE APPLICATION, AND APPLY HERBICIDE PER MANUFACTURER'S RECOMMENDATION AND ANY STATE OF CALIFORNIA GUIDELINES.
5. CONTRACTOR SHALL CONTROL WEEDS AS IDENTIFIED BY THE PROJECT BIOLOGIST SUCH THAT NO WEED COVER EXCEEDS 5% OF THE PROJECT SITE, BEFORE THEY EXCEED TWELVE INCHES (12") IN HEIGHT, AND BEFORE THEY SET SEED.

TEMPORARY IRRIGATION:

1. AT THE DIRECTION OF THE BIOLOGIST, TEMPORARY IRRIGATION WILL BE APPLIED AS FOLLOWS.
2. TEMPORARY IRRIGATION VIA IRRIGATION LINES AND APPURTENANCES (OR ALTERNATE METHOD APPROVED BY PROJECT BIOLOGIST) SHALL BE PROVIDED BY THE CONTRACTOR FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND TO PROVIDE VEGETATIVE COVER THAT PREVENTS SOIL EROSION. THE AMOUNT OF IRRIGATION MUST BE ADJUSTED WHEN WARRANTED BY SITE CONDITIONS. PROJECT BIOLOGIST AND LANDSCAPE CONTRACTOR SHALL MONITOR TO DETERMINE SUCCESS AND ADDED REQUIREMENT FOR TEMPORARY IRRIGATION.
3. IRRIGATION SHALL BE PREFORMED IN A MANNER THAT AVOIDS RUNOFF, SEEPAGE, AND OVERSPRAY ONTO ADJACENT PROPERTIES, NON-IRRIGATED AREAS, WALLS, ROADWAYS, OR STRUCTURES.
4. THE WATER DELIVERY RATE SHALL BE MATCHED TO THE SLOPE GRADIENT AND THE PERCOLATION RATE OF SOIL.
5. IRRIGATION SHALL DELIVER WATER SUFFICIENTLY AND UNIFORMLY AND SHALL BE APPROPRIATE TO THE NEEDS OF THE PLANT MATERIALS. RECOMMENDED REFERENCE MATERIALS FOR IRRIGATION SYSTEMS DESIGN ARE LISTED IN APPENDIX "A" OF THE CITY'S LANDSCAPE STANDARDS.
6. OVERWATERING AS EVIDENCED BY SOGGY SOILS, CONTINUALLY WET PAVEMENT, STANDING WATER, RUNOFF IN STREET GUTTERS AND OTHER SIMILAR CONDITIONS SHALL BE PREVENTED.
7. IF THE PROJECT BIOLOGIST RECOMMENDS AN ALTERNATIVE IRRIGATION METHOD SUCH AS TRUCK WATERING, ALL VEHICLES SHALL STAY ON THE PERMANENT ACCESS ROUTES AND SHALL NOT IRRIGATE BEYOND THE REVEGETATION BOUNDARY.

TABLE 5: Coastal Sage Scrub Container Plant Palette - Manholes 84, 85, 86, 87, 88, 89, 90, & 316*

Scientific Name	Common Name	Container Size	Quantity/ Manhole	Total Quantity
ARTEMISIA CALIFORNICA	COASTAL SAGEBRUSH	1 GALLON	4	32
BACCHARIS SAROTHROIDES	BROOM BACCHARIS	1 GALLON	8	64
ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	1 GALLON	10	80

TABLE 6: Southern Willow Scrub Container Plant Palette - Manholes 91, 92, 93, & 320*

Scientific Name	Common Name	Container Size	Quantity/ Manhole	Total Quantity
Anemopsis californica	Yerba Mansa	1 Gallon	10	40
Artemisia douglasiana	Douglas mugwort	1 Gallon	8	32
Vitis girdiana	California Grape	1 Gallon	2	8

* CONTAINER PLANT TAGS SHALL BE SUBMITTED TO THE PROJECT BIOLOGIST PRIOR TO INSTALLATION OF CONTAINER STOCK.

* CONTAINER PLANTS SHALL BE PLACED WITHIN REVEGETATION CORRIDOR AT THE LOCATIONS RECOMMENDED AND UNDER THE DIRECTION OF THE PROJECT BIOLOGIST.

TABLE 7: SUMMARY AND SCHEDULE FOR MAINTENANCE, MONITORING, AND REPORTING FOR PROJECT

Period	Activity for Project Biologist/Contractor	Biologist Site Visit Frequency	Submittals/ Checklist	Reporting Frequency
Revegetation/ Installation	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for installation and maintenance.	As needed or at least once every two weeks.	Reports prepared by the biologist (based on the revegetation plan criteria)	At successful installation as determined by the project biologist
120 Day PEP	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for maintenance.	For Months 1 & 2- biweekly, Months 3 & 4- at least once a month	Reports prepared by the biologist (based on the revegetation plan criteria)	At the end of PEP**
25-month long term maintenance & monitoring	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for maintenance.	Every 3 months	Reports prepared by the biologist (based on the revegetation plan criteria)	Every 3 months for the first 9 months Year 1** 25 Months**

NOTE: If 25 month success criteria are not met, the M&M program will be extended as required. Quarterly maintenance and monitoring with yearly reporting shall continue as needed.
** PEP, 1 year and 25 month final report(s) required to include above information.

TABLE 8: SUCCESS CRITERIA*

PARAMETER	PERCENT VEGETATION COVER		PLANT SURVIVAL	
	HYDROSEED		CONTAINER PLANTS**	
PERFORMANCE STANDARD - IMPACT AREA	YEAR 1: 25 MONTHS :	50 PERCENT 100 PERCENT	YEAR 1: 25 MONTHS:	100 PERCENT 80 PERCENT
PERFORMANCE STANDARD - ACCESS PATH	YEAR 1: 25 MONTHS :	50 PERCENT 100 PERCENT	YEAR 1: 25 MONTHS:	100 PERCENT 80 PERCENT

* SEE GENERAL REVEGETATION NOTE #5 IF LOWER PERCENT APPROVED BY PROJECT BIOLOGIST.
** CONTAINER PLANTS NOT MEETING PLANT SURVIVAL SUCCESS CRITERIA , AS VERIFIED AND RECOMMENDED BY THE PROJECT BIOLOGIST, SHALL BE REPLACED AND MAINTAINED AT CONTRACTOR'S EXPENSE UNTIL THE SUCCESS CRITERIA HAS BEEN MET.

ICF INTERNATIONAL
9775 Businesspark Ave., Suite 200
San Diego CA. 92131
TEL:(858)578-8964 FAX:(858)578-0573

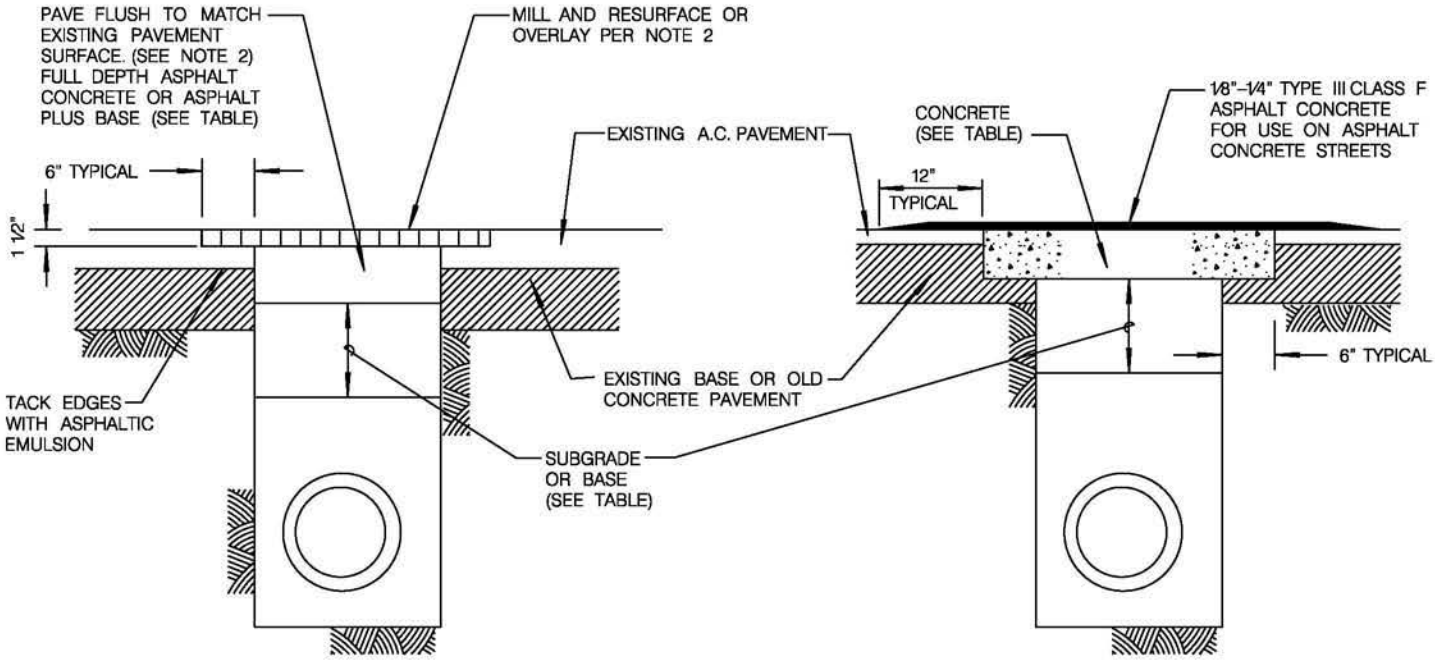
Erin Schorr

Erin Schorr - Project Biologist

ALVARADO TRUNK SEWER PHASE 3 REVEGETATION PLAN

APPENDIX I

STANDARD DRAWING DETAILS



TYPE A

TYPE B

(SEE NOTE 4)

	TYPE A		TYPE B
	ASPHALT	ASPHALT PLUS BASE	CONCRETE
MIX DESIGN	3/4" TYPE III CLASS B3	3/4" TYPE III CLASS B3 PLUS CLASS II BASE	560–C–3250
ALLEYS	8.0"	ASPHALT THICKNESS TO EQUAL	5.5"
LOCAL THROUGH 4 LANE COLLECTORS	10.0"	EXISTING PLUS 1", MIN 4" TO MAX. 9".	7.0"
MAJOR	12.0"	COMBINED ASPHALT PLUS BASE 18" MIN.	9.0"

NOTES:

1. ANY STREET TRENCH 7 FEET IN WIDTH OR GREATER AND LONGER THAN 100 FEET IN OVERALL LENGTH SHALL BE RECONSTRUCTED WITH THE PAVEMENT SECTION FOR THE STREET CLASSIFICATION PER SCHEDULE "J" (SDG–113).

2. ASPHALT TRENCH CAPS IN STREETS NOT RECEIVING A FULL WIDTH OVERLAY PRIOR TO ACCEPTANCE SHALL BE MILLED AS SHOWN AND RESURFACED WITH 1/2" TYPE III CLASS C2 ASPHALT NO LESS THAN 30 DAYS AFTER INITIAL ASPHALT PLACEMENT.

3. 560–C–3250 CONCRETE TREATED WITH A MINIMUM 2% CALCIUM CHLORIDE SOLUTION IN ACCORDANCE WITH 201–1 OR 650–CW–4000 (W/O CC) CONCRETE MAY BE OPENED TO TRAFFIC 3 DAYS AFTER IT IS PLACED. 650–CW–4000 CONCRETE TREATED IN SAME MANNER (W/CC) MAY BE OPENED TO TRAFFIC 24 HOURS AFTER IT IS PLACED. CONCRETE SPECIFIED BY ALTERNATE CLASS OR OTHERWISE CONTAINING FLY ASH IS NOT ALLOWED.

4. USE TYPE "A" UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE CITY ENGINEER.

REVISION	BY	APPROVED	DATE
ORIGINAL		J.P. CASEY	1/24/89
UPDATED	KA	J. NAGELVOORT	01/12

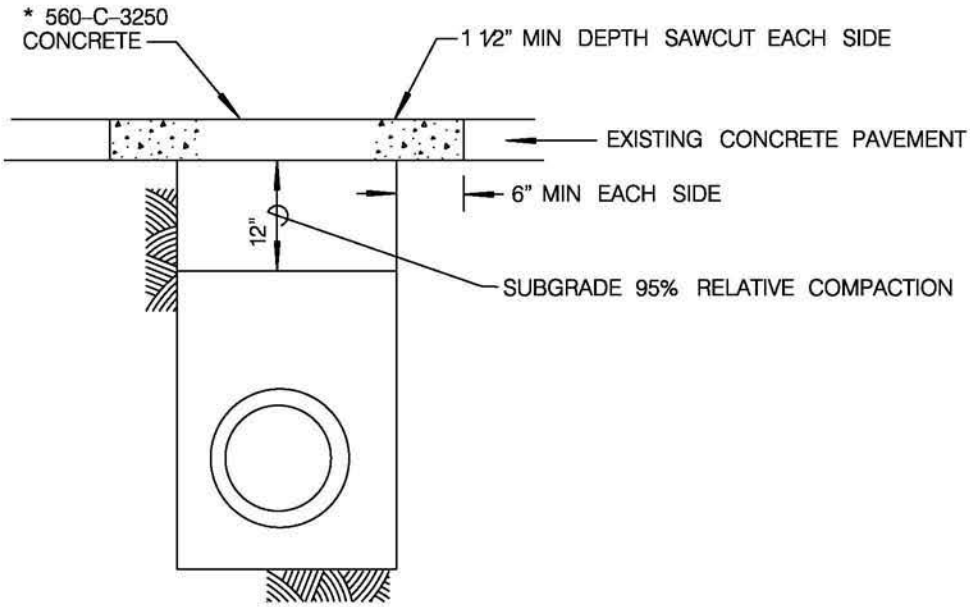
CITY OF SAN DIEGO – STANDARD DRAWING

TRENCH RESURFACING FOR ASPHALT CONCRETE SURFACED STREETS

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDG-107**



NOTES

1. EXISTING CONCRETE PAVEMENT SHALL BE REMOVED.

2. PRIOR TO PLACING CONCRETE, PAVEMENT EDGES SHALL BE TRIMMED TO NEAT HORIZONTAL AND VERTICAL LINES.

3. UNLESS OTHERWISE SPECIFIED, CONCRETE TRENCH COVER SHALL BE A MINIMUM OF 5 1/2" FOR ALLEYS, 7" FOR LOCAL THROUGH FOUR LANE COLLECTOR STREETS AND 9" THICK FOR ALL MAJOR OR GREATER STREET CLASSIFICATIONS.

4. ANY STREET TRENCH 7' IN WIDTH OR GREATER AND LONGER THAN 100' IN LENGTH SHALL BE RECONSTRUCTED WITH THE PAVEMENT SECTION FOR THE STREET CLASSIFICATION PER SCHEDULE "J" (SDG-113). STREET TRENCH SECTIONS 7' IN WIDTH OR GREATER BUT LESS THAN 100' IN OVERALL LENGTH SHALL BE RESURFACED TO A THICKNESS OF 1" GREATER THAN REQUIRED BY NOTE 3 ABOVE.

* IN FOUR-LANE MAJOR OR GREATER STREETS, AN APPROVED SET ACCELERATING ADMIXTURE SUCH AS CALCIUM CHLORIDE, SHALL BE USED IN THE CONCRETE.

REVISION	BY	APPROVED	DATE
ORIGINAL		J.CASEY	01/89
UPDATED	KA	J. NAGELVOORT	01/12

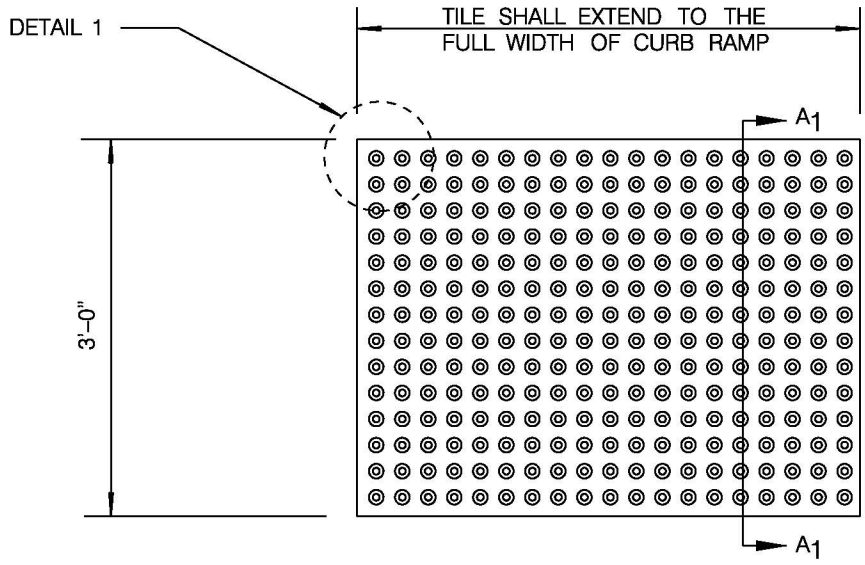
CITY OF SAN DIEGO – STANDARD DRAWING

TRENCH RESURFACING FOR PCC SURFACED STREETS

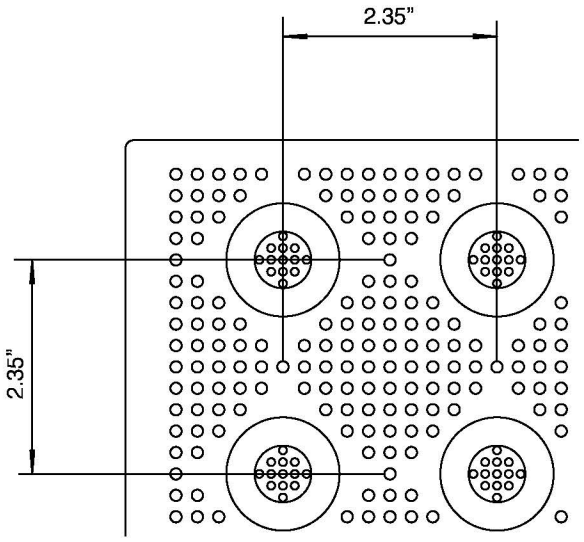
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDG-108**



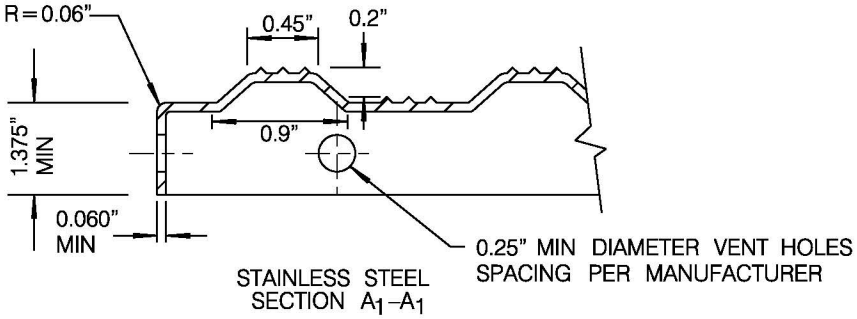
PLAN – TILE



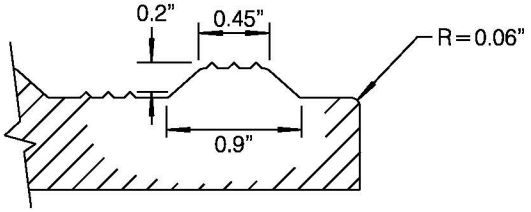
DETAIL 1

NOTES

1. THE DETECTABLE / TACTILE WARNING TILE SHALL BE SLIP RESISTANT AND CONSIST OF AN INLINE PATTERN OF RAISED TRUNCATED DOMES.
2. COLOR: THE DETECTABLE / TACTILE WARNING TILE SHALL BE YELLOW CONFORMING TO FEDERAL STANDARDS 595B TABLE IV, COLOR NO. 33538.



STAINLESS STEEL
SECTION A_1–A_1



COMPOSITE
SECTION A_1–A_1

DETECTABLE / TACTILE WARNING TILES

REVISION	BY	APPROVED	DATE
ORIGINAL	FC	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	02/07
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

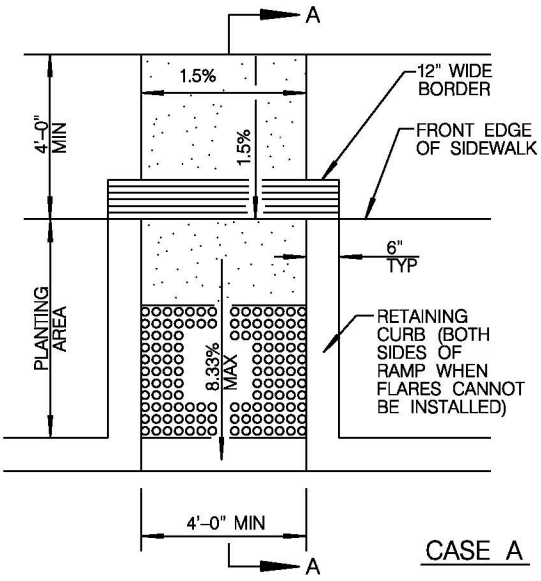
CITY OF SAN DIEGO – STANDARD DRAWING

GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS

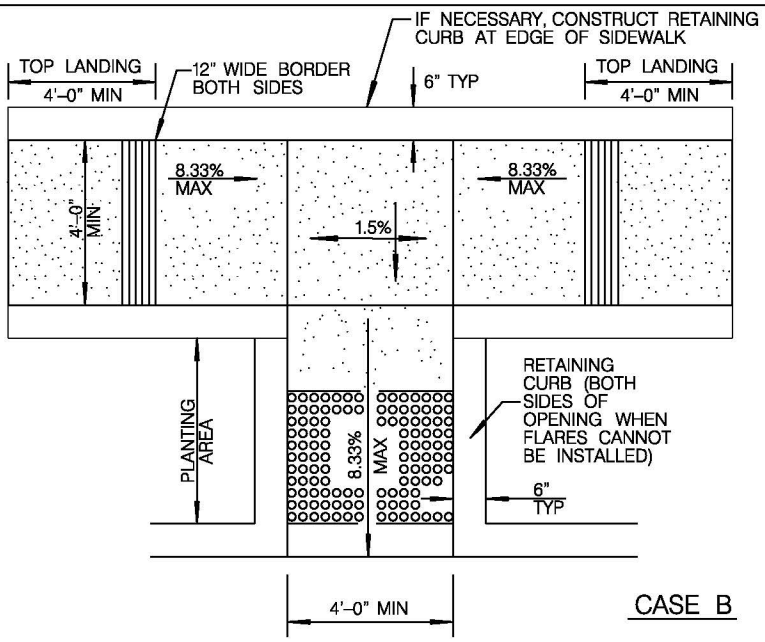
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

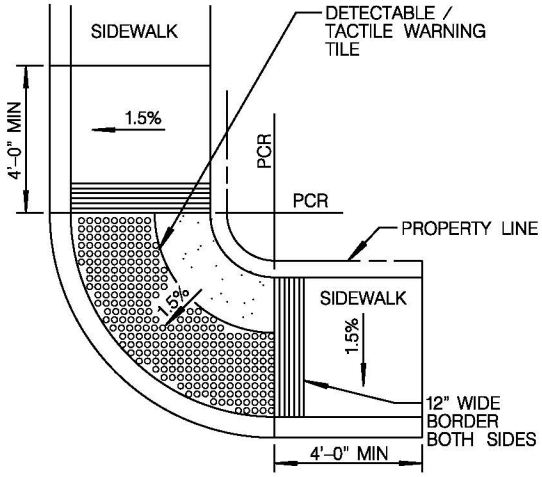
DRAWING NUMBER **SDG-130**



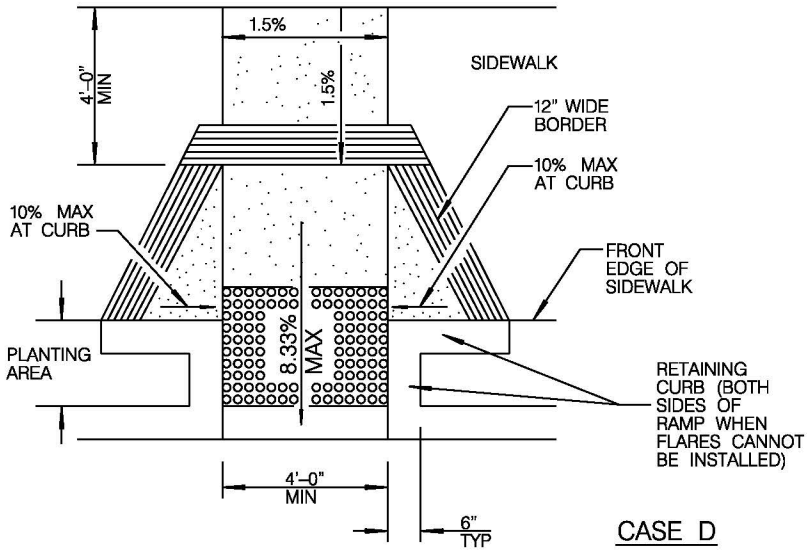
CASE A



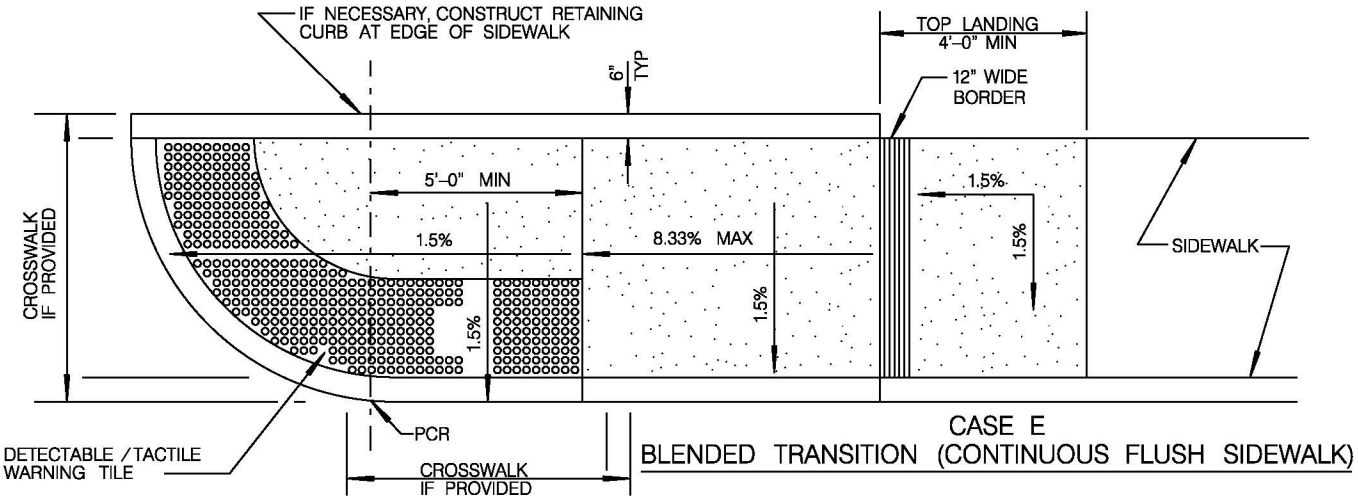
CASE B



CASE C
BLENDED TRANSITION (FLUSH SIDEWALK)



CASE D



CASE E
BLENDED TRANSITION (CONTINUOUS FLUSH SIDEWALK)

NOTE:
CASE A THRU E MAY BE USED ONLY WITH APPROVAL OF THE ENGINEER.

SHEET 2 OF 5

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

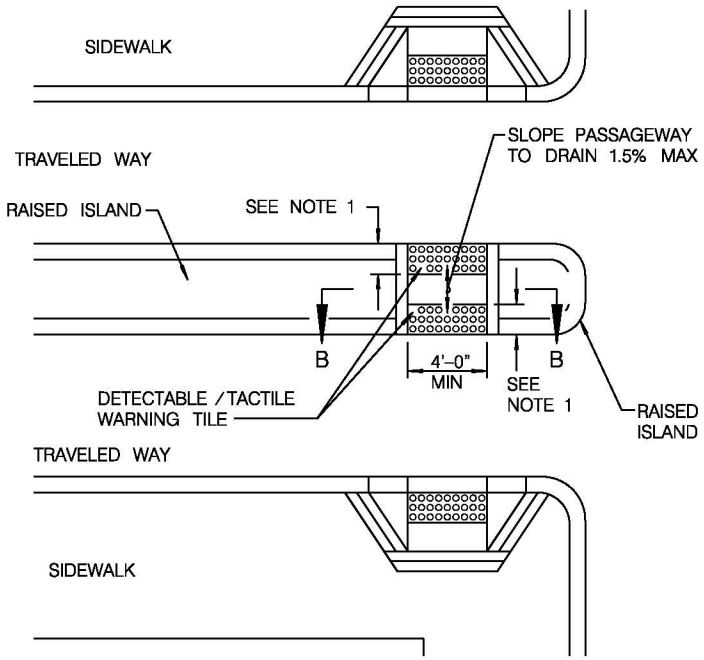
CITY OF SAN DIEGO – STANDARD DRAWING

GENERAL CURB RAMP
NOTES & SUPPLEMENTAL DETAILS

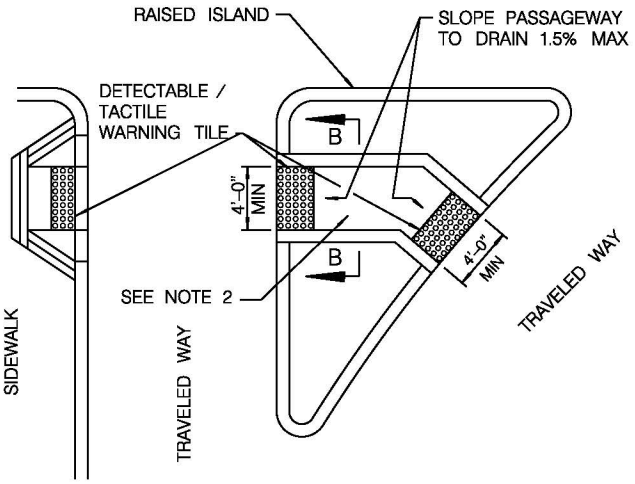
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

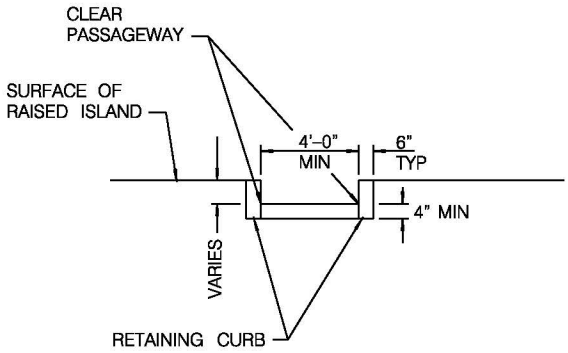
DRAWING NUMBER **SDG-130**



STRAIGHT PASSAGEWAY



ANGULAR PASSAGEWAY

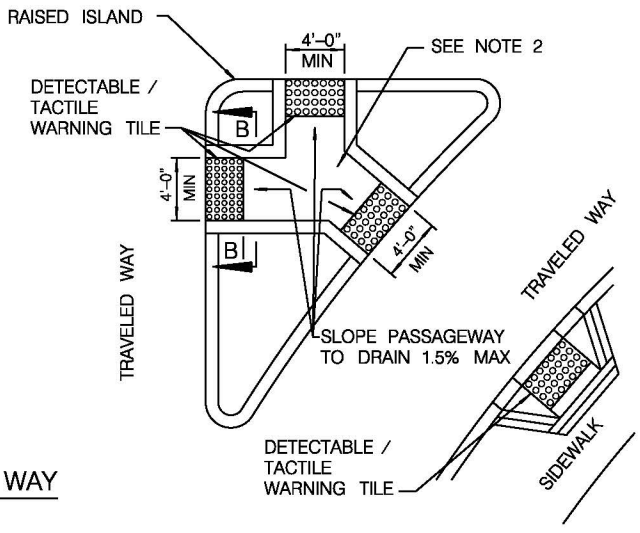


SECTION B–B

NOTES:

1. WHERE AN ISLAND PASSAGEWAY LENGTH IS LESS THAN OR EQUAL TO 8'–0", THE DETECTABLE / TACTILE WARNING TILE SHALL EXTEND THE FULL WIDTH AND FULL LENGTH OF THE PASSAGEWAY. WHERE AN ISLAND PASSAGEWAY LENGTH IS GREATER THAN 8'–0", A DETECTABLE / TACTILE WARNING TILE SHALL EXTEND THE FULL WIDTH AND 3'–0" DEPTH OF THE PASSAGEWAY LENGTH.
2. THE DETECTABLE / TACTILE WARNING TILES AT FLUSH REFUGE OR PASSAGEWAY SHALL BE IN LINE WITH MEDIAN EDGE.
3. FOR FLUSH ISLAND PASSAGEWAY, DETECTABLE WARNING TILE SHALL BE STAINLESS STEEL OR REPLACEABLE PANELS PLACED ON CONCRETE PASSAGEWAY.

ISLAND PASSAGE WAY



TRIANGULAR PASSAGEWAY

SHEET 3 OF 5

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

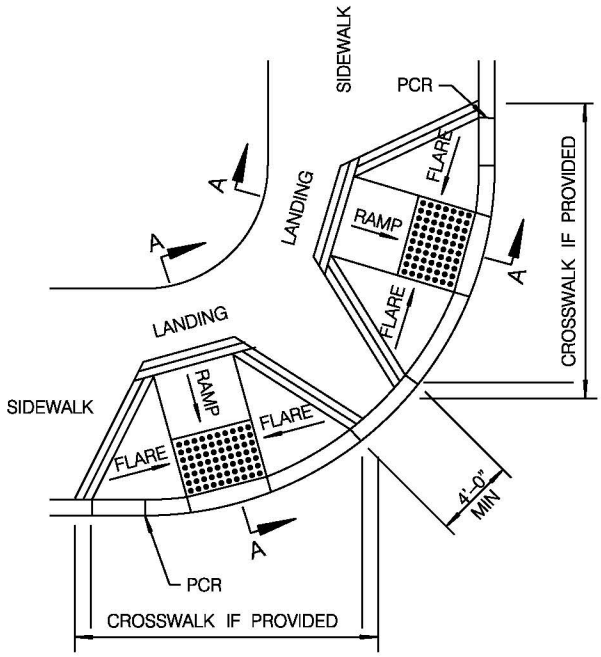
CITY OF SAN DIEGO – STANDARD DRAWING

GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS

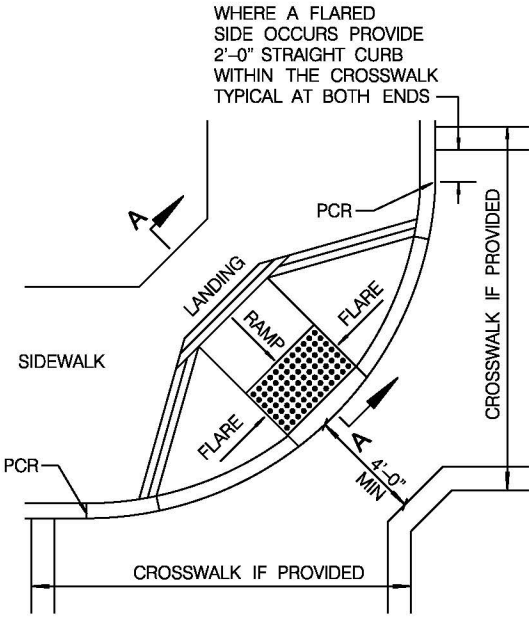
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

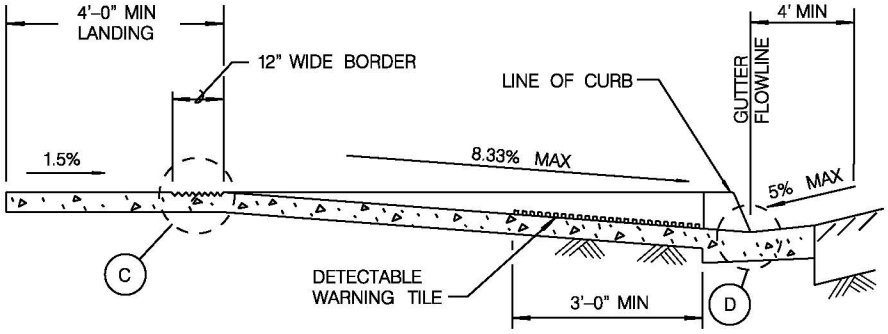
DRAWING NUMBER **SDG-130**



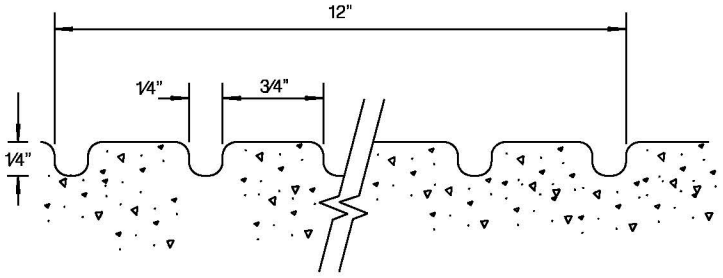
DETAIL A
TWO–RAMP CORNER INSTALLATION



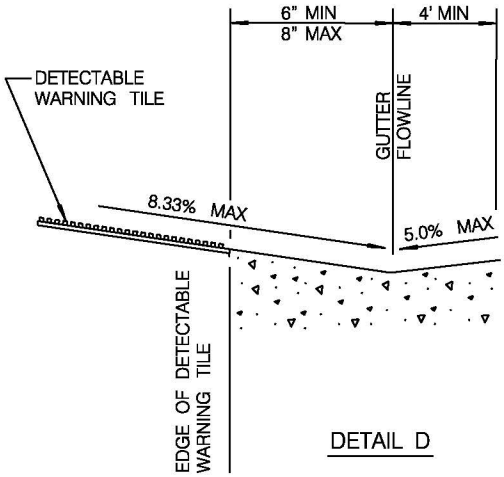
DETAIL B
TYPICAL ONE–RAMP
CORNER INSTALLATION



SECTION A–A



DETAIL C



DETAIL D

SHEET 4 OF 5

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

CITY OF SAN DIEGO – STANDARD DRAWING

GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDG-130**

NOTES

1. AS SITE CONDITIONS DICTATE, 2 CURB RAMPS MAY BE USED FOR CORNER INSTALLATIONS SIMILAR TO THOSE SHOWN IN DETAIL A. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO THE APPLICATION OF CASES A THROUGH D SHEET 2 OF 5.
2. WHEN A CURB RAMP IS LOCATED IN THE CENTER OF THE CURB RETURN, CROSSWALK CONFIGURATION SHALL BE SIMILAR TO DETAIL B.
3. CURB RAMP SURFACES (FLARES AND RAMP) SHALL HAVE A MEDIUM TO HEAVY BROOM TEXTURED FINISH, PERPENDICULAR TO THE AXIS OF TRAVEL.
4. THE CURB RAMP SHALL BE OUTLINED WITH A 12" BORDER, WITH 1/4" GROOVES APPROXIMATELY 3/4" ON CENTER. SEE DETAIL C.
5. CURB RAMPS SHALL BE CONCRETE CLASS 520–C–2500.
6. INSTALL 1/4" EXPANSION JOINT FILLER MATERIAL BETWEEN A NEW CURB RAMP AND THE EXISTING SIDEWALKS.
7. TOOLED JOINT – PROVIDE 1/4" DEEP GROOVE WITH 1/4" RADIUS EDGES. GROVE SHALL NOT EXTEND TO BOTTOM CURB OR GUTTER.
8. IF OBSTRUCTIONS SUCH AS INLETS, POLES, FIRE HYDRANT, ETC., ARE ENCOUNTERED, THE RAMP LOCATION(S) MAY BE ADJUSTED ONLY UPON THE EVALUATION & APPROVAL OF THE ENGINEER.
9. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. THE BUILD–UP ASPHALT AT THE BOTTOM OF THE CURB RAMP BETWEEN THE GUTTER AND THE STREET SHALL BE MILLED TO ACHIEVE THE REQUIRED FLUSH TRANSITION.
10. IF THE 4' 5% MAXIMUM COUNTER SLOPE AT THE BOTTOM OF THE RAMP (AT STREET TRANSITION) CANNOT BE ACHIEVED DUE TO EXISTING CONDITIONS, THE RAMP SLOPE SHALL BE ADJUSTED SO THE SUM OF BOTH SLOPES DOESN'T EXCEED 13.3%.
11. IF THE CONDITION OF THE STREET AND SIDEWALK IS SUCH THAT THE EXISTING SLOPES DO NOT ALLOW THE INSTALLATION OF THE REQUIRED CURB RAMP SLOPE, THEN THE RAMP SHALL BE EXTENDED UP TO A MAXIMUM LENGTH OF 15'–0" (LINEAR FEET) TO CATCH THE REQUIRED SLOPE EVEN IF THE REQUIRED SLOPE IS NOT ACHIEVED. COORDINATION WITH ENGINEER IS REQUIRED PRIOR TO ANY DEMOLITION OR CONSTRUCTION.
12. THE REMOVAL OF EXISTING CONCRETE CURB, GUTTER, SIDEWALK, AND PAVEMENT (OR CURB RAMP) FOR A NEW CURB RAMP SHALL COMPLY WITH SDG–156. THE REMOVAL OF ADDITIONAL SIDEWALK PANELS MAY BE REQUIRED TO MEET EXISTING GRADE AND TO COMPLY WITH THE ACCESSIBILITY REGULATIONS.
13. PROVIDE A 2" X 2" KEYWAY BENEATH SAWCUT EDGES OF THE EXISTING SIDEWALK.
14. THE CROSS SLOPE OF THE RAMP SHALL BE 1.5%.
15. WATER PONDING WITHIN THE CURB RAMP LIMITS IS NOT ALLOWED.
16. NO GRADE BREAK IS ALLOWED ALONG THE RAMP SURFACE.
17. IF THE CROSS SLOPE OF THE SIDEWALK ADJACENT TO THE CURB RAMP IS MORE THAN 2%, PROVIDE A MINIMUM 4' TRANSITION.
18. HISTORICAL STAMPS/IMPRESSIONS SHALL BE PRESERVED PER SDG–115.
19. UTILITY PULL BOXES, MANHOLES, VAULTS AND OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP SHALL BE RELOCATED OR ADJUSTED TO GRADE PRIOR TO, OR IN CONJUNCTION WITH THE CURB RAMP CONSTRUCTION. COORDINATE WITH THE ENGINEER.
20. ANY DEVIATION FROM THESE PROVISIONS REQUIRES PRIOR APPROVAL BY THE ENGINEER.

SHEET 5 OF 5

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

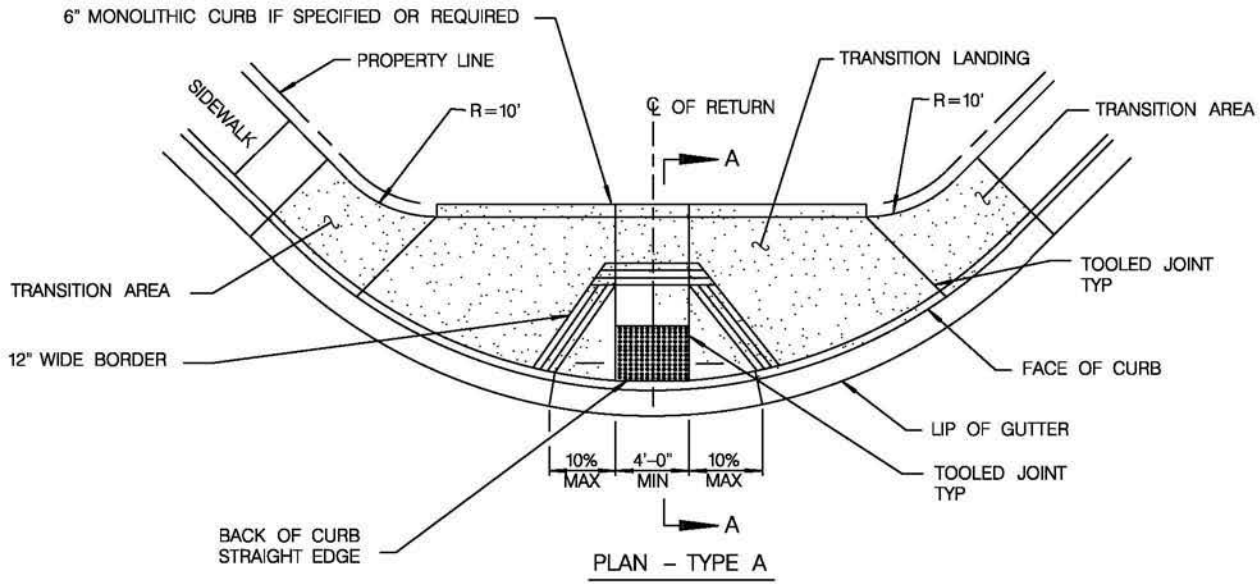
CITY OF SAN DIEGO – STANDARD DRAWING

GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS

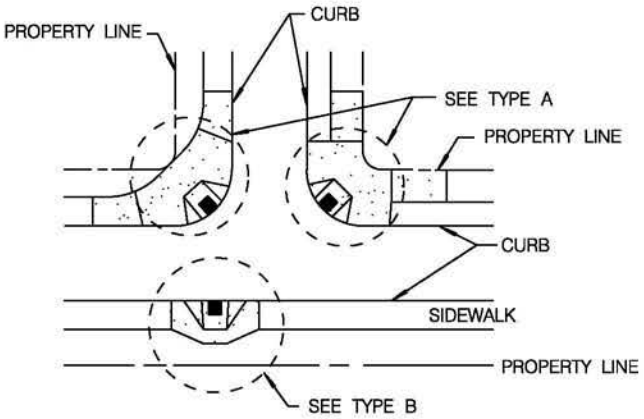
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

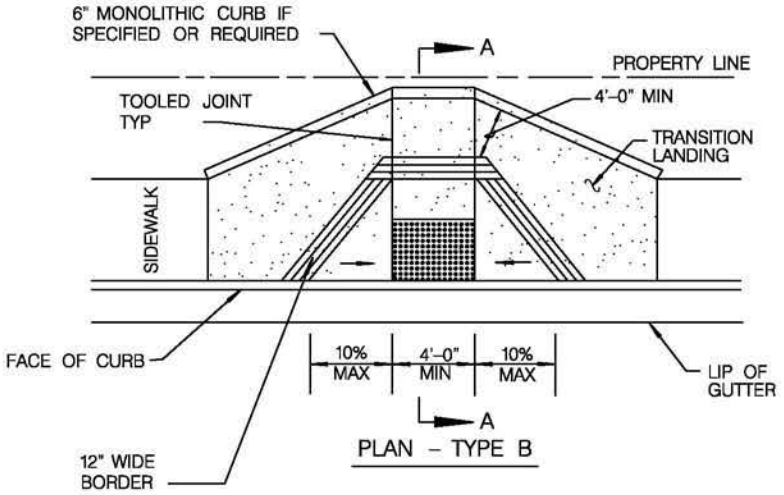
COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDG-130**



PLAN – TYPE A

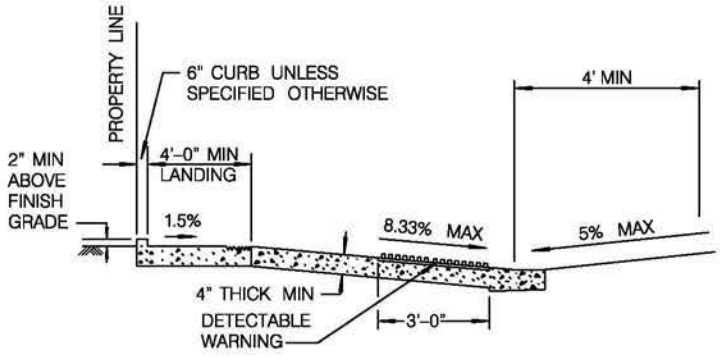




PLAN – TYPE B

NOTE:

1. SEE SDG-130 FOR ADDITIONAL CURB RAMP DETAILS AND INFORMATION.



SECTION A–A

REVISION	BY	APPROVED	DATE
ORIGINAL	FC	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

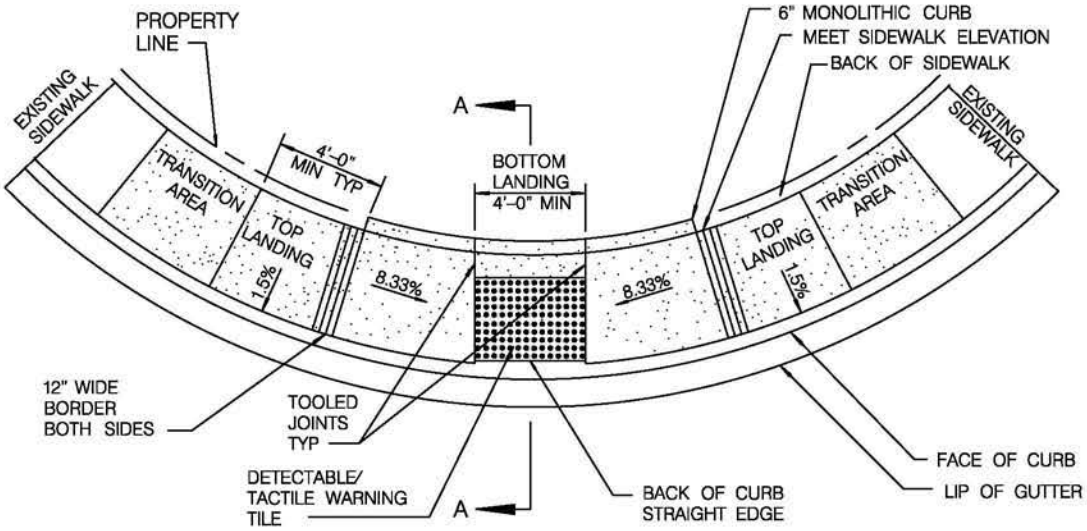
CITY OF SAN DIEGO – STANDARD DRAWING

CURB RAMP - TYPES A AND B

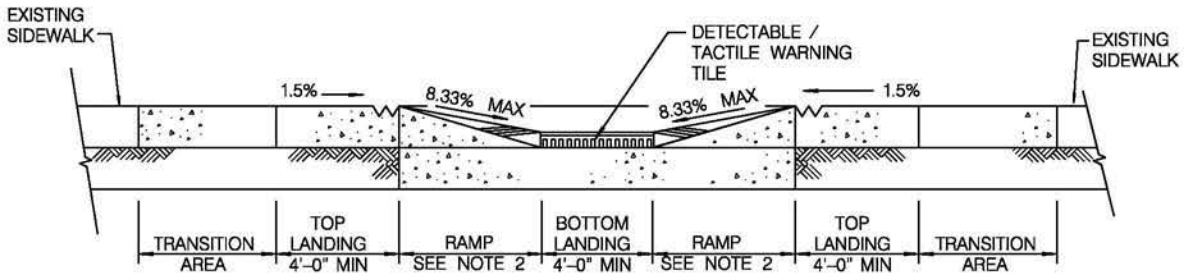
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 DATE 1/31/2012

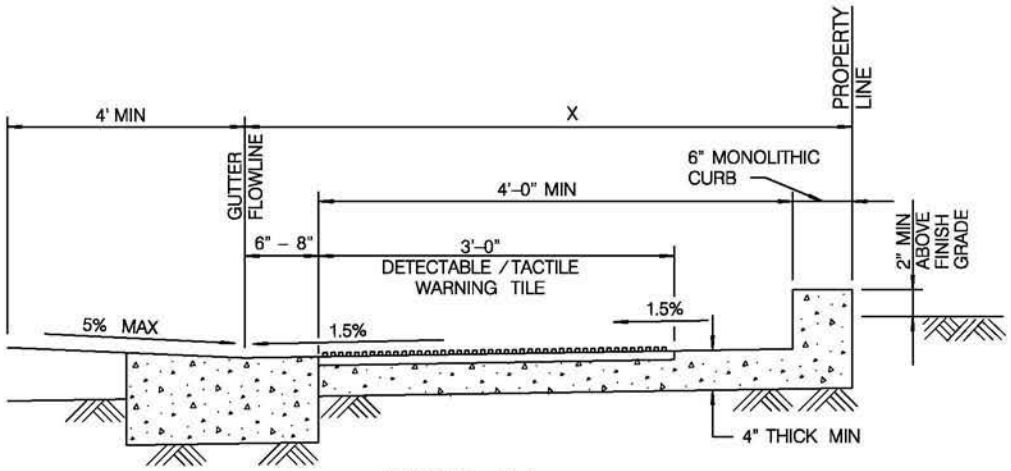
DRAWING NUMBER **SDG-132**



PLAN



ELEVATION



SECTION A–A

NOTES

1. TYPE C1 CURB RAMP SHALL ONLY BE USED TO MITIGATE EXISTING CONDITIONS WHERE INADEQUATE RIGHT OF WAY EXISTS. TYPE C1 SHALL BE USED WHEN X<8'. X=DISTANCE FROM FACE OF CURB TO PROPERTY LINE.
2. SEE SDG–130 FOR ADDITIONAL CURB RAMP DETAILS AND INFORMATION.

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

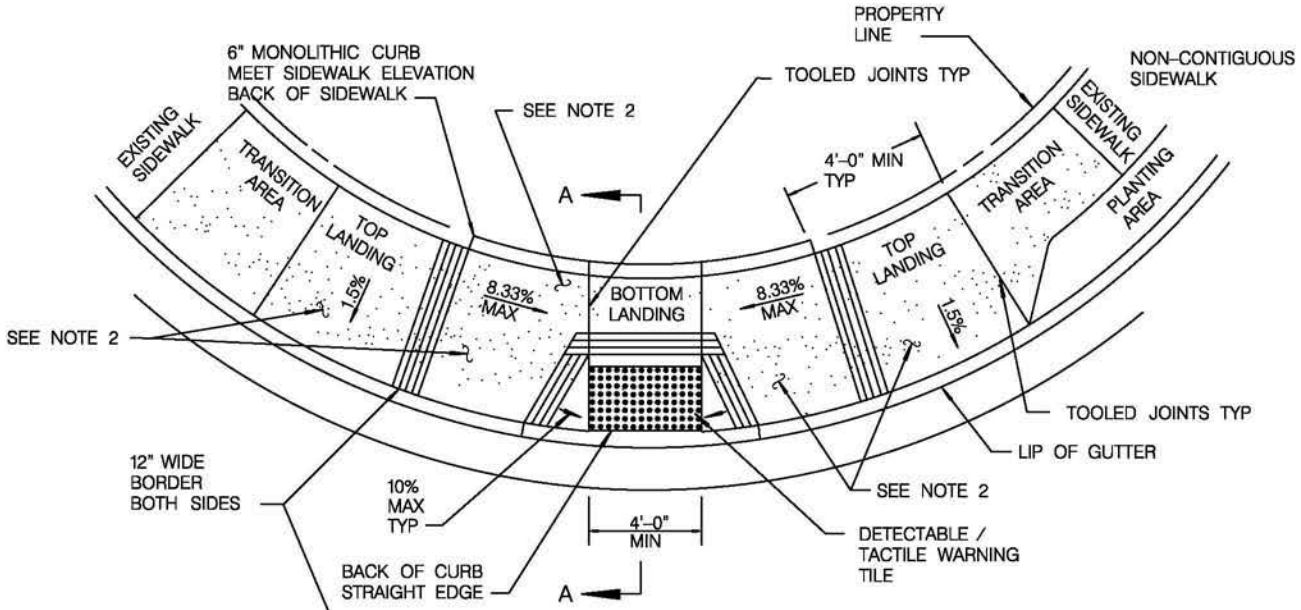
CITY OF SAN DIEGO – STANDARD DRAWING

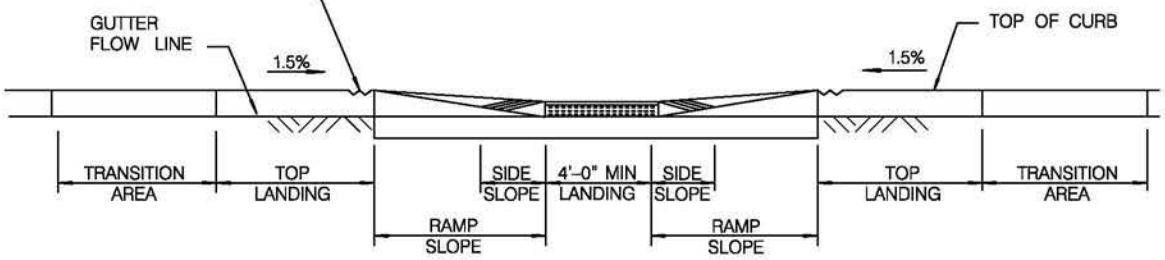
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

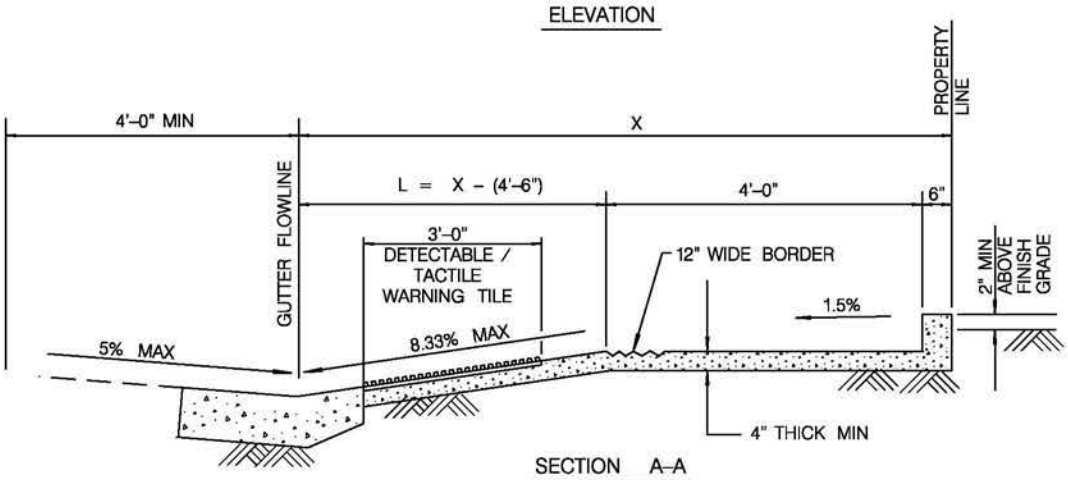
COORDINATOR R.C.E. 65271 1/31/2012 DATE

CURB RAMP - TYPE C1

DRAWING NUMBER **SDG-134**







NOTES

1. TYPE C2 CURB RAMP SHALL ONLY BE USED TO MITIGATE EXISTING CONDITIONS WHERE INADEQUATE RIGHT OF WAY EXISTS. TYPE C2 SHALL BE USED WHEN X=8' OR 8'<X<10'. X=DISTANCE FROM FACE OF CURB TO PROPERTY LINE.
2. SEE SDG-130 FOR ADDITIONAL CURB RAMP DETAILS AND INFORMATION.

REVISION	BY	APPROVED	DATE
ORIGINAL	SS	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/10

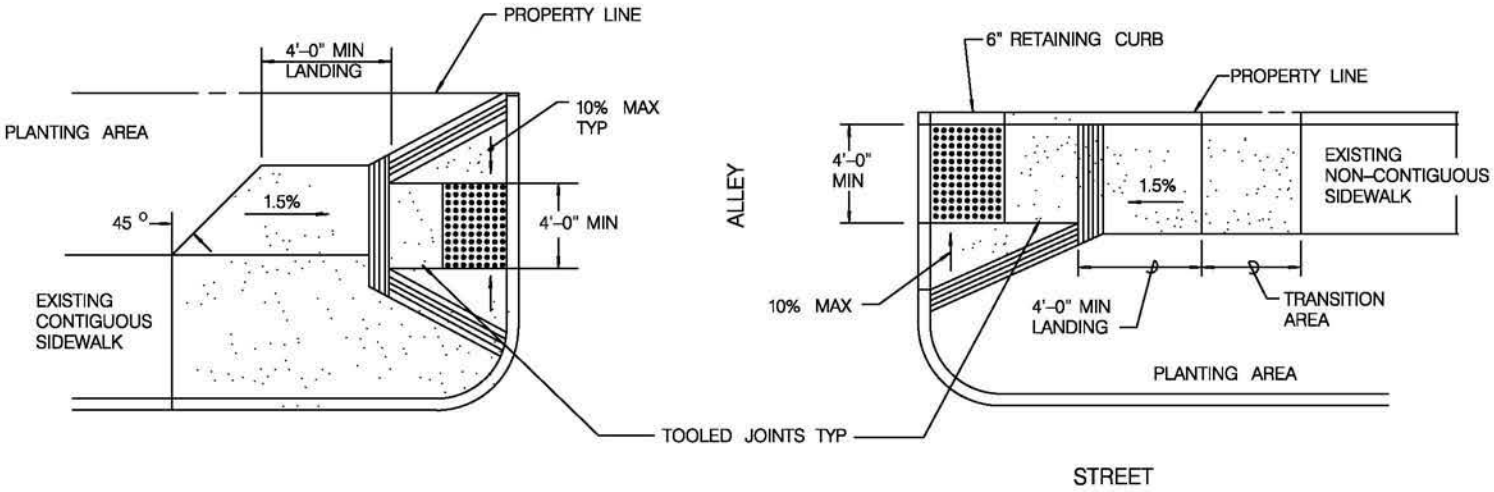
CITY OF SAN DIEGO – STANDARD DRAWING

CURB RAMP - TYPE C2

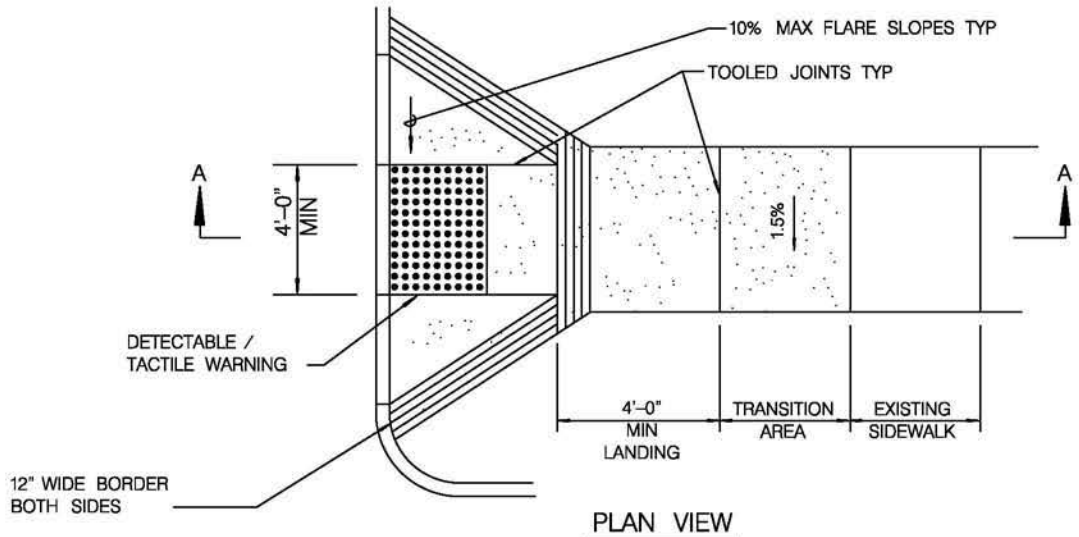
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

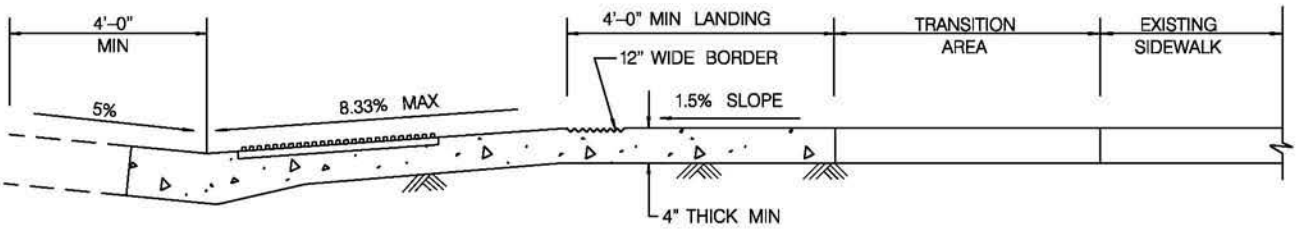
DRAWING NUMBER **SDG-135**



TYPICAL PLAN



PLAN VIEW



SECTION A–A

NOTES:

1. SEE SDG–130 FOR ADDITIONAL CURB RAMP DETAILS AND INFORMATION

REVISION	BY	APPROVED	DATE
ORIGINAL	SM	A. OSKOUI	12/03
UPDATE	FC	A. OSKOUI	12/06
UPDATE	FC	A. OSKOUI	12/08
UPDATE	KA	J. NAGELVOORT	01/12

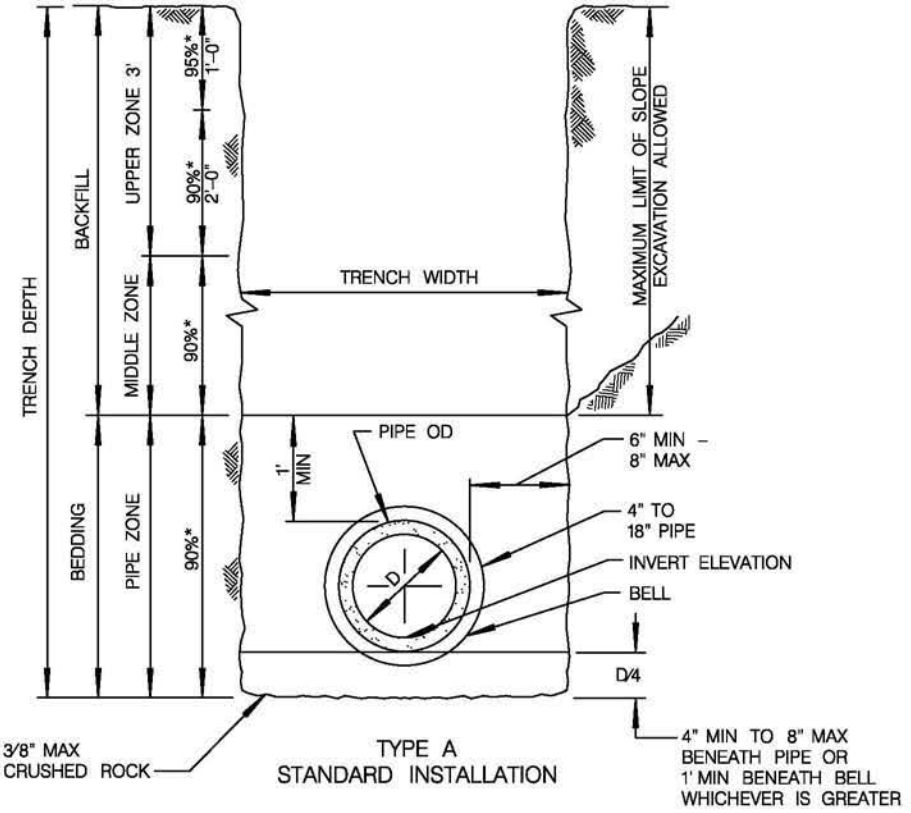
CITY OF SAN DIEGO – STANDARD DRAWING

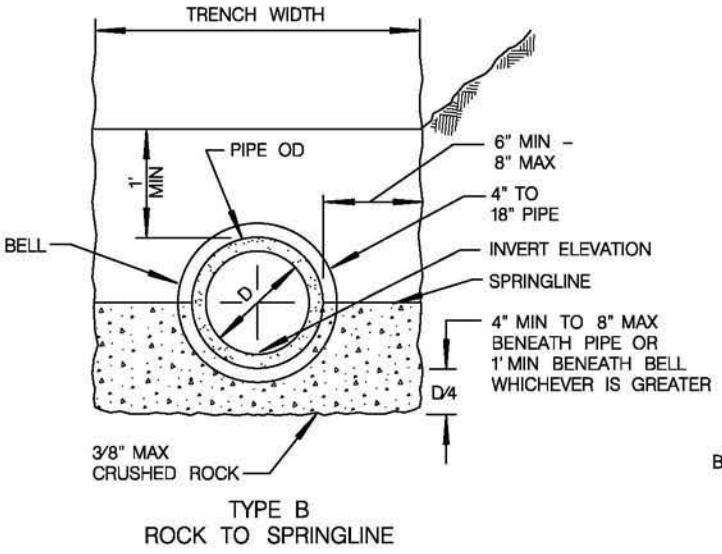
CURB RAMP - TYPE D

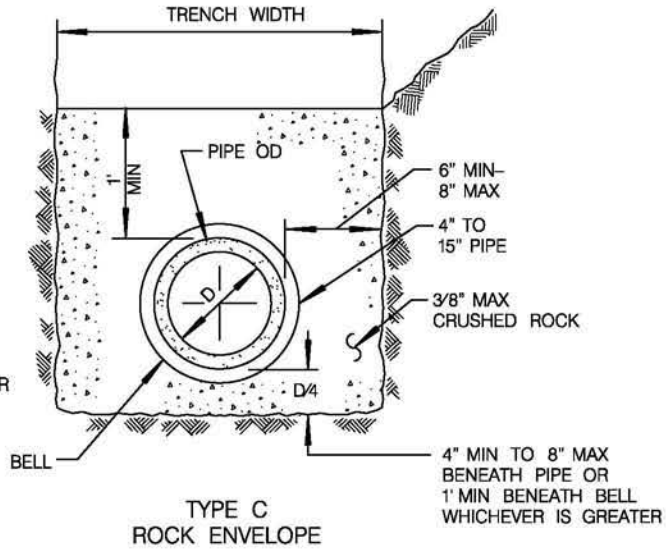
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDG-136**







NOTES

1. FOR TRENCH RESURFACING IN IMPROVED STREETS, SEE STANDARD DRAWINGS SDG–107, SDG–108.
2. (*) INDICATES MINIMUM RELATIVE COMPACTION.
3. MINIMUM DEPTH OF COVER FROM THE TOP OF PIPE TO FINISH GRADE FOR PVC SDR 35 SEWER MAIN SHALL BE 5'. FOR SHALLOWER DEPTH, SPECIAL DESIGN IS REQUIRED.
4. SEE TYPE A INSTALLATION FOR DETAILS NOT SHOWN FOR TYPES B AND C.
5. FOR PIPE SIZE ENCASEMENT LARGER THAN 15", MAXIMUM SIDE WALL CLEARANCE SHALL BE 12" OR AS SHOWN ON THE PLANS.
6. 6" METAL TAPE SHALL BE INSTALLED ABOVE PIPE 4" BELOW TRENCH CAP AND 12" BELOW FINISH GRADE IN UNIMPROVED STREETS.
7. 1' SAND CUSHION OR A 6" MINIMUM SAND CUSHION WITH 1" NEOPRENE PAD SHALL BE PLACED FOR CROSSINGS UTILITIES WHEN VERTICAL CLEARANCE IS 1' OR LESS. THE NEOPRENE PAD SHALL BE PLACED ON THE MOST FRAGILE UTILITY.

REVISION	BY	APPROVED	DATE
ORIGINAL	RA	A. OSKOUI	12/06
UPDATED	KA	J. NAGELVOORT	01/12

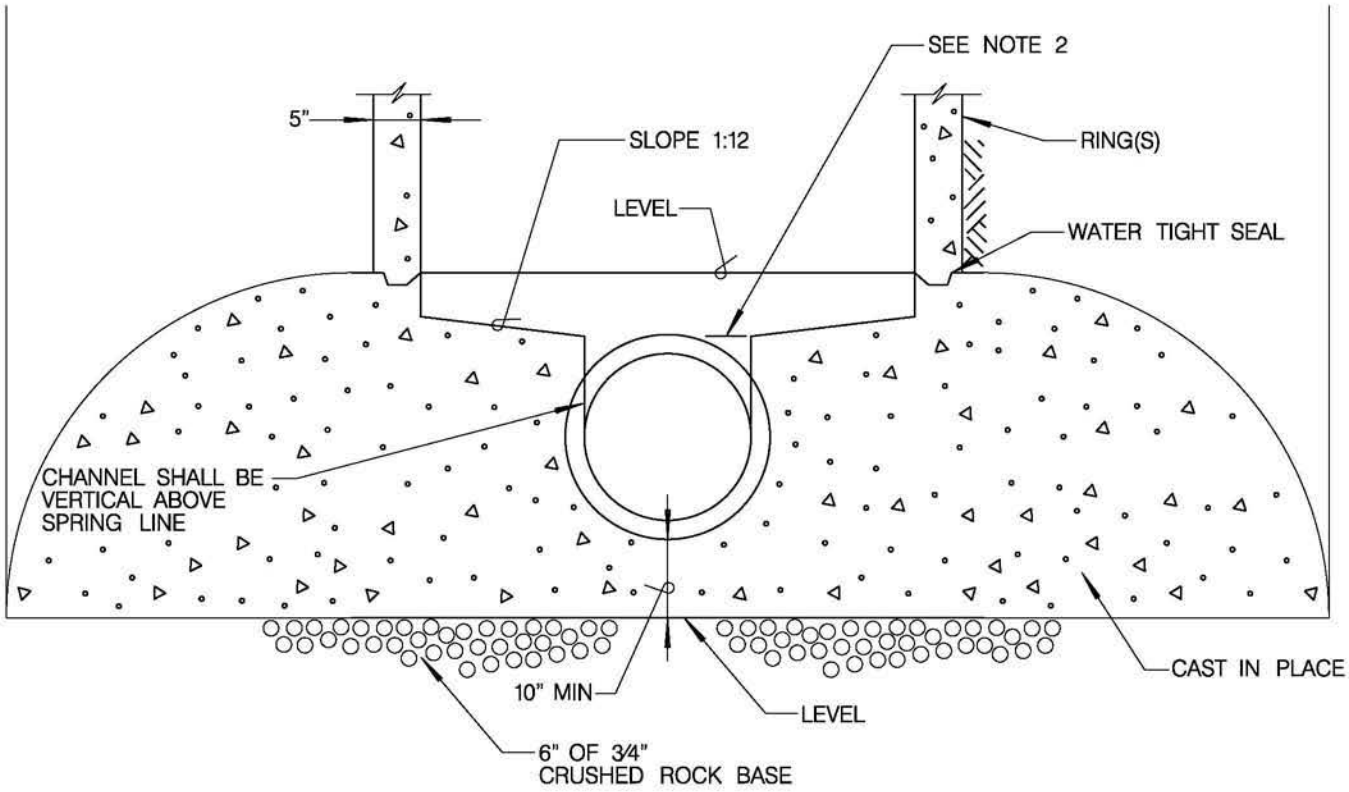
CITY OF SAN DIEGO – STANDARD DRAWING

PIPE BEDDING AND TRENCH BACKFILL FOR SEWERS

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDS-110**



NOTES:

1. MANHOLE BASES FOR MAINS 18" AND LARGER SHALL BE COATED.
2. LOWEST POINT ON SHELF SHALL BE EVEN WITH TOP OF PIPE.
3. CAST IN PLACE MANHOLE BASES CAST WITH 560–C–3250 SHALL BE CURED A MINIMUM OF THREE DAYS PRIOR TO STACKING MANHOLE. BASES CAST WITH 660–CW–4000 (WITHOUT CALCIUM CHLORIDE (CC)) OR WITH 560–C–3250 TREATED WITH A MINIMUM OF 2% CC SOLUTION IN ACCORDANCE WITH 201–1 SHALL BE CURED A MINIMUM OF 24 HOURS. THESE CURING REQUIREMENTS APPLY TO MANHOLES WITH A MAXIMUM HEIGHT OF 25'. SHORTER CURING TIMES, DEEPER INSTALLATIONS, AND ALTERNATE CONCRETE MIX DESIGNS REQUIRE ENGINEER'S PRIOR APPROVAL.
4. CONCRETE SPECIFIED BY ALTERNATE CLASS OR OTHERWISE CONTAINING FLY ASH IS NOT ALLOWED FOR USE IN CAST IN PLACE MANHOLES.
5. CONCRETE MIX DESIGNS CONTAINING ACCELERATING ADMIXTURES OTHER THAN CC REQUIRE A BREAK HISTORY AND ENGINEER'S APPROVAL.

REVISION	BY	APPROVED	DATE
ORIGINAL*	KA	J. NAGELVOORT	01/12

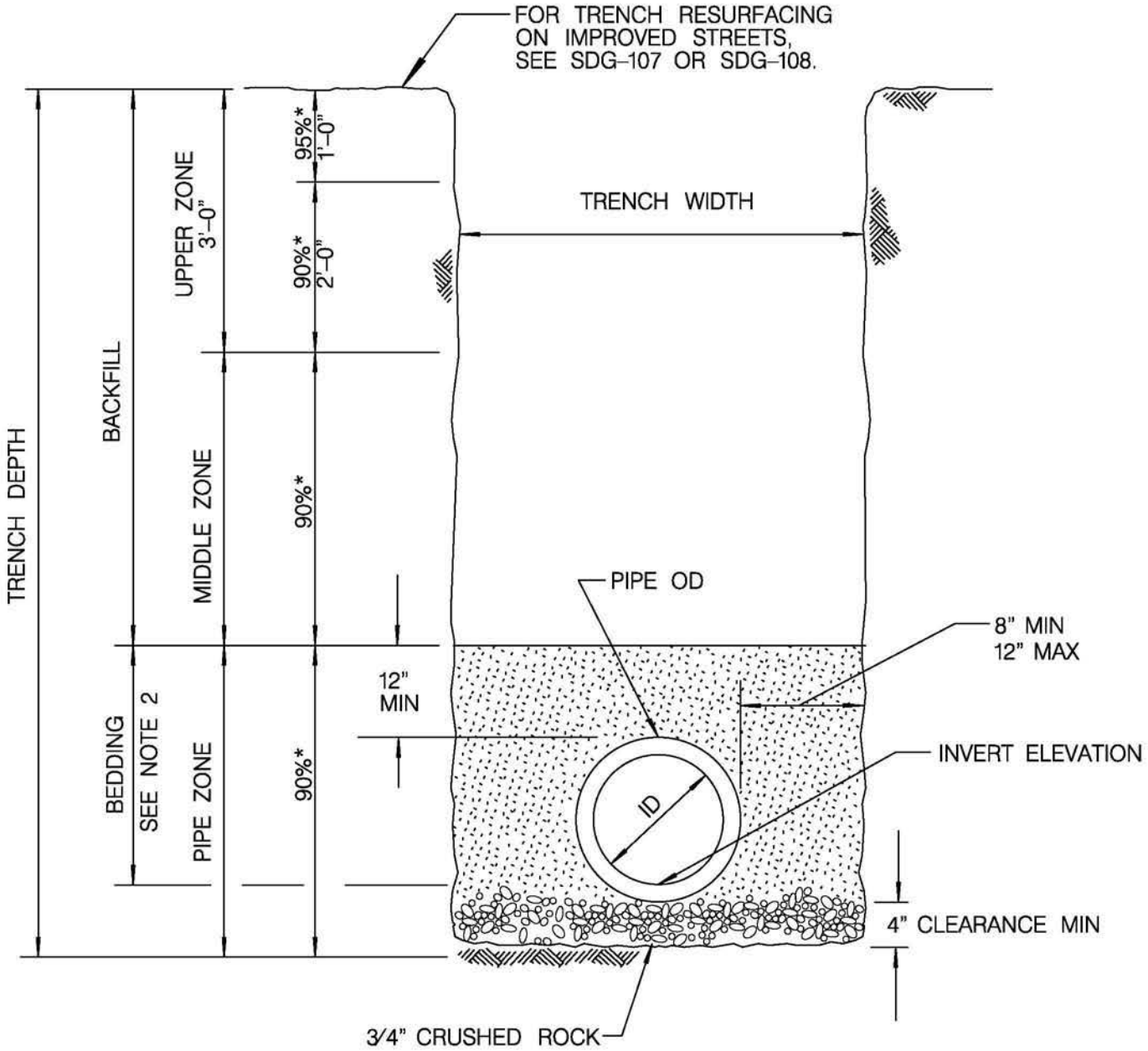
CITY OF SAN DIEGO – STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

SEWER MANHOLE BASE

DRAWING NUMBER **SDS-120**



SECTION

NOTES:

1. (*) INDICATES MINIMUM RELATIVE COMPACTION.
2. BEDDING MATERIAL SHALL BE SAND, CRUSHED AGGREGATE, OR NATIVE FREE–DRAINING GRANULAR MATERIAL. 100% SHALL PASS NO. 4 SIEVE AND HAVE A SAND EQUIVALENT OF NOT LESS THAN 30.

REVISION	BY	APPROVED	DATE
ORIGINAL*	KA	J. NAGELVOORT	01/12

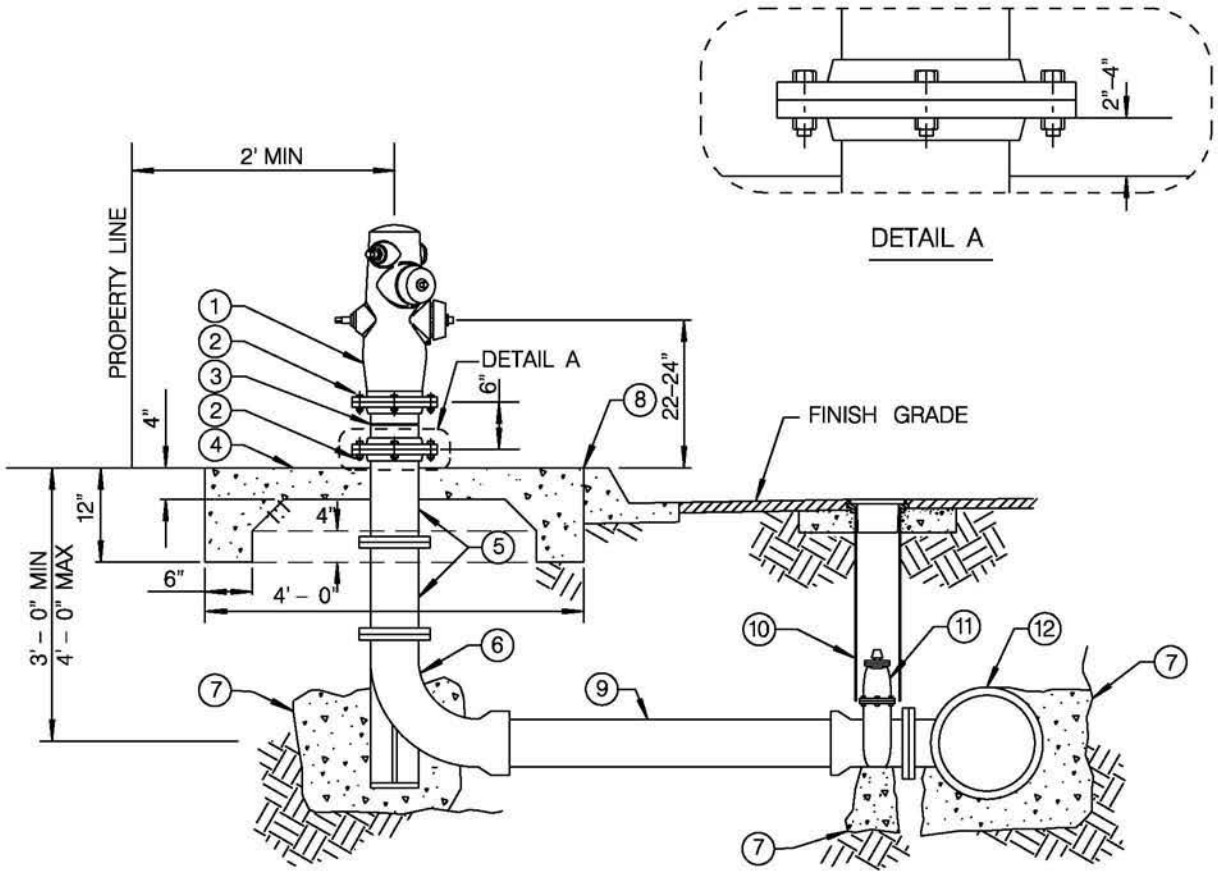
CITY OF SAN DIEGO – STANDARD DRAWING

PIPE BEDDING AND TRENCH BACKFILL FOR STORM DRAINS

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

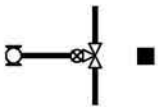
DRAWING NUMBER **SDD-110**



FIRE HYDRANT INSTALLATION

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
1	6" WET BARREL FIRE HYDRANT	5	6" CAST IRON EXTENSION NON–GROOVED SPOOL – AS REQUIRED (F, F)
2	.75" X 3.5" MIN HEX HEAD BREAKAWAY (SHEAR) BOLTS AND NUTS (ASTM A307) SHALL BE 3/4" NC THREAD. HEX HEAD ON TOP OF FLANGES (ALL)	6	6" LONG RADIUS DI BASE ELBOW (F, PO / MJ)
3	6" CAST IRON BREAKAWAY SPOOL WITH 0.25"–V (SINGLE OR DOUBLE) BREAK OFF GROOVE	7	CONCRETE THRUST BLOCK
4	4' X 4' X 4" THICK CONCRETE PAD WITH 6" X 12" DEEP THICKENED EDGE AROUND PERIMETER OF CONCRETE PAD	8	COLD JOINT STRIP
		9	PIPE – 6" C–900 PVC
		10	GATE WELL WITH CAP
		11	6" GATE VALVE (MJ / PO, F)
		12	TEE – SIZE X 6" (MJ, MJ, F)

NOTES:
1. NUMBER OF OUTLETS SHALL BE AS SHOWN ON THE PLANS.
2. CONNECT TO BASE OF THE HYDRANT WITH SHEAR BOLTS INSTALLED WITH HEX HEAD ON TOP OF THE FLANGE. (31/64" DIAMETER HOLE 2" DEEP IN BOLTS, GALVANIZED AFTER BORING)



LEGEND ON PLANS

SHEET 1 OF 3

REVISION	BY	APPROVED	DATE
ORIGINAL	KA	J. NAGELVOORT	01/12

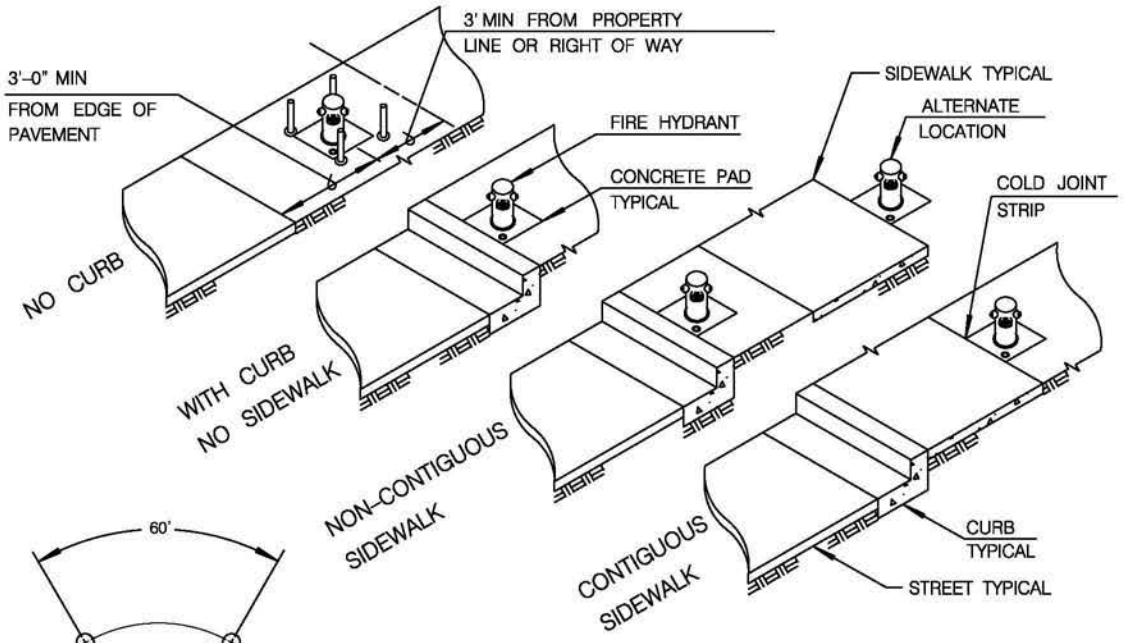
CITY OF SAN DIEGO – STANDARD DRAWING

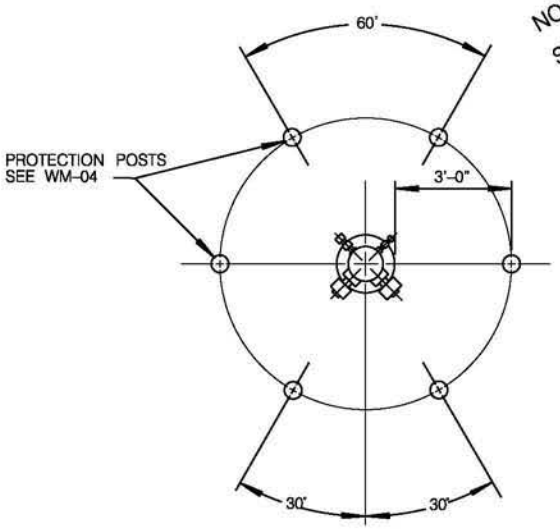
FIRE HYDRANT INSTALLATION

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 DATE 1/31/2012

DRAWING NUMBER **SDW-104**

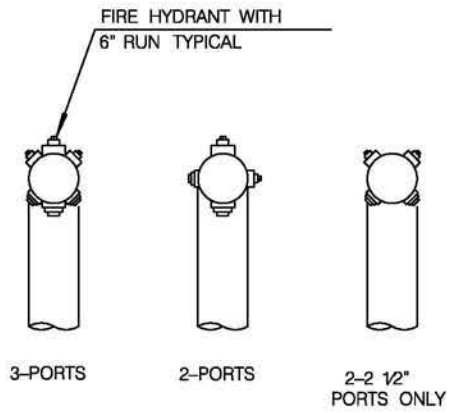




NOTE:

WHEN REQUIRED, NUMBER OF POSTS AND LOCATION TO BE SHOWN ON THE PLANS.

PROTECTION POSTS



PORT ORIENTATION

FIRE HYDRANT LOCATIONS AND PORT ORIENTATION

NOTES:

1) LOCATE FIRE HYDRANT AS SHOWN ABOVE OR AS DIRECTED BY THE ENGINEER.

2) FIRE HYDRANTS SHALL BE INSTALLED WITH THE LARGEST PORT PERPENDICULAR TO THE STREET.

3) IF THE CONCRETE SLAB IS TO BE INSTALLED ADJACENT TO A CONCRETE CURB OR SIDEWALK, A COLD JOINT STRIP SHALL BE INSTALLED.

4) CONCRETE APRON SHALL BE REQUIRED WHERE THE FIRE HYDRANT IS INSTALLED IN AN UNPAVED LOCATION. THE APRON SHALL BE 4" THICK 520-C-2500 CONCRETE.

5) WHEN DISTANCE FROM THE FIRE HYDRANT TO THE TOP OR TOE OF THE SLOPE OR WALLS IS LESS THAN 2', SPECIAL HYDRANT INSTALLATION DETAIL SHALL BE SHOWN ON THE PLANS.

6) THE DISTANCE FROM THE FACE OF THE CURB TO THE CENTERLINE OF THE FIRE HYDRANT SHALL BE 2 1/2' MINIMUM.

REVISION	BY	APPROVED	DATE
ORIGINAL	KA	J. NAGELVOORT	01/12

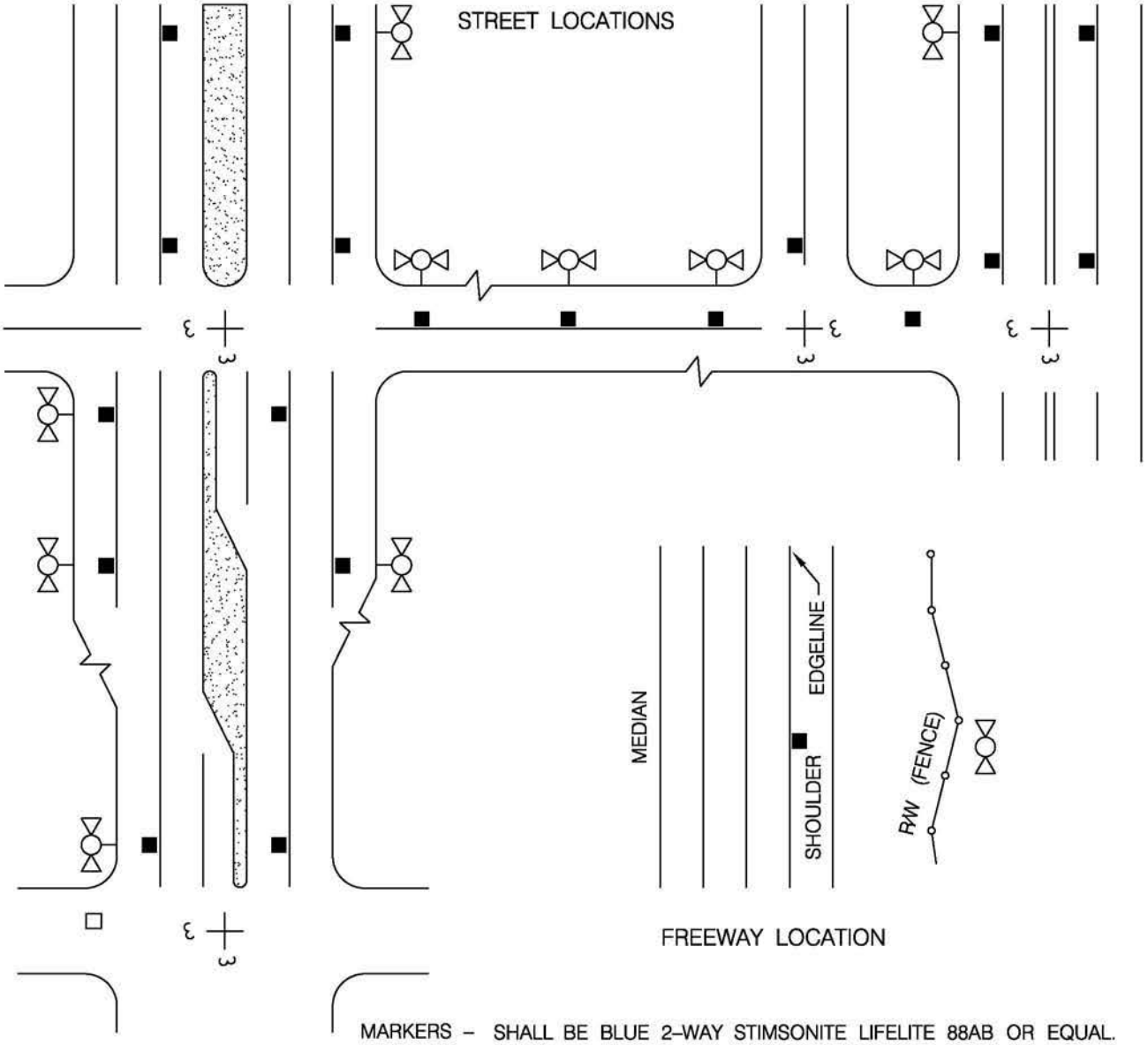
CITY OF SAN DIEGO – STANDARD DRAWING

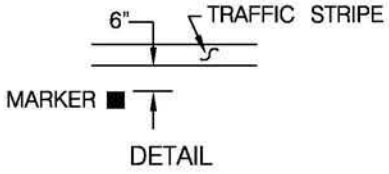
FIRE HYDRANT INSTALLATION

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 DATE 1/31/2012

DRAWING NUMBER **SDW-104**





MARKERS – SHALL BE BLUE 2-WAY STIMSONITE LIFELITE 88AB OR EQUAL.

ADHESIVE – AN AMPLE AMOUNT OF 2 (A&B) EPOXY OR EQUAL.

SURFACES – CLEAN AND DRY TO INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
INSTALL MARKERS WITH REFLECTIVE SURFACES FACING ONCOMING VEHICLES AND OFFSET 2" FROM LANE LINES TOWARD FIRE HYDRANT.

FIRE HYDRANT MARKERS

NOTES

1. FIRE DEPARTMENT WILL PROVIDE LOCATION(S) FOR ALL MARKERS IN PRD'S COMMERCIAL LOTS AND OTHER AREAS OUTSIDE OF PUBLIC RIGHT OF WAY.
2. MARKERS SHALL BE INSTALLED AT THE NEW AND RELOCATED HYDRANTS AND WITHIN ALL RESURFACING PROJECTS.
3. FOR STREETS WITHOUT LANE LINES OR STREETS WITH RAISED PAVEMENT MARKERS AND NO PAINTED LANE LINES, INSTALL MARKERS 6" FROM CENTERLINE OR EXISTING MARKERS.

SHEET 3 OF 3

REVISION	BY	APPROVED	DATE
ORIGINAL	KA	J. NAGELVOORT	01/12

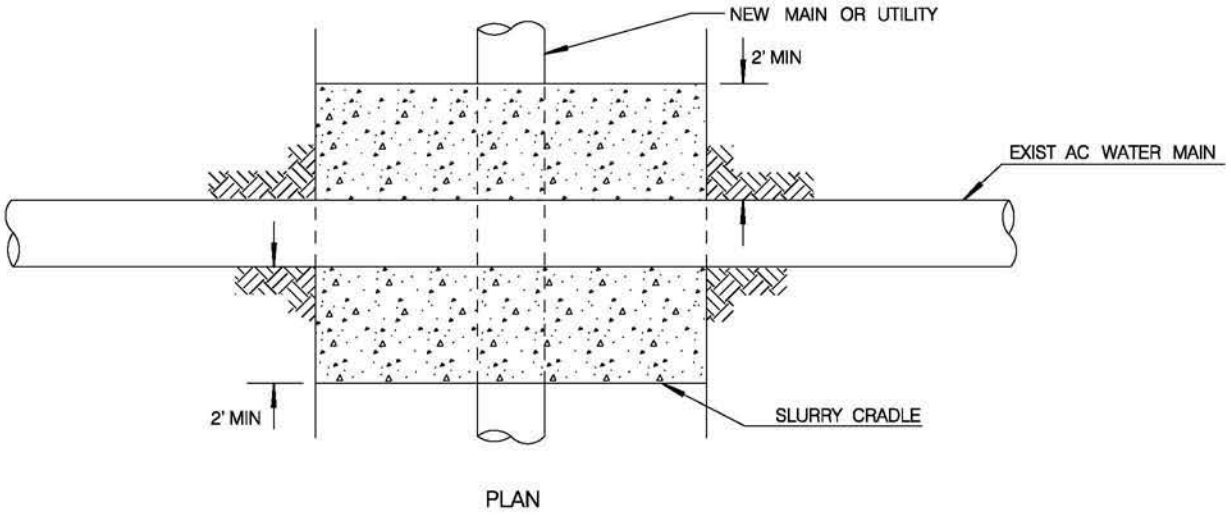
CITY OF SAN DIEGO – STANDARD DRAWING

FIRE HYDRANT INSTALLATION

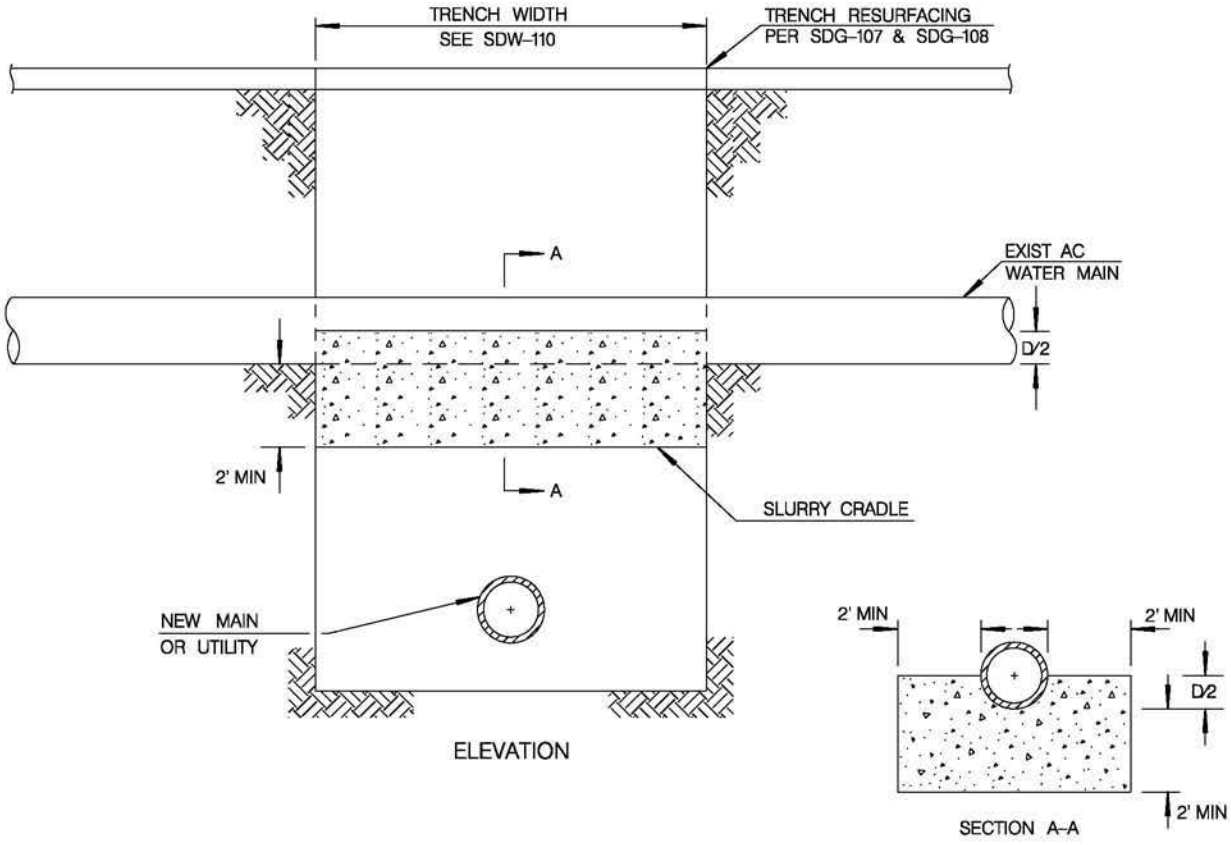
RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDW-104**



PLAN



ELEVATION

SECTION A-A

NOTES:
1) SLURRY SHALL BE CONTROLLED LOW STRENGTH MATERIAL CLSM (100-E-100)

2) SLURRY SHALL BE PLACED ON FIRMLY COMPACTED BACKFILL

REVISION	BY	APPROVED	DATE
ORIGINAL	KA	J. NAGELVOORT	01/12

CITY OF SAN DIEGO – STANDARD DRAWING

PIPE SUPPORT FOR UNDERCUT AC WATER MAIN

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

COORDINATOR R.C.E. 65271 1/31/2012 DATE

DRAWING NUMBER **SDW-162**

APPENDIX J

ARCHAEOLOGICAL SAMPLE 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: $_____

SAMPLE

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).

SAMPLE

City of San Diego

ADDENDUM "A"

FOR

ALVARADO TRUNK SEWER PHASE III

BID NO.:	**K-13-5243-DBB-3-B**
SAP NO. (WBS/IO/CC):	**B-00481**
CLIENT DEPARTMENT:	**2011**
COUNCIL DISTRICT:	**7**
PROJECT TYPE:	**JB**

A. CHANGES TO THE BID SUBMITTAL DUE DATE AND TIME

The Bid submittal due date has been extended to **July 31, 2012.**

Proposals will be received at the Public Works Contracting Group, no later than **2:00 PM on the same date at** 1200 Third Avenue, Suite 200, San Diego, California followed immediately by the public Bid opening.

Tony Heinrichs, Director
Public Works Department

Dated: *July 13, 2012,*
San Diego, California

TH/nb/cg/rir

8/1/12 CW

City of San Diego

CONTRACTOR'S NAME: ORTIZ CORPORATION
ADDRESS: 2000 MC KINLEY AVENUE, NATIONAL CITY, CA 91950
TELEPHONE NO.: 619-434-7925 **FAX NO.:** 619-434-7931
CITY CONTACT: Jericho Gallardo, **Address:** 600 B Street, Suite 800, MS. 908 A, San Diego, CA 92101
E-mail: JGallardo@sandiego.gov, **Ph.** 619-533-7523, **Fax.** 619-533-5176

NB/RIR/CG

CONTRACT DOCUMENTS

FOR

ALVARADO TRUNK SEWER PHASE III

VOLUME 2 OF 2

BID NO.:	**K-13-5243-DBB-3-B**
SAP NO. (WBS/IO/CC):	**B-00481**
CLIENT DEPARTMENT:	**2011**
COUNCIL DISTRICT:	**7**
PROJECT TYPE:	**JB**

THIS CONTRACT IS SUBJECT TO THE FOLLOWING:

- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.

THIS BIDDING DOCUMENT TO BE SUBMITTED IN ITS ENTIRETY
REFER TO INVITATION TO BIDS FOR TIME, DATE, AND LOCATION

TABLE OF CONTENTS

Volume 2 - Bidding Documents

The following forms must be completed in their entirety and submitted with the Bid. Include the form(s) even if the information does not apply. Where the information does not apply write in N/A. Failure to include any of the forms may cause the Bid to be deemed **non-responsive.** If you are uncertain or have any questions about any required information, contact the City no later than 14 days prior to Bid due date.

DESCRIPTION **PAGE NUMBER**

1. Bid/Proposal 3-5
2. Bid Bond 6
3. Non-Collusion Affidavit to be executed by Bidder and Submitted with Bid under 23 USC 112 and PCC 7106 7
4. Contractors Certification of Pending Actions 8
5. Equal Benefits Ordinance Certification of Compliance 9
6. Proposal (Bid) 10-13
7. Form AA35 - List of Subcontractors 14
8. Form AA40 - Named Equipment/Material Supplier List 15

PROPOSAL

Bidder's General Information

To the City of San Diego:

Pursuant to "Invitation to 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.

IF A SOLE OWNER OR SOLE CONTRACTOR SIGNS HERE:

(1) Name under which business is conducted N/A

(2) Signature (Given and surname) of proprietor _____

(3) Place of Business (Street & Number) _____

(4) City and State _____ Zip Code _____

(5) Telephone No. _____ Facsimile No. _____

IF A PARTNERSHIP, SIGN HERE:

(1) Name under which business is conducted N/A

(2) Name of each member of partnership [indicate character of each partner, general or special (limited):

_____

_____

(3) Signature (Note: Signature must be made by a general partner)

_____

Full Name and Character of partner

_____

_____

(4) Place of Business (Street & Number) _____

(5) City and State _____ Zip Code _____

(6) Telephone No. _____ Facsimile No. _____

IF A CORPORATION, SIGN HERE:

(1) Name under which business is conducted ORTIZ CORPORATION

(2) Signature, with official title of officer authorized to sign for the corporation:

Marcelino E Ortiz

(Signature)

MARCELINO E. ORTIZ

(Printed Name)

PRESIDENT

(Title of Officer)

(Impress Corporate Seal Here)

(3) Incorporated under the laws of the State of CALIFORNIA

(4) Place of Business (Street & Number) 2000 MC KINLEY AVENUE

(5) City and State NATIONAL CITY, CA Zip Code 91950

(6) Telephone No. 619-434-7925 Facsimile No. 619-434-7931

THE FOLLOWING SECTIONS MUST BE FILLED IN BY ALL PROPOSERS:

In accordance with the "**INVITATION TO BIDS**", the bidder holds a California State Contractor's license for the following classification(s) to perform the work described in these specifications:

LICENSE CLASSIFICATION A

LICENSE NO. 602454 EXPIRES SEPTEMBER 30TH, 2012

This license classification must also be shown on the front of the bid envelope. Failure to show license classification on the bid envelope may cause return of the bid unopened.

TAX IDENTIFICATION NUMBER (TIN): [redacted]

E-Mail Address: LUCY@ORTIZCORPORATION.COM / JOSE@ORTIZCORPORATION.COM

THIS PROPOSAL MUST BE NOTARIZED BELOW:

I certify, under penalty of perjury, that the representations made herein regarding my State Contractor's license number, classification and expiration date are true and correct.

Signature Marcelino T Ortiz Title PRESIDENT

SUBSCRIBED AND SWORN TO BEFORE ME, THIS 31 DAY OF JULY ,2012 .

Notary Public in and for the County of SAN DIEGO , State of CALIFORNIA

(NOTARIAL SEAL)

ESI1 GABRIELA REYES COMM. #1972333 Notary Public-California SAN DIEGO COUNTY My Comm. Exp. MAR 17, 2016 ESI1

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of SAN DIEGO

On 07/31/12 (Date) before me, GABRIELA REYES - NOTARY PUBLIC (Here Insert Name and Title of the Officer),

personally appeared MARCELINO E. ORTIZ (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 Gabriela Reyes (Signature of Notary Public)

ESI1 GABRIELA REYES COMM. #1972333 Notary Public-California SAN DIEGO COUNTY My Comm. Exp. MAR 17, 2016 ESI1

Place Notary Seal Above

OPTIONAL

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

Description of Attached Document BIDDING DOCUMENTS

Title or Type of Document: ALVARADO TRUNK SEWER PHASE III / BID NO.K-13-5243-DBB-C

Document Date: 07/31/12 Number of Pages: 1 (ONE)

Signer(s) Other Than Named Above: N/A

Capacity(ies) Claimed by Signer(s)

Signer's Name: N/A
- ☐ Individual
- ☐ Corporate Officer — Title(s):
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other:

Signer Is Representing:

RIGHT THUMBPRINT OF SIGNER — Top of thumb here

Signer's Name: N/A
- ☐ Individual
- ☐ Corporate Officer — Title(s):
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other:

Signer Is Representing:

RIGHT THUMBPRINT OF SIGNER — Top of thumb here

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BID BOND

KNOW ALL MEN BY THESE PRESENTS,

That Ortiz Corporation as Principal, and International Fidelity 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

Alvarado Trunk Sewer Phase III

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in the manner required in the "Invitation to 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 25th day of July, 20 12

Ortiz Corporation (SEAL)	International Fidelity Insurance Company (SEAL)
(Principal)	(Surety)
By: _____ (Signature)	By: _____ (Signature)
Marcelino E. Ortiz, President	Sioux Munyon, Attorney-In-Fact

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of San Diego

On July 25, 2012 (Date) before me, Kimberely C. Miller, Notary Public (Here Insert Name and Title of the Officer)

personally appeared Sioux Munyon (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: _____ (Signature of Notary Public)

KIMBERLEY C. MILLER
COMM. #1847744
NOTARY PUBLIC • CALIFORNIA
SAN DIEGO COUNTY
Comm. Exp. JUNE 2, 2013

Place Notary Seal Above

OPTIONAL

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

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

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

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: _____

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

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

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Tel (973) 624-7200

POWER OF ATTORNEY
INTERNATIONAL FIDELITY INSURANCE COMPANY

HOME OFFICE: ONE NEWARK CENTER, 20TH FLOOR
NEWARK, NEW JERSEY 07102-5207

KNOW ALL MEN BY THESE PRESENTS: That **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing laws of the State of New Jersey, and having its principal office in the City of Newark, New Jersey, does hereby constitute and appoint

CYNDI BEILMAN, SIOUX MUNYON, ANNE WRIGHT

La Mesa, CA.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said **INTERNATIONAL FIDELITY INSURANCE COMPANY**, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal office.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of Article 3-Section 3, of the By-Laws adopted by the Board of Directors of **INTERNATIONAL FIDELITY INSURANCE COMPANY** at a meeting called and held on the 7th day of February, 1974.

The President or any Vice President, Executive Vice President, Secretary or Assistant Secretary, shall have power and authority

(1) To appoint Attorneys-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and,

(2) To remove, at any time, any such attorney-in-fact and revoke the authority given.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of said Company adopted at a meeting duly called and held on the 29th day of April, 1982 of which the following is a true excerpt:

Now therefore the signatures of such officers and the seal of the Company may be affixed to any such power of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

INTERNATIONAL FIDELITY INSURANCE COMPANY CORPORATE SEAL 1904 NEW JERSEY

IN TESTIMONY WHEREOF, **INTERNATIONAL FIDELITY INSURANCE COMPANY** has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 16th day of October, A.D. 2007.

INTERNATIONAL FIDELITY INSURANCE COMPANY

STATE OF NEW JERSEY
County of Essex

Secretary

On this 16th day of October 2007, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said the he is the therein described and authorized officer of the **INTERNATIONAL FIDELITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate Seal of said Company; that the said Corporate Seal and his signature were duly affixed by order of the Board of Directors of said Company.

JOSE A. MARQUEZ, JR. NOTARY PUBLIC NEW JERSEY

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Nov. 21, 2010

CERTIFICATION

I, the undersigned officer of **INTERNATIONAL FIDELITY INSURANCE COMPANY** do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the By-Laws of said Company as set forth in said Power of Attorney, with the ORIGINALS ON IN THE HOME OFFICE OF SAID COMPANY, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 25th day of July, 2012

Assistant Secretary

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23 USC 112 AND PCC 7106

State of California)
) ss.
County of SAN DIEGO)

MARCELINO E. ORTIZ, being first duly sworn, deposes and says that he ~~XXXX~~ is PRESIDENT of 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.

Signed: Marcelino E Ortiz

Title: PRESIDENT

Subscribed and sworn to before me this 31 day of JULY, 2012

Gabriela Reyes
Notary Public

(SEAL)

ESI1 GABRIELA REYES COMM. #1972333 Notary Public-California SAN DIEGO COUNTY My Comm. Exp. MAR 17, 2016 ESI1

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of SAN DIEGO

On 07/31/12 (Date) before me, GABRIELA REYES - NOTARY PUBLIC (Here Insert Name and Title of the Officer)

personally appeared MARCELINO E. ORTIZ (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 gabriela reyes (Signature of Notary Public)

ESI1 GABRIELA REYES COMM. #1972333 Notary Public-California SAN DIEGO COUNTY My Comm. Exp. MAR 17, 2016 ESI1

Place Notary Seal Above

OPTIONAL

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

Description of Attached Document NON-COLLUSION AFFIDAVIT

Title or Type of Document: ALVARADO TRUNK SEWER PHASE III/BID NO.K-13-5243-DBB-3B

Document Date: 07/31/12 Number of Pages: 1 (ONE)

Signer(s) Other Than Named Above: N/A

Capacity(ies) Claimed by Signer(s)

Signer's Name: N/A
- ☐ Individual
- ☐ Corporate Officer — Title(s):
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other:

Signer Is Representing:

RIGHT THUMBPRINT OF SIGNER — Top of thumb here

Signer's Name: N/A
- ☐ Individual
- ☐ Corporate Officer — Title(s):
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other:

Signer Is Representing:

RIGHT THUMBPRINT OF SIGNER — Top of thumb here

©2007 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Chatsworth, CA 91313-2402 • www.NationalNotary.org Item #5907 Reorder: Call Toll-Free 1-800-876-6827

CONTRACTORS 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 ten 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 ten 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:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Contractor Name ORTIZ CORPORATION

Certified By MARCELINO E. ORTIZ Title PRESIDENT
Name

Signature Date 07/31/12

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
Phone (619) 533-3948 Fax (619) 533-3220

COMPANY INFORMATION

Company Name: ORTIZ CORPORATION	Contact Name: LUCY ORTIZ
Company Address: 2000 MC KINLEY AVENUE	Contact Phone: 619-434-7925
NATIONAL CITY, CA 91950	Contact Email: Lucy@ortizcorporation.com

CONTRACT INFORMATION

Contract Title: ALVARADO TRUNK SEWER PHASE III	Start Date: OCT 2012
Contract Number (if no number, state location): K-13-5243-DBB-3-B	End Date: JULY 2013

SUMMARY OF EQUAL BENEFITS ORDINANCE REQUI REMENTS

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.

MARCELINO E. ORTIZ/PRESIDENT	Marcelino E Ortiz	07/31/12
Name/Title of Signatory	Signature	Date

FOR OFFICIAL CITY USE ONLY

Receipt Date: EBO Analyst: ☐ Approved ☐ Not Approved – Reason:

rev 02/15/2011

PROPOSAL (BID)

The Bidder agrees to the construction of **ALVARADO TRUNK SEWER PHASE III**, for the city of San Diego, in accordance with these contract documents for the prices listed below. 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 to Award of the Contract. 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 e.g., bond and insurance.:

Item	Quantity	Unit	NAICS	Payment Reference	Description	Unit Price	Extension
BASE BID							
1	1	LS	237310	2-4.1	Bonds (Payment and Performance)		$ 19,500.00
2	1	EA	237310	3-3.2.2	Certified Payroll	$ 100.00	$ 100.00
3	1	LS	238990	7-9.1.1	Video Recording of Pre-existing Conditions		$ 500.00
4	1	LS	237310	7-10.2.7	Traffic Control		$ 14,000.00
5	1	LS	237310	9-3.4	Mobilization		$ 58,000.00
6	1	AL		9-3.5	Field Orders- Type II		$160,000.00
7	11	CY	237310	306-1.4	Additional Pavement Removal & Disposal	$ 75.00	$ 825.00
8	230	TON	237310	302-5.9	1 1/2 Inch Asphalt Concrete Overlay and Striping	$ 145.00	$ 33,350.00
9	1400	LF	237310	302-1.12	Cold Milling AC Pavement	$ 4.00	$ 5,600.00
10	80	SY	237310	302-7.4	Pavement Fabric	$ 70.00	$ 5,600.00
11	210	SF	237310	302-5.1.2	Damaged AC Pavement Replacement	$ 30.00	$ 6,300.00
12	1	LS	237110	306-1.1.6	Trench Shoring		$ 43,000.00
13	22	CY	237110	306-1.2.1.1	Additional Bedding	$ 100.00	$ 2,200.00
14	516	TON	237110	306-1.6	Imported Backfill	$ 45.00	$ 23,220.00
15	1290	LF	237110	306-1.4.8.8	Televising Sewer Mains & Storm Drains For Acceptance	$ 1.00	$ 1,290.00
16	25	TON	237310	306-1.5.1	Temporary Resurfacing	$ 185.00	$ 4,625.00
17	66	LF	237110	306-1.6	8-Inch Sewer Main	$ 700.00	$ 46,200.00
18	308	LF	237110	306-1.6	15-Inch Sewer Main	$ 650.00	$ 200,200.00
19	423	LF	237110	306-1.6	15-Inch Sewer Main, Special Strength SDR-26	$ 1,850.00	$ 782,550.00

Item	Quantity	Unit	NAICS	Payment Reference	Description	Unit Price	Extension
20	6	EA	237110	306-1.8.6	Manholes (5 x 3), PVC Lined	$ 8,500.00	$ 51,000.00
21	1	EA	237110	306-1.8.6	Junction Structure Ex Manhole No. 1, PVC Lined	$ 165,000.00	$ 165,000.00
22	4	EA	237110	306-1.8.6	Connection to Existing Manhole and Rechanneling	$ 6,400.00	$ 25,600.00
23	493	LF	237110	306-2.6	15-Inch Sewer by Jacking Operation of 48 to 72 Inch Steel Casing	$ 1,500.00	$ 739,500.00
24	4	EA	237110	306-5.3	Abandon Existing Manhole Outside of Trench	$ 2,575.00	$ 10,300.00
25	7	EA	237110	306-5.3	Abandon Existing Manhole on the Canyon	$ 2,995.00	$ 20,965.00
26	577	LF	237110	306-5.3	Abandon and Fill Existing 8-Inch Sewer Main Outside of Trench Limit	$ 12.00	$ 6,924.00
27	779	LF	237110	306-5.3	Abandon and Fill Existing 10-Inch Sewer Main Outside of Trench Limit	$ 13.00	$ 10,127.00
28	935	LF	237110	306-5.3	Abandon and Fill Existing 12-Inch Sewer Main Outside of Trench Limit	$ 13.00	$ 12,155.00
29	1	LS	238390	800-2.15	Clearing and Grubbing		$ 15,250.00
30	1	LS	561730	800-2.15	Revegetation and Erosion Control		$ 38,000.00
31	1	LS	237900	800-2.15	Construction Fencing and Access Route		$ 12,000.00
32	1	LS	541330	800-2.15	Maintenance Program		$ 19,000.00
33	1	LS	541330	801-9.4	Water Pollution Control Program Development		$ 28,600.00
34	1	LS	237990	801-9.4	Water Pollution Control Program Implementation		$ 2,700.00
35	1	LS	237110	804-2.2	Sewage Bypass and Pumping Plan (Diversion Plan)		$ 75,000.00
36	1224	LF	541330	808-1.3	Paleontological Monitoring Program	$ 6.00	$ 7,344.00
37	472	CY	541330	808-1.5	Paleontological Mitigation and Excavation	$ 1.00	$ 472.00
38	1224	LF	541330	807-1.2	Archeological and Native American Monitoring Program	$ 24.00	$ 29,376.00
39	1	AL	541330	807-1.4	Archeological and Native American Mitigation and Curation – Type I		$10,000.00
					ESTIMATED TOTAL BASE BID:		$ 2,686,373.00

TOTAL BID PRICE FOR BID (Items 1 through 39 inclusive) amount written in words:

TWO MILLION, SIX HUNDRED EIGHTY SIX THOUSAND, THREE HUNDRED SEVENTY THREE DOLLARS AND ZERO CENTS**********

The Bid shall contain an acknowledgment of receipt of all addenda, the numbers of which shall be filled in on the Bid form.

List the Addenda received and being acknowledged: A

If an addendum or addenda has been issued by the City and not noted as being received by the Bidder, this proposal shall be rejected as being **non-responsive**.

The names of all persons interested in the foregoing proposal as principals are as follows:

MARCELINO E. ORTIZ-PRESIDENT

AIDA BANGHART-VICE PRESIDENT

TERESA O. ORTIZ-SECRETARY

IMPORTANT NOTICE: If Bidder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last names in full.

Bidder: AIDA BANGHART on behalf of MARCELINO E. ORTIZ for ORTIZ CORPORATION

Title: VICE PRESIDENT for PRESIDENT

Business Address: 2000 MC KINLEY AVENUE, NATIONAL CITY, CA 91950

Place of Business: 2000 MC KINLEY AVENUE, NATIONAL CITY, CA 91950

Place of Residence: 1101 MAJESTAD LANE, CHULA VISTA, CA 91910

Signature:

NOTES:

A. The City shall determine the low Bid based on the Base Bid alone.

B. Prices and notations shall be in ink or typewritten. All corrections (which have been initiated by the Bidder using erasures, strike out, line out, or "white-out") shall be typed or written in with ink adjacent thereto, and shall be initialed in ink by the person signing the bid proposal.

C. Failure to initial all corrections made in the bidding documents shall cause the Bid to be rejected as **non-responsive** and ineligible for further consideration.

D. Blank spaces must be filled in, using figures. Bidder's failure to submit a price for any Bid item that requires the Bidder to submit a price shall render the Bid **non-responsive** and shall be cause for its rejection.

E. Unit prices shall be entered for all unit price items. Unit prices shall not exceed two (2) decimal places. If the Unit prices entered exceed two (2) decimal places, the City will only use the first two digits after the decimal points without rounding up or down.

F. All extensions of the unit prices bid will be subject to verification by the City. In the case of inconsistency or conflict between the product of the Quantity x Unit Price and the Extension, the product shall govern.

G. In the case of inconsistency or conflict, between the sums of the Extensions with the estimated total Bid, the sum of the Extensions shall govern.

H. Bids shall not contain any recapitulation of the Work. Conditional Bids will be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act", Division 2, Part 1, Chapter 4 of the Public Contract Code, the Bidder shall list below the name and address of each Subcontractor who will perform work, labor, render services or 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 list below the portion of the work which will be done 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 shall 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 that Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: D & D WILDLIFE HABITAT & RESTORATION Address: 9143 HARNESS STREET City: SPRING VALLEY State: CA Zip: 91977 Phone: 619-954-1956	CONSTRUCTOR	REVEGETATION	$41,192.00	ELBE	CITY OF SAN DIEGO	N/A
Name: T L SCANLAN CONST Address: 2308 SHAYLENE WAY City: ALPINE State: CA Zip: 91901 Phone: 619-647-9062	CONSTRUCTOR	CONCRETE STRUCTURES & SAND FILL (CASING)	$194,980.00	ELBE	CITY OF SAN DIEGO	N/A
Name: BONITA PIPELINE Address: 2209 HIGHLAND AVENUE City: NATIONAL CITY State: CA Zip: 91950 Phone: (619) 434-9801	CONSTRUCTOR	FURNISH & WELD CASING & PIPE ABANDONMENT	$233,102.00	SLBE	CITY OF	N/A

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	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

0.3855 GW

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification (except for OBE, SLBE and ELBE).

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act", Division 2, Part 1, Chapter 4 of the Public Contract Code, the Bidder shall list below the name and address of each Subcontractor who will perform work, labor, render services or 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 list below the portion of the work which will be done 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 shall 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 that Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: BRIAN F. SMITH & ASSOCIATES Address: 14010 POWAY RD., STE A City: POWAY State: CA Zip: 92064 Phone: 858-679-8218	CONSTRUCTOR SERVICE	ARCHEO/PALEONTO -LOGICAL & NATIVE AMERICAN MONITORING	$16,290.00	SLBE	CITY OF SAN DIEGO	N/A
Name: RC BIOLOGICAL CONSULTING Address: 12737 CAMPO ROAD City: SPRING VALLEY State: CA Zip: 91978 Phone: 619-463-1072	CONSTRUCTOR SERVICE	BIO MONITORING & REPORTING	$12,000.00	SLBE	CITY OF SAN DIEGO	N/A
Name: AYALA BORING INC Address: 10150 POPLAR AVENUE City: FONTANA State: CA Zip: 92335 Phone: 909-350-8940	CONSTRUCTOR	TUNNELING	$278,052.00	N/A	N/A	N/A

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	San Diego Regional Minority Supplier Diversity Council	SRMSDC
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 (except for OBE, SLBE and ELBE).

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act", Division 2, Part 1, Chapter 4 of the Public Contract Code, the Bidder shall list below the name and address of each Subcontractor who will perform work, labor, render services or 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 list below the portion of the work which will be done 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 shall 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 that Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: MJ BAXTER DRILLING CO. Address: PO BOX 245 City: EL CAJON State: CA Zip: 92022 Phone: 619-443-7800	CONSTRUCTOR	ROCK DRILLING	$201,500.00	N/A	N/A	N/A
Name: LSI ROAD MARKING Address: PO BOX 2426 City: EL CAJON State: CA Zip: 92021 Phone: 619-443-7755	CONSTRUCTOR	STRIPING	$2,800.00	SLBE	CITY OF SAN DIEGO	N/A
Name: ACCULINE SURVEY INC Address: 1919 GRAND AVENUE, STE 1G City: SAN DIEGO State: CA Zip: 92109 Phone: 858-483-6665	CONSTRUCTOR	SURVEY	$4,200.00	SLBE	CITY OF SAN DIEGO	N/A

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	San Diego Regional Minority Supplier Diversity Council	SRMSDC
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 (except for OBE, SLBE and ELBE).

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act", Division 2, Part 1, Chapter 4 of the Public Contract Code, the Bidder shall list below the name and address of each Subcontractor who will perform work, labor, render services or 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 list below the portion of the work which will be done 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 shall 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 that Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: COASTAL PIPELINE SERVICES Address: PO BOX 235653 City: ENCINITAS State: CA Zip: 92023 Phone: 760-828-5174	CONSTRUCTOR	TELEVISING	$845.00	ELBE	CITY OF SAN DIEGO	N/A
Name: PAL GENERAL ENGINEERING Address: 5374 EASGATE MALL City: SAN DIEGO State: CA Zip: 92121 Phone: 858-638-7100	CONSTRUCTOR	ASPHALT PAVING	$50,293.00	ELBE	CITY OF SAN DIEGO	N/A
Name: VIDEO FACT DOCUMENTATION Address: 4150 MERRITT BLVD City: LA MESA State: CA Zip: 91941 Phone: 619-589-0080	CONSTRUCTOR	PRECON VIDEO	$450.00	ELBE	CITY OF SAN DIEGO	N/A

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	San Diego Regional Minority Supplier Diversity Council	SRMSDC
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 (except for OBE, SLBE and ELBE).

NAMED EQUIPMENT/MATERIAL SUPPLIER LIST

The Bidder seeking the recognition of equipment, materials, or supplies obtained from Suppliers towards achieving any mandatory, voluntary, or both subcontracting participation percentages shall list the Supplier(s) on the Named Equipment/Material Supplier List. The Named Equipment/Material Supplier List, at a minimum, shall have the name, locations (City) and the **DOLLAR VALUE** of the Suppliers. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for such materials and supplies unless vendor manufactures or substantially alters materials and supplies in which case 100% will be credited. The Bidder is to indicate (Yes/No) whether listed firm is a supplier or manufacturer. In calculating the subcontractor participation percentages, vendors/suppliers will receive 60% credit of the listed **DOLLAR VALUE**, whereas manufacturers will receive 100% credit. If no indication provided, listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage, Suppliers will receive 60% credit of the listed **DOLLAR VALUE**, whereas manufacturers will receive 100% credit. If no indication provided, listed firm will be credited at 60% of the listed **DOLLAR VALUE** for purposes of calculating the subcontractor participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED②
Name: J. CLOUD, INC Address: 2094 WILLOW GLEN DRIVE City: EL CAJON State: CA Zip: 92019 Phone: 619-593-9020	MATERIALS	$27,304.00	YES	YES	ELBE	CITY OF SAN DIEGO
Name: Address: City: State: Zip: Phone:						
Name: Address: City: State: Zip: Phone:						

① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
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 (except for OBE, SLBE and ELBE).

ALVARADO TRUNK SEWER PHASE III

UNDERGROUND UTILITIES

AT LEAST THREE (3) WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR SHALL REQUEST A MARKOUT OF UNDERGROUND UTILITIES BY CALLING THE BELOW LISTED REGIONAL NOTIFICATION CENTER FOR AN INQUIRY IDENTIFICATION NUMBER:
UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-422-4133

CONTRACTOR'S RESPONSIBILITIES

1. THE CONTRACTOR SHALL LOCATE AND RECONNECT ALL SEWER LATERALS. LOCATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY, LATERAL RECORDS ARE AVAILABLE TO THE CONTRACTOR AT THE WATER DEPARTMENT, 2797 CAMINITO CHOLLAS. THE CONTRACTOR SHALL LOCATE THE IMPROVEMENTS THAT WILL BE AFFECTED BY LATERAL REPLACEMENTS.
2. THE LOCATIONS OF EXISTING BUILDINGS AS SHOWN ON THE PLAN ARE APPROXIMATE.
3. STORM DRAIN INLETS ARE TO REMAIN FUNCTIONAL/OPERATIONAL AT ALL TIMES DURING CONSTRUCTION
4. UNLESS OTHERWISE NOTED AS PREVIOUSLY POTHOLED (PH), ELEVATIONS SHOWN ON THE PROFILE FOR EXISTING UTILITIES ARE BASED ON A SEARCH OF THE AVAILABLE RECORD INFORMATION ONLY AND ARE SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THE CITY DOES NOT GUARANTEE THAT IT HAS REVIEWED ALL AVAILABLE DATA. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES EITHER SHOWN ON THE PLANS OR MARKED IN THE FIELD IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 5-1.
5. EXISTING UTILITY CROSSING AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT REPRESENTATIVE OF ACTUAL LENGTH AND LOCATION OF CONFLICT AREAS. SEE PLAN VIEW.

STORM WATER PROTECTION

1. THIS PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT ORDER NO. R9-2007-0001 AND WPCP.

ABBREVIATIONS

ABAND	ABANDON	EB	ENCASED BURIED	OVHD	OVER HEAD
ABAND'D	ABANDONED	EL, ELEV	ELEVATION	PVC	POLYVINYL CHLORIDE
AC	ASBESTOS CEMENT PIPE	ELEC	ELECTRIC	PROP	PROPOSED
		EX, EXIST	EXISTING	RED	REDUCER
AHD	AHEAD	E/O	EAST OF	RT	RIGHT
ASSY	ASSEMBLY	F	FLANGE	℄	SURVEY LINE
BK	BACK	GV	GATE VALVE	SMH	SEWER MANHOLE
BTWN	BETWEEN	HDPE	HIGH-DENSITY POLYETHYLENE	SO	STUB OUT
CATV	CABLE TV			S/O	SOUTH OF
CI	CAST IRON PIPE	HP	HIGH PRESSURE	SWR	SEWER
℄	CENTER LINE	IE	INVERT ELEVATION	TEL	TELEPHONE
COND	CONDUIT	LT	LEFT	UNK	UNKNOWN
CONT	CONTINUED	MJ	MECHANICAL JOINT	VC	VITRIFIED CLAY PIPE
CONTR	CONTRACTOR	MTD	MUTTIPLE TELEPHONE DUCT	WM	WATER METER
DB	DIRECT BURIED			WTR	WATER
DIAM	DIAMETER	N/O	NORTH OF	W/O	WEST OF

EXISTING STRUCTURES

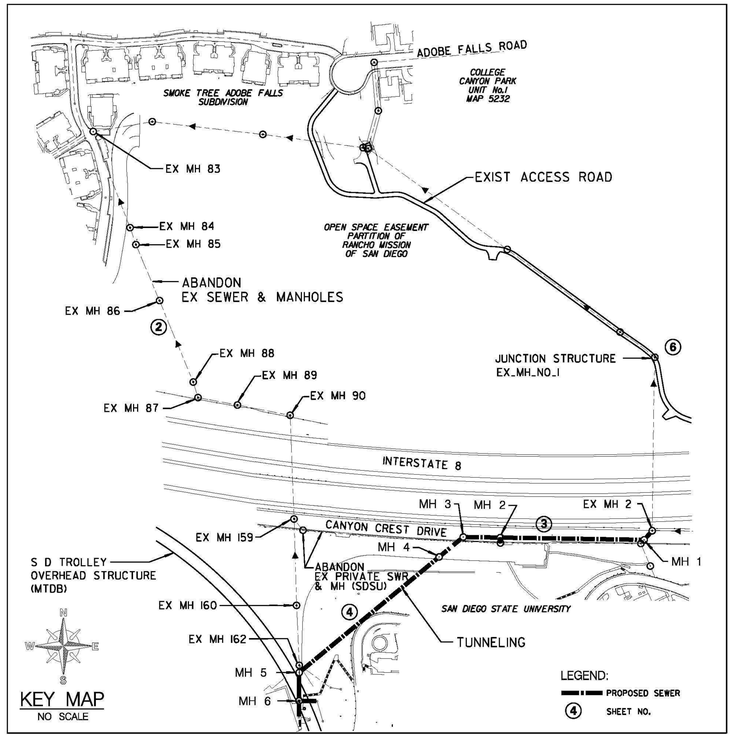
EX WATER MAIN & VALVES	W
EX WATER METER	
EX FIRE HYDRANT	FH
EX SEWER MAIN & MANHOLES	
EX DRAINS	
EX PAVEMENT (PROFILE)	
EX GROUND	
EX TRAFFIC SIGNAL	TS
EX STREET LIGHT	SL
GAS MAIN	G
ELEC. COND., TEL. COND., CATV	E T C
EX SEWER MAIN W/CONCRETE ENCASEMENT	
EX. EASEMENT	
EX. PROPERTY LINE	
SOIL BORING BY GROUP DELTA CONSULTANTS	B-1 (GDC)
SOIL TEST PIT BY GROUP DELTA CONSULTANTS	TP-1 (GDC)
EX FENCE	
EX CONCRETE ROLLED CURB	

LIMITS OF WORK

SHEET NO.	DISCIPLINE CODE	TITLE	LIMITS	PIPE SIZE (IN)	PIPE MATERIAL	LENGTH (FT)
1	G-1	COVER SHEET				
			SEWER			
2	C-1	CANYON CREST DR/SDSU	STA 10+00 TO STA 15+50 SDSU AREA	15	SEWER	550
			STA 0+00 TO STA 0+14.7	8	SEWER	15
3	C-2	SDSU	STA 15+50 TO STA 22+24 SDSU AREA	15	SEWER	674
		SDSU	STA 0+00. TO EXIST MH (SDSU) (STA 0+51)	8	SEWER	51
4	C-3	SEWER ABANDONMENT	EXIST MH 83 SOUTH TO EXIST MH 87; EXIST MH 87 TO EXIST MH 162 & EXIST MH 162 TO EXIST MH AT SDSU			
5	C-4		STREET RESURFACING	TOTAL SEWER		1290
6	C-5		JUNCTION STRUCTURE EX MANHOLE NO. 1			
7	C-6		MANHOLE CONNECTIONS & DETAILS			
8	C-7		TUNNELING DETAILS			
9-13	S-1 - S-5		STRUCTURAL NOTES, DETAILS, PLANS & SECTIONS			
14	L-1		REVEGETATION SHEET			
15	G-2		WATER POLLUTION CONTROL SITE PLAN			
	T1-T2		TRAFFIC PLANS			

DISCIPLINE CODE

G GENERAL
L LANDSCAPE
C CIVIL
T TRAFFIC CONTROL
S STRUCTURAL



KEY MAP
NO SCALE

WORK TO BE DONE

CONSTRUCTION OF ALVARADO TRUNK SEWER PHASE III CONSISTS OF: RE-ALIGNING THE EXISTING TRUNK SEWER SYSTEM BY INSTALLING APPROXIMATELY 1,290 NEW LINEAR FEET (LF) OF PIPE AS FOLLOWS: 797 LF OF OPEN CUT (66 LF 8-INCH, 731 LF 15-INCH) AND 493 LF OF TUNNELING. ABANDONMENT OF APPROXIMATELY 2,291 LINEAR FEET OF EXISTING SEWER BETWEEN ALVARADO CANYON AND SAN DIEGO STATE UNIVERSITY (SDSU). REPLACEMENT OF JUNCTION STRUCTURE EX MH NO 1. THE WORK ALSO INCLUDES THE ABANDONMENT OF EXISTING MANHOLES, MANHOLE REPLACEMENT, JACK-AND-BORE WORK AREAS (I.E. JACKING/RECEIVING PIT AREAS), TEMPORARY ACCESS ROADS, AND STAGING AREAS.

LEGEND

IMPROVEMENTS	STANDARD DRAWINGS	SYMBOL
PAVING & TRENCH RESURFACING	SDG-107, SDG-108	
SEWER MAIN	SDS-100, SDS-101, SDS-108, SDS-110 (TYPE C)	
SEWER MANHOLE/PVC LINED	SDS-106, SDS-107, SDM-113, M-3, SM-03, SM-04, SM-07	
ABANDON EX MANHOLE	SM-08	
SURVEY MONUMENT	M-10	
SLURRY FILL ABANDONED SEWER MAIN	SEE PLANS & SPECS	
CONSTRUCTION FENCE		

FOR ADDITIONAL SYMBOLS SEE RESURFACING, REVEGETATION, WATER POLLUTION CONTROL, AND TRAFFIC CONTROL SHEETS.

FIELD DATA

BENCHMARK: SWBP ADOBE DR & ADOBE PLACE
ELEV 238.535 MSL

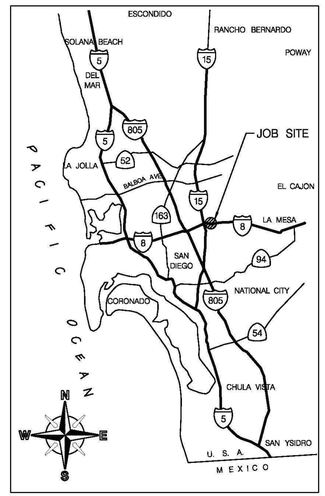
DATUM: MEAN SEA LEVEL

BASIS OF BEARING: GPS PTS 991, 1096, 1097

CITY OF SAN DIEGO SURVEY FIELD NOTES:
ALVARADO TRUNK SEWER AS-BUILT TOPO, RAMETTA, 2/9/99, WO 172801, 222-1746
S W'LY ADOBE FALLS RD, HALL, 1/22/94, 222-1746, WO 172801
ALVARADO TRUNK SEWER, HALL, 7/13/93, WO 172801, 222-1746

STREETS REQUIRING 12" TRENCH CAP:

STREET NAME: CANYON CREST DRIVE



VICINITY MAP
NOT TO SCALE

G-1

COVER SHEET

PLANS FOR THE CONSTRUCTION OF
ALVARADO TRUNK SEWER PHASE III
COVER SHEET

CITY OF SAN DIEGO, CALIFORNIA
SHEET 1 OF 15 SHEETS

AMENDED FOR CITY ENGINEER — DATE 7/2/2012

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

WATER W.B.S. N/A
SEWER W.B.S. B-00481

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER
JOSELITO GUINTO, PROJECT ENGINEER
- CCS27 COORDINATE
SEE SHEETS CCS83 COORDINATE
31650-01-D

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

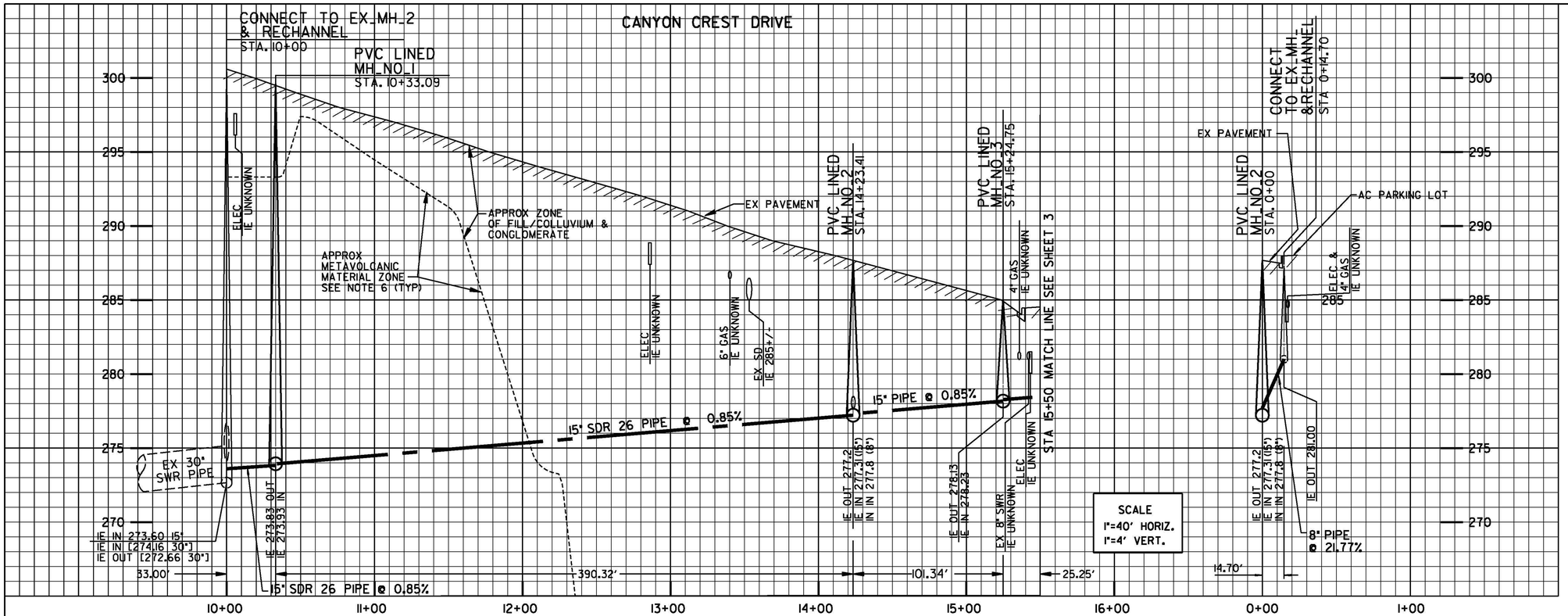
TEMPORARY BMP CONSTRUCTION SITE STORM WATER PRIORITY: HIGH ____ MEDIUM _X_ LOW____

SPEC. NO. K-13-5243-DBB-3-B

AS-BUILT INFORMATION

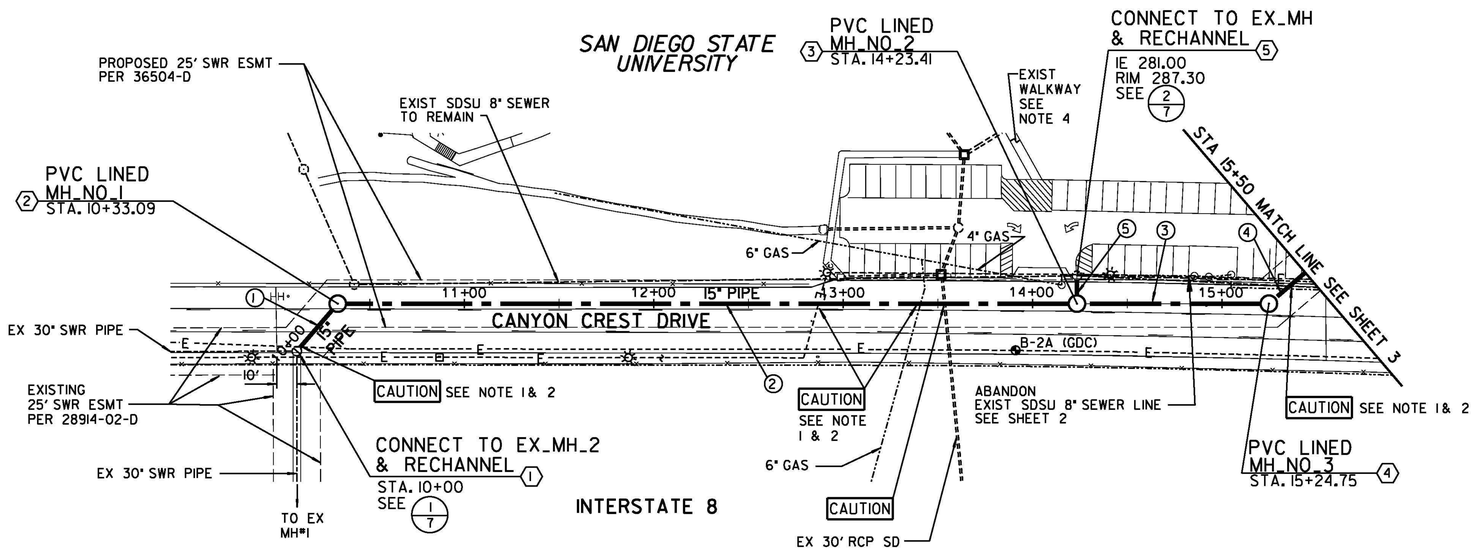
MATERIALS	MANUFACTURER
PIPE CL 235 (WATER)	-
PIPE SDR 35 (SEWER)	-
GATE VALVES	-
FIRE HYDRANTS	-
SEWER MANHOLES	-
REHABILITATE SEWER MANHOLES	-
REHABILITATE SEWER MAIN	-

REGISTERED PROFESSIONAL ENGINEER — RANIA L. SARKIS AMEN — No. C 63507 — Exp 09-30-2012 — CIVIL — STATE OF CALIFORNIA



SDSU PROFILE

SDSU PROFILE
CONNECTION 1



SDSU PLAN

SEWER MANHOLE COORDINATE TABLE			
NO.	NORTHING	EASTING	DESCRIPTION
1	1864199.55	6309017.14	EX SMH
2	1864174.84	6308995.14	5' SMH
3	1864181.04	6308604.86	"
4	1864182.65	6308503.54	"
5	1864166.35	6308604.63	EX SMH

NOTE: COORDINATE IS AT CENTER OF MANHOLE

PROPOSED PIPE DATA TABLE			
NO.	DELTA/BRG.	LENGTH	REMARKS
1	N41° 40'58"E	33.09'	15"
2	N89° 05'25"E	390.32'	"
3	N89° 05'25"E	101.34'	"
4	N50° 26'30"E	25.25'	"
5	N00° 54'35"E	14.7+/-	8", SEE SDSU PROFILE CONNECTION 1(THIS SHT)

SCALE: 1"=40'

NOTES:

1. PROTECT/RELOCATE EXIST UTILITIES AS NECESSARY DURING CONSTRUCTION. SERVICE TO BE MAINTAINED AT ALL TIMES
2. LENGTH OF OPEN CUT CONSTRUCTION AND MANHOLE LOCATION MAY VARY DEPENDING ON GEOTECHNICAL CONDITIONS FOUND AT TIME OF CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER AS SOON AS ANY CHANGE IS NOTED.
3. LIMITS OF SOIL FORMATIONS ARE APPROXIMATE & HAVE BEEN PLOTTED BASED ON SEISMIC REFRACTION SURVEY PERFORMED DURING DESIGN.
4. CONTRACTOR TO MAINTAIN SAFE ACCESS TO EXISTING WALKWAY FROM THE PARKING LOT. STREET LIGHTING MUST BE MAINTAINED AT ALL TIMES.
5. NIGHT WORK ONLY BETWEEN 8:00 PM TO 5:00 AM.

REFERENCE:

IMPROVEMENTS: MTDB No. LRT-426.3, UI2A SHT 174; 28027-2-D
GAS: SDG&E
ELECTRIC: SDG&E
CABLE TV: COX COMMUNICATIONS
TELEPHONE: SBC PACIFIC BELL
WATER FIELD BOOK: KI6
SEWER FIELD BOOK: KI6
100' SCALE: 222-1746
THOMAS BROS.: 1270-B1

RETIREMENTS:

NONE

REGISTERED PROFESSIONAL ENGINEER
RAMIA SARKIS AMEN
No. C 63507
Ex 09-30-2012
CIVIL
STATE OF CALIFORNIA

CANYON CREST DRIVE/SDSU

C-1

ALVARADO TRUNK SEWER PHASE III

CANYON CREST DRIVE/SDSU

STA 10+00 TO STA 15+50

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 2 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

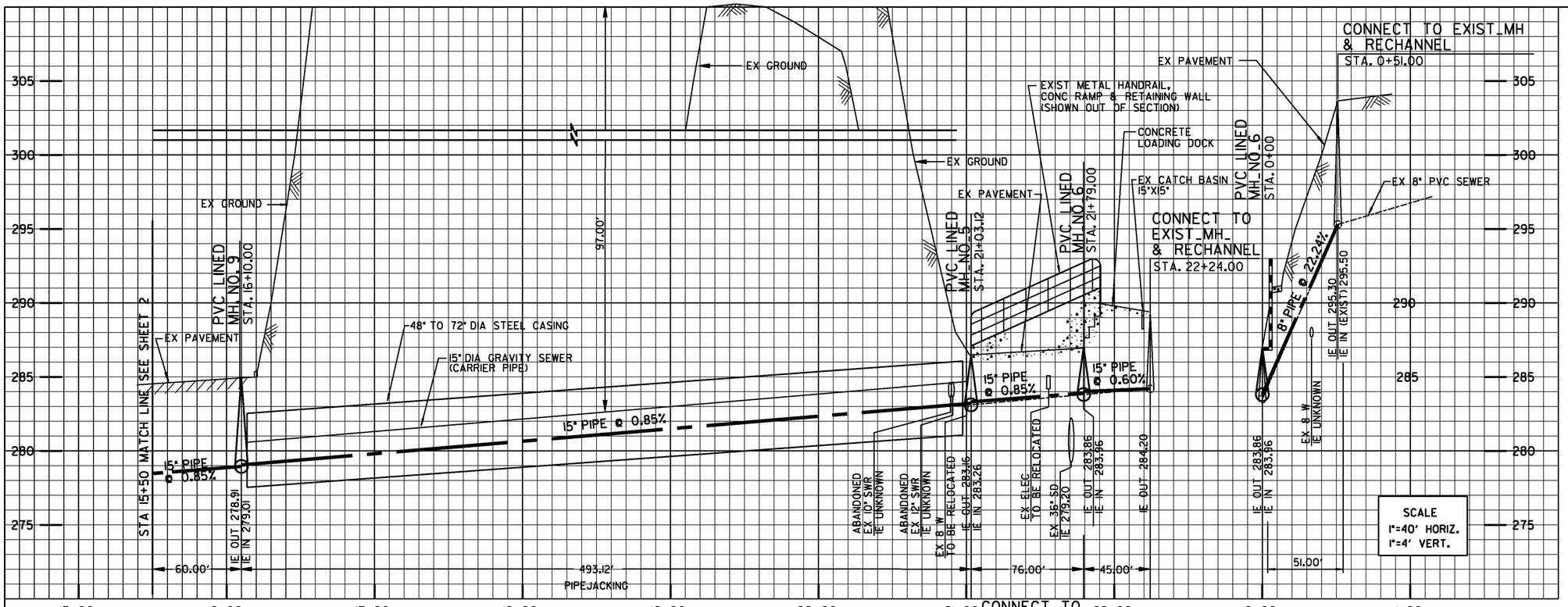
JOSELITO GUINTO, PROJECT ENGINEER

222-1743 CCS27 COORDINATE

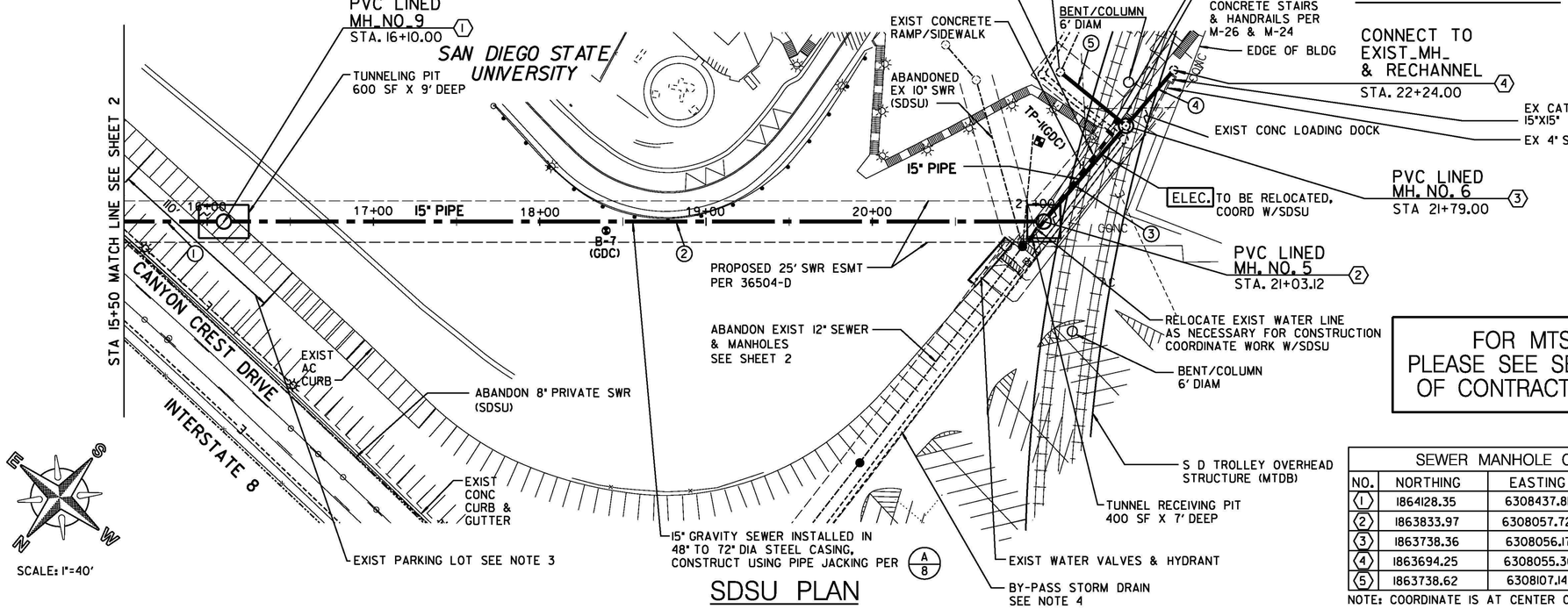
- CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31650-02-D



SDSU PROFILE



SDSU PLAN

SDSU PROFILE CONNECTION 2

NOTES:

1. PROTECT/RELOCATE EXIST UTILITIES AS NECESSARY DURING CONSTRUCTION. SERVICE TO BE MAINTAINED AT ALL TIMES
2. LENGTH OF OPEN CUT CONSTRUCTION AND MANHOLE LOCATION MAY VARY DEPENDING ON GEOTECHNICAL CONDITIONS FOUND AT TIME OF CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER AS SOON AS ANY CHANGE IS NOTED.
3. CONTRACTOR TO MAINTAIN SAFE ACCESS TO EXISTING WALKWAY FROM THE PARKING LOT. STREET LIGHTING MUST BE MAINTAINED AT ALL TIMES.
4. EXIST STORM DRAIN FLOWS TO BE BY-PASSED DURING CONSTRUCTION AS NECESSARY.

REFERENCE:

IMPROVEMENTS: MTDB No. LRT-426.1, UTIL; 28027-2-D, SDSU PLUMBING MAP 1967
GAS: SDG&E
ELECTRIC: SDG&E
CABLE TV: COX COMMUNICATIONS
TELEPHONE: SBC PACIFIC BELL
WATER FIELD BOOK: K16
SEWER FIELD BOOK: K16
100' SCALE: 222-1746
THOMAS BROS.: 1270-B1

RETIREMENTS:

SEE SHEET 4

PROPOSED PIPE DATA TABLE			
NO.	DELTA/BRG.	LENGTH	REMARKS
1	N50° 26'30"E	60.00'	15"
2	N50° 26'30"E	493.12'	"
3	N01° 05'58"E	76.00'	"
4	N01° 03'07"E	45.00'	15" SEE NOTE 3
5	N89° 42'28"E	51.00'	8", SEE NOTE 4 & SDSU PROFILE CONNECTION 2 (THIS SHT)

REGISTERED PROFESSIONAL ENGINEER RANYA SARKIS AMEEN No. C 63507 Exp 09-30-2012 CIVIL STATE OF CALIFORNIA

FOR MTS NOTE, PLEASE SEE SECTION 7-10.1 OF CONTRACT DOCUMENT

SEWER MANHOLE COORD. DATA			
NO.	NORTHING	EASTING	DESCRIPTION
1	1864128.35	6308437.81	5' SMH PER S-106
2	1863833.97	6308057.72	"
3	1863738.36	6308056.17	"
4	1863694.25	6308055.36	EX SMH
5	1863738.62	6308107.14	EX SMH

NOTE: COORDINATE IS AT CENTER OF MANHOLE

C-2

ALVARADO TRUNK SEWER PHASE III

SDSU

STA 15+50 TO STA 22+24

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 3 OF 15 SHEETS

APPROVED: FOR CITY ENGINEER — DATE: 7/2/2012

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

WATER W.B.S. N/A
SEWER W.B.S. B-00481

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER
JOSELITO GUINTO, PROJECT ENGINEER
222-1743 CCS27 COORDINATE
- CCS83 COORDINATE
31650-03-D

SDSU

EX MH NO 83
RIM EL= 136.70
EX IE= 111.90

EXIST 24" VC SEWER

ABANDON
EX_MH_NO_84
RIM EL=136.91
EX IE=114.87

ABANDON
EX_MH_NO_85
RIM EL=148.64
EX IE=139.00

ABANDON
EXIST 10" VC SEWER
281'

PLUG EXIST 10" VC SEWER

EXIST DRAINAGE CHANNEL

SMOKE TREE
ADOBE FALLS
SUBDIVISION
LOT 3

SMOKE TREE
ADOBE FALLS
SUBDIVISION
LOT 2

WALL

PRIVATE DRIVEWAY

EXIST 24" VC SEWER

OPEN SPACE EASEMENT
PARTITION OF RANCHO MISSION OF SAN DIEGO
MAP 330

ABANDON
EX 10" VC SWR
165'

EXISTING
20' SWR ESMT
PER 1418-D

ABANDON
EX 10" VC SWR
49'

ABANDON
EX_MH_NO_86
RIM EL=161.25
EX IE=153.10

ABANDON
EX 10" VC SWR
239'

ABANDON
EXIST 10" VC SEWER
44'

ABANDON EX 12" VC SWR
146' TO EX MH NO 90

ABANDON
EX 12" VC SWR
109'

MATCH LINE SEE BELOW LEFT

ABANDON
EX_MH_NO_89
RIM EL=194.35
EX IE=187.12

INTERSTATE 8

WALL

ABANDON
EX_MH_NO_87
RIM EL=189.03
EX IE=183.24

ABANDON
EX_MH_NO_88
RIM EL=187.96
EX IE=181.71

SCALE: 1"=40'

ABANDON
EX_MH_NO_159
RIM EL=270.81
EX IE=238.92

ABANDON
EX 8" PRIVATE SWR (SDSU)
39'

ABANDON
EX PRIVATE MH (SDSU)

ABANDON
EX_MH_NO_90
RIM EL=230.01
EX IE=226.12

EXISTING
20' SWR ESMT
PER 9102-I-D

OPEN SPACE EASEMENT
PARTITION OF
RANCHO MISSION
OF SAN DIEGO
MAP 330

EXISTING
20' SWR ESMT
PER 9102-I-D

MATCH LINE SEE ABOVE RIGHT

ABANDON
EX 12" VC SWR
146' TO EX MH NO 89

INTERSTATE 8

CANYON CREST DR.

ABANDON
EX 8" PRIVATE SWR (SDSU)
538'

ABANDON
EX 12" VC SWR
282'

ABANDON
EX 12" VC SWR
235'

ABANDON
EX_MH_NO_160
RIM EL=278.65
EX IE=264.60

SAN DIEGO
STATE UNIVERSITY

ABANDON
EX_MH_NO_162
RIM EL=285.87
EX IE=280.10

EXIST 36" SD

PLUG EXIST 8" VC
SEWER INSIDE MH

ABANDONED
12" VC SWR
104'

EXISTING
20' SWR ESMT
PER 9102-I-D

EXIST 36" SD

TR-1(GDC)

BENT/COLUMN
6' DIAM

SAN DIEGO (MTDB)

ABANDON
EX 12" VC SWR
163'

GRANT EASEMENT TO METROPOLITAN
TRANSIT DEVELOPMENT BOARD PER
DOC. NO. 2006-0897976 RECORDED
ON 12-19-2006 O.R.

BENT/COLUMN
6' DIAM

EXISTING MTS R/W AND S D TROLLEY
OVERHEAD STRUCTURE

SCALE: 1"=40'

REGISTERED PROFESSIONAL ENGINEER
RAMIA SARKIS AMEN
No. C 63507
Exp 09-30-2012
CIVIL
STATE OF CALIFORNIA

REFERENCE:

WATER: 18404-D
SEWER: 12496-5,6-D, 9102-D, 1418-D, 18404-3-D
STORM DRAIN: 18404-14-D
GAS: SDG&E
ELECTRIC: SDG&E
CABLE TV: COX COMMUNICATIONS
TELEPHONE: SBC PACIFIC BELL
IMPROVEMENTS: 18404-2,3,8,9,15-D; 12496-6,7-D;
28027-6-D; 11190-5-D
100' SCALE/FIELD BOOK: K16S
THOMAS BROS.: 1270-B1

RETIREMENTS:

10" - VC - 779' - 1951, 1960, 1982
12" - VC - 935' - 1960
MH - II - 1965

8" - 577' - PRIVATE SWR (SDSU)

SEWER ABANDONMENT

C-3

ALVARADO TRUNK SEWER PHASE III

SEWER ABANDONMENT

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 4 OF 15 SHEETS

APPROVED: FOR CITY ENGINEER — DATE: 7/2/2012

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

WATER W.B.S. N/A
SEWER W.B.S. B-00481

SUBMITTED BY:
JERICHO GALLARDO
ASSOCIATE ENGINEER

JOSELITO GUINTO
PROJECT ENGINEER

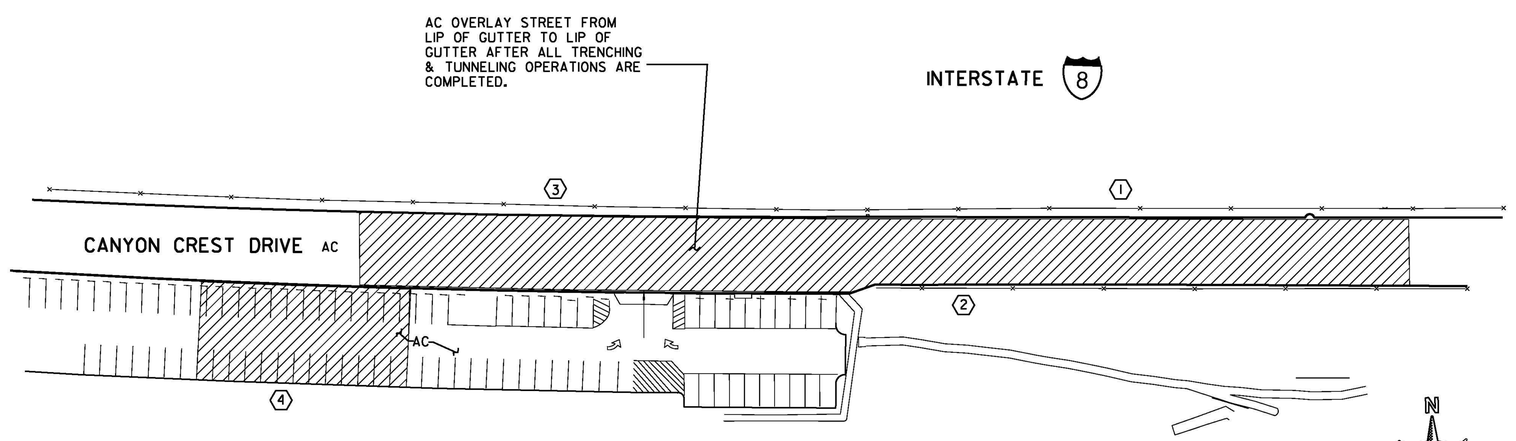
222-1743
CCS27 COORDINATE

-
CCS83 COORDINATE

31650-04-D

LEGEND	
	APPROXIMATE LIMIT OF AC OVERLAY
⬡	LOCATION PER PAVING SCHEDULE NOTES (THIS SHEET)

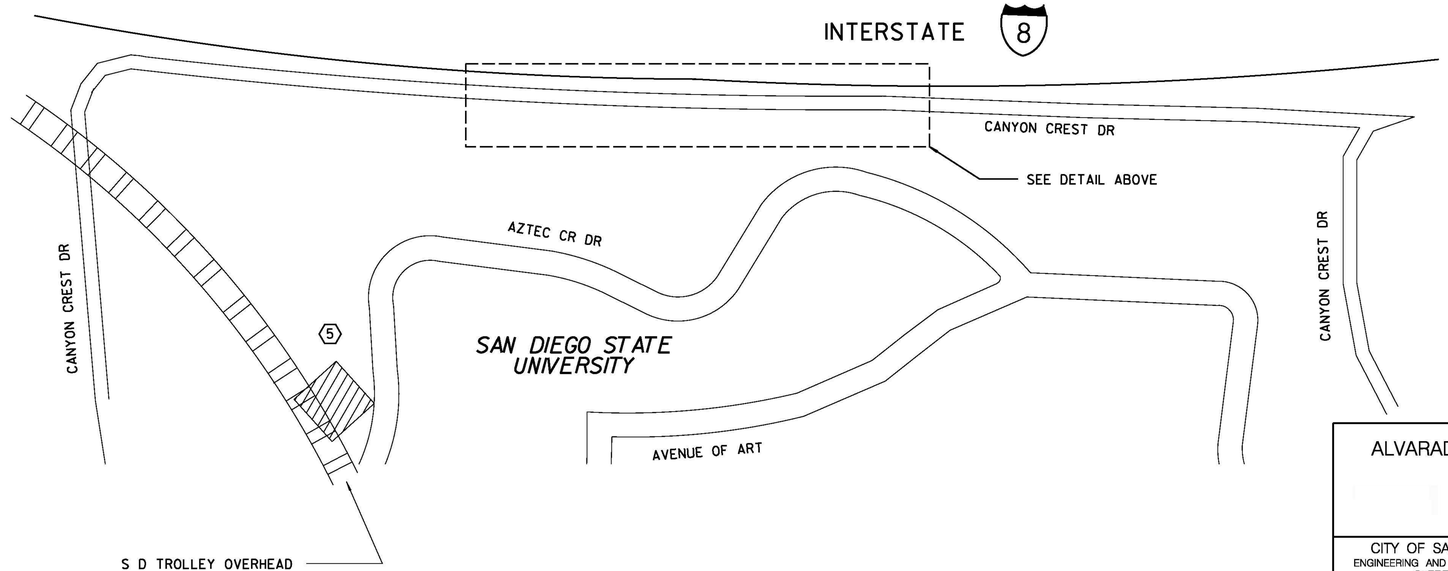
PAVING SCHEDULE NOTES						
NO.	LOCATION	RESTORATION REQUIRED	STATION	STATION	WIDTH	APPROX. AREA
⟨1⟩	CANYON CREST DRIVE		10+00.69	12+83.09	34.6'	9759.0
⟨2⟩	CANYON CREST DRIVE		12+83.09	12+95.59	36.55' (AVE.)	457.0
⟨3⟩	CANYON CREST DRIVE		12+95.59	15+54.75	38.5'	9978.0
⟨4⟩	S OF CANYON CREST DR AND PARKING LOT		15+29.00	16+40.00	52.0'	5772.0
⟨5⟩	SOUTH OF TUNNELING		20+88.12	21+18.12	30.0'	900.0
					TOTAL AREA OF AC OVERLAY	**26,866 SF**



SDSU PLAN

SAN DIEGO STATE UNIVERSITY

SCALE: 1"=40'



STREET RESURFACING

C-4

ALVARADO TRUNK SEWER PHASE III

STREET RESURFACING

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 5 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: _____ FOR CITY ENGINEER
DATE: 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

REGISTERED PROFESSIONAL ENGINEER — RANIA SARKIS AMEN — No. C 63507 — to 09-30-2012 — CIVIL — STATE OF CALIFORNIA

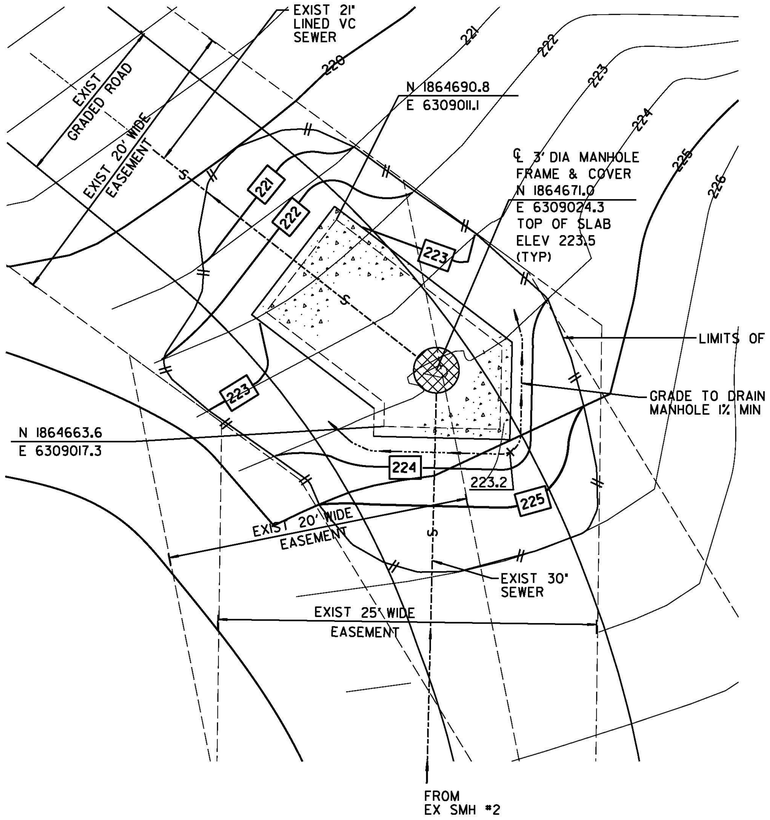
JOSELITO GUINTO, PROJECT ENGINEER

222-1743, CCS27 COORDINATE

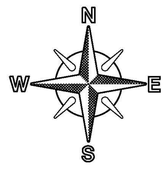
-, CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31650-05-D

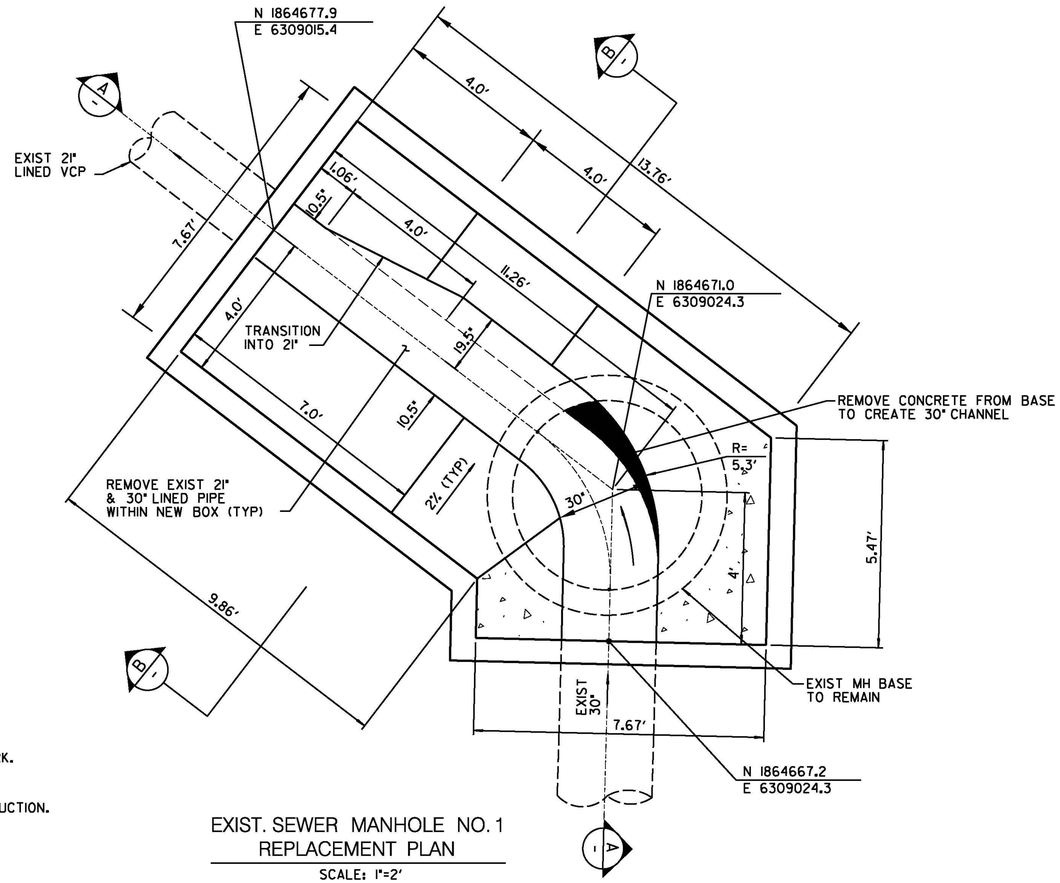


EXIST. SEWER MANHOLE NO. 1
GRADING PLAN
SCALE: 1"=5'

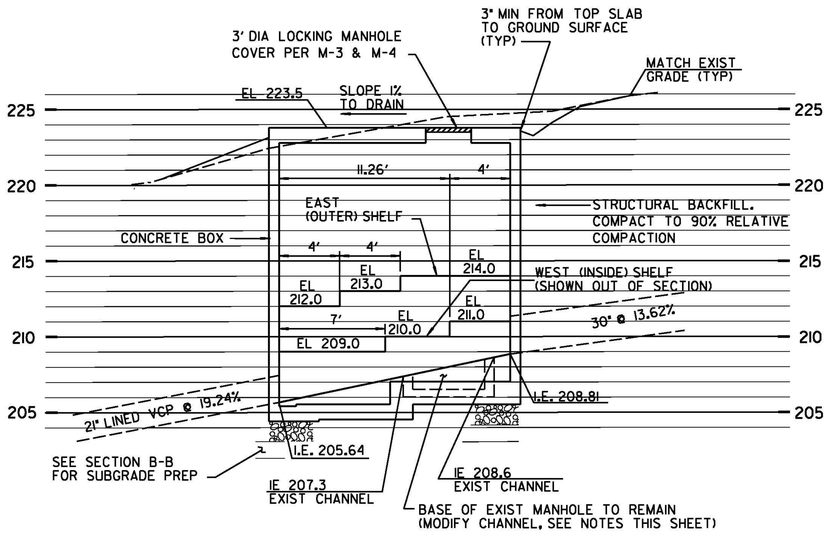


SCALE: 1"=5'

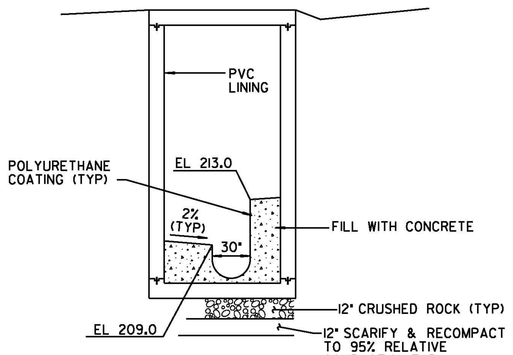
NOTES:
1. FOR STRUCTURAL DETAILS, SEE SHT 11
2. CONTRACTOR SHALL SUBMIT SEWAGE DIVERSION PLAN TO THE ENGINEER FOR APPROVAL
3. FIELD VERIFY ALL EXIST CONDITIONS PRIOR TO START OF WORK. ADJUST BOX BOTTOM/CHANNEL ELEV TO MATCH EXIST PIPE.
4. CONTRACTOR SHALL PROTECT EXISTING PIPING DURING CONSTRUCTION.



EXIST. SEWER MANHOLE NO. 1
REPLACEMENT PLAN
SCALE: 1"=2'



SECTION A–A
SCALE: 1"=5'



SECTION B–B
SCALE: 1"=5'

REFERENCE:

IMPROVEMENTS: 28027-2,4,6-D; 28914-2-D; 12496-8-D
GAS: SDG&E
ELECTRIC: SDG&E
CABLE TV: COX COMMUNICATIONS
TELEPHONE: SBC PACIFIC BELL
WATER FIELD BOOK: 516
SEWER FIELD BOOK: 516
100' SCALE: 222-1746
THOMAS BROS.: 1270-B1

C–5

JUNCTION STRUCTURE MANHOLE NO. 1

ALVARADO TRUNK SEWER PHASE III

JUNCTION STRUCTURE EXISTING MANHOLE NO. 1

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 6 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE: 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

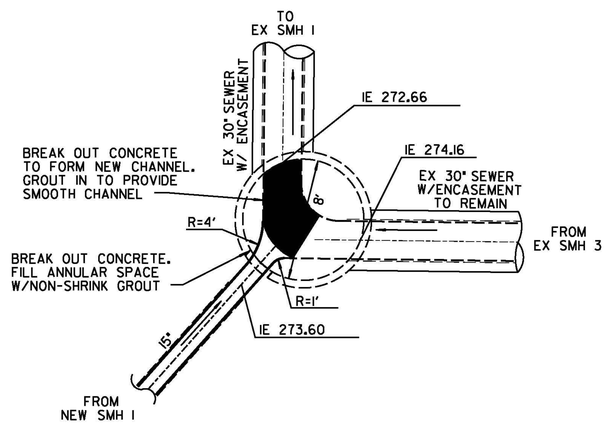
224-1743 CCS27 COORDINATE

- CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

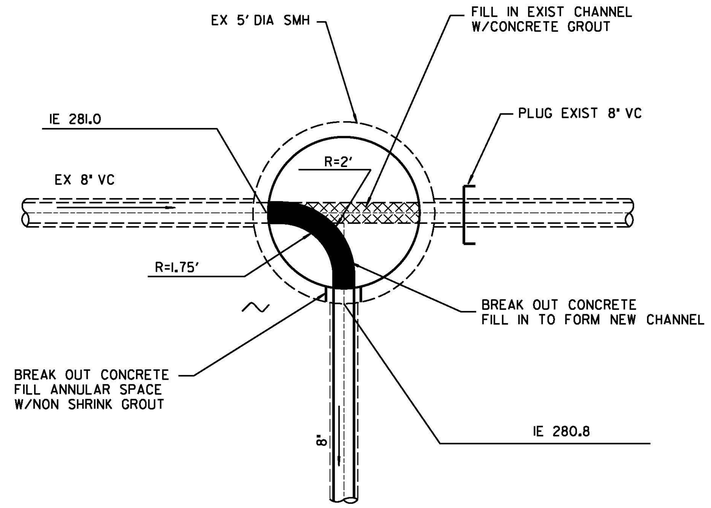
31650-06-D

REGISTERED PROFESSIONAL ENGINEER — RANIA SARKIS AMEN — No. C 63507 — Re 09-30-2012 — CIVIL — STATE OF CALIFORNIA



8' DIA EX SEWER MANHOLE No. 2 (1/-)

SCALE: 1"=5'



5' DIA EX SEWER MH @SDSU NEAR STA 14+23 (2/-)

NOT TO SCALE

MANHOLE CONNECTIONS & DETAILS

C-6

ALVARADO TRUNK SEWER PHASE III

MANHOLE CONNECTIONS & DETAILS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 7 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION		APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

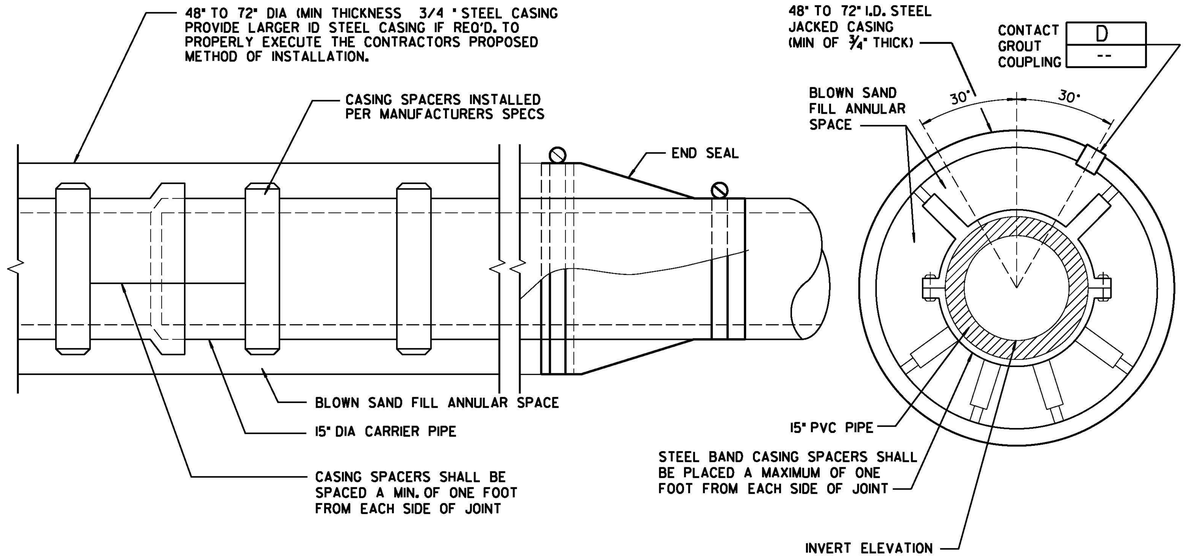
CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

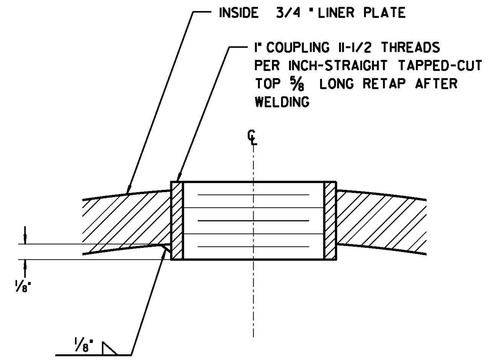
31650-07-D

REGISTERED PROFESSIONAL ENGINEER
RANIA SARKIS AMEN
No. C 63507
Exp 03-31-2012
CIVIL
STATE OF CALIFORNIA



DETAIL	A
JACKED PIPE TUNNEL NOT TO SCALE	--

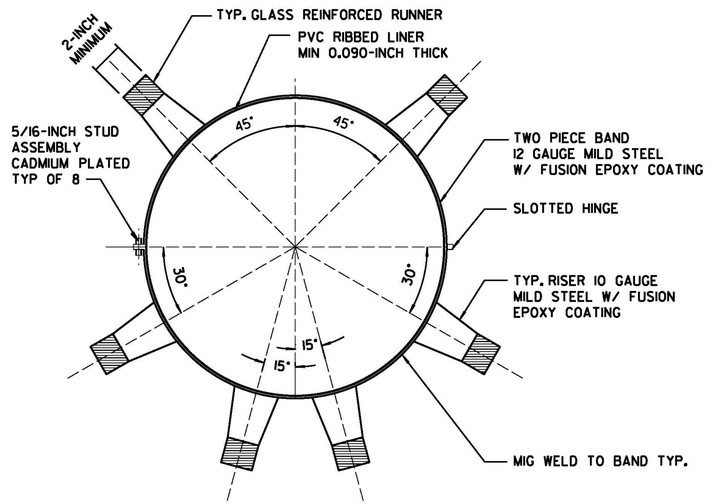
DETAIL	B
JACKED STEEL CASING NOT TO SCALE	--



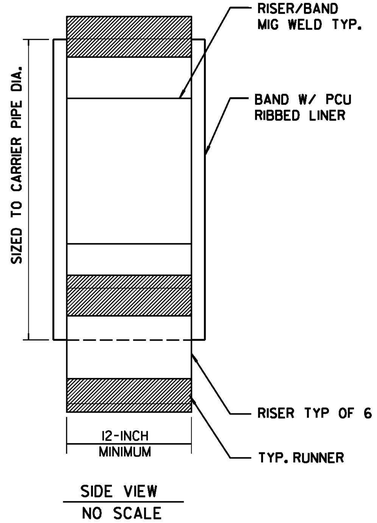
NOTES:

1. ALTERNATE 30 DEGREES EACH SIDE OF CENTERLINE MAXIMUM SPACING SHALL BE 6'-0".
2. AFTER GROUTING, PLUG HOLES WITH RECESSED STEEL PIPE PLUGS. INSTALL FLUSH WITH INSIDE OF CASING.

DETAIL	D
CONTACT GROUT COUPLING NOT TO SCALE	--



FRONT VIEW
NO SCALE



SIDE VIEW
NO SCALE

DETAIL	C
TYPICAL CASING SPACER SCALE 2"=1'-0"	--

TUNNELING DETAILS

C-7

ALVARADO TRUNK SEWER PHASE III

TUNNELING DETAILS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 8 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

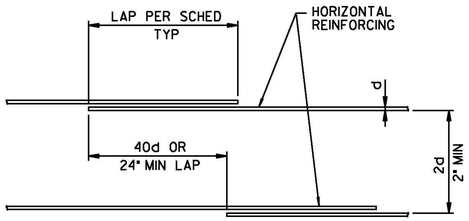
CONTROL CERTIFICATION

LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31650-08-D

REGISTERED PROFESSIONAL ENGINEER — RANIA SARKIS AMEN — No. C 63507 — Exp 03-30-2012 — CIVIL — STATE OF CALIFORNIA



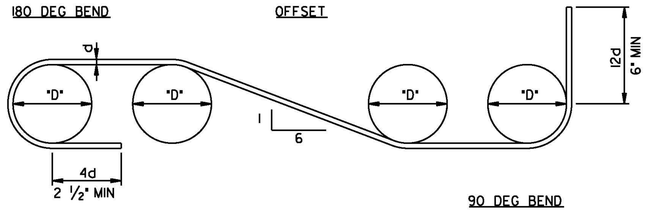
CONC. F'c P.S.I.	BAR SIZE									
	#3	#4	#5	#6	#7	#8	#9	#10		
	TENSION LAP SPLICES, INCHES									
4,000	25	33	41	49	69	81	91	103		

HARDROCK CONCRETE
F'y = 60,000 P.S.I. (CLASS "B")

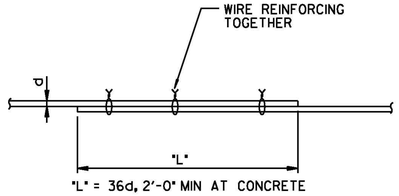
NOTES:

1. SPLICE LENGTH SHALL BE DETERMINED FROM THE SIZE OF THE SMALLER BAR SPLICED.
2. DIVIDE BY 1.3 FOR NON-TOP BAR (LESS THAN 12" OF CONCRETE CAST BELOW)
3. CONCRETE MASONRY UNITS LAP 50d MIN HORIZ & VERT REINF

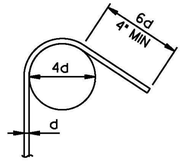
HORIZONTAL REINFORCING LAP SPLICE — A — VAR
NTS



90 DEG BEND

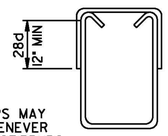


BAR SPLICE



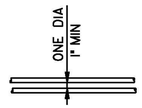
135 DEG BEND

REINFORCING BAR BEND	
REINFORCING SIZE	BAR BEND DIAMETER ("D")
#3 TO #8	6d
#9 TO #11	8d
#14 TO #18	10d



NOTE:
CAP STIRRUPS MAY BE USED WHENEVER 135° CLOSED STIRRUPS ARE SHOWN IN GRADE BEAM ONLY

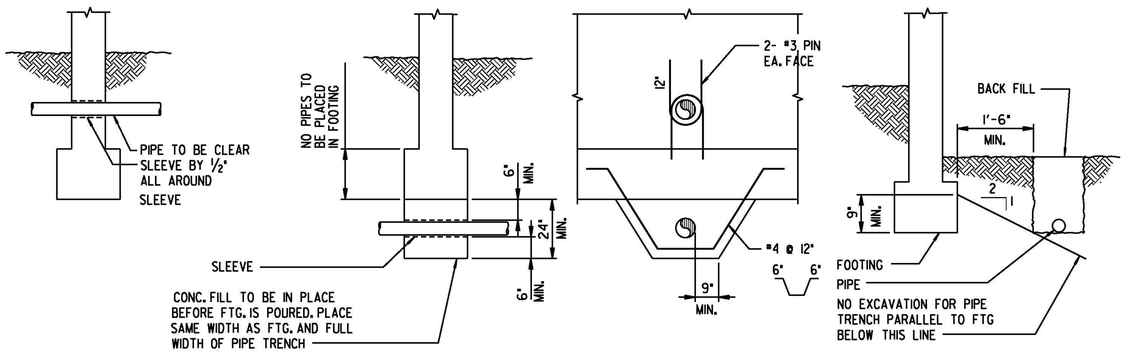
CAP STIRRUP



BAR CLEARANCE

NOTE: ALL BENDS SHALL BE MADE COLD

TYPICAL BAR BENDS — C — VAR
NTS

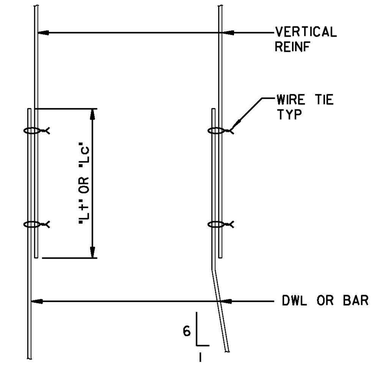


PIPE AT FOUNDATION WALL
(PIPE IS MORE THAN 2'-6" BELOW FINISH GRADE AND PASS THRU FOUNDATION WALL.)

NOTES:

1. INSIDE DIAMETER OF SLEEVE TO BE 2" LARGER THAN OUTSIDE DIAMETER OF PIPE
2. SLEEVES SHALL BE NON-CORROSIVE, FILL VOID W/ OAKUM AT EA END.
3. IF PIPE IS IN PLACE PRIOR TO POURING CONC. WRAP PIPE WITH 1" GLASS WOOL INSULATION BEFORE POURING CONC. IN LIEU OF SLEEVE.

TYPICAL PIPE THRU FOOTING — E — VAR
NTS



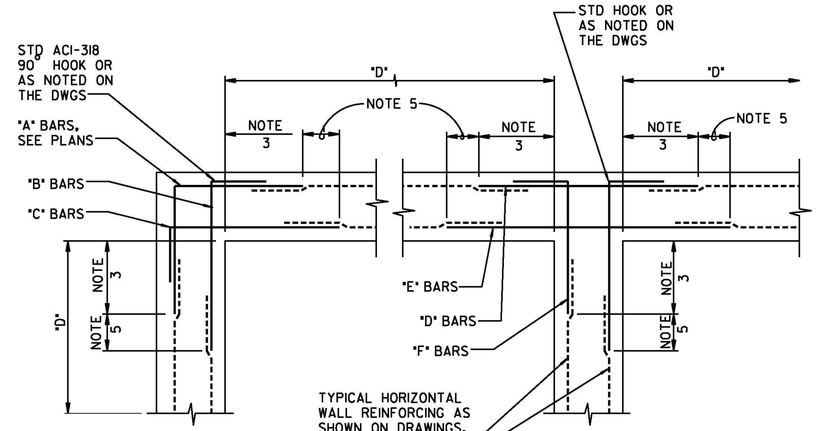
BAR SIZE	TENSION LAP "L+" (IN.) F'c=4,000 P.S.I.	COMPRESSION LAP "Lc" (IN.)
#3	25	12
#4	33	15
#5	41	19
#6	49	23
#7	69	27
#8	81	30
#9	91	34
#10	103	39
#11	114	43

F'y = 60 K.S.I.

NOTES:

1. ALL VERTICAL REINFORCING FOR COLUMN, PIERS AND WALLS SHALL BE DOWELED AS SHOWN, UNLESS NOTED OTHERWISE.
2. DOWELS SHALL BE THE SAME GRADE, SIZE, QUANTITY AND/OR SPACING AS VERTICAL REINFORCING.
3. WHEN "Lc" OR "L+" IS NOT SPECIFIED ON DRAWING, USE TENSION LAP "L+"

VERT REINF - TENSION & COMPRESSION LAP SPLICE — B — VAR
NTS



TYPICAL DOUBLE MAT
CORNER AND INTERSECTION

1. TYPICAL HORIZONTAL WALL CORNER AND INTERSECTION REINFORCING LAYOUT IS SHOWN TO AVOID CONGESTION AND PERMIT PROPER PLACEMENT. FOR SIZE AND SPACING SEE PLANS. ALL HORIZONTAL REINFORCING AT CORNERS AND INTERSECTIONS SHALL BE FABRICATED AND INSTALLED WITH SPLICES LOCATED WHERE SHOWN REGARDLESS OF BAR SIZE AND SPACING.
2. WHERE THE CORNER OR INTERSECTION REINFORCING SIZE AND SPACING IS NOT SHOWN, NOTED OR TABULATED ON THE PLANS, THE SIZE AND SPACING SHALL BE THE SAME AS THE WALL HORIZONTAL REINFORCING SHOWN ON THE WALL SECTIONS OR AS NOTED FOR THE REINFORCING BETWEEN THE CORNERS OR INTERSECTIONS.
3. EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, THE LENGTH INDICATED AS "NOTE 3" SHALL BE THE LESSER OF D/4, 10 FEET, OR 1.0 TIMES THE HEIGHT OF THE WALL, EXCEPT THAT IN NO CASE SHALL IT BE LESS THAN 2.0 FEET.
4. D = LENGTH OF WALL PARALLEL TO THE BAR LENGTH IN QUESTION.
5. EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, THE LENGTH INDICATED AS "NOTE 5" SHALL BE EQUAL TO ONE "LAP LENGTH" AS REQUIRED BY THE GENERAL STRUCTURAL NOTES. USE THE LAP LENGTH AS REQUIRED FOR THE SMALLER OF THE TWO REINFORCING BARS BEING SPLICED.
6. UNLESS OTHERWISE NOTED "B" AND "C" BARS ARE THE SAME SIZE AND SPACING AND, "F" AND "G" BARS ARE THE SAME SIZE AND SPACING.

INTERSECTION REINFORCING — D — VAR
(SEE PLANS FOR SIZE AND SPACING)
NTS

TYPICAL STRUCTURAL DETAILS – 1

S-1

ALVARADO TRUNK SEWER PHASE III

TYPICAL STRUCTURAL DETAILS – 1

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 9 OF 15 SHEETS

APPROVED: FOR CITY ENGINEER — DATE: 7/2/2012

WATER W.O.S. N/A
SEWER W.O.S. B-00481

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO
PROJECT ENGINEER

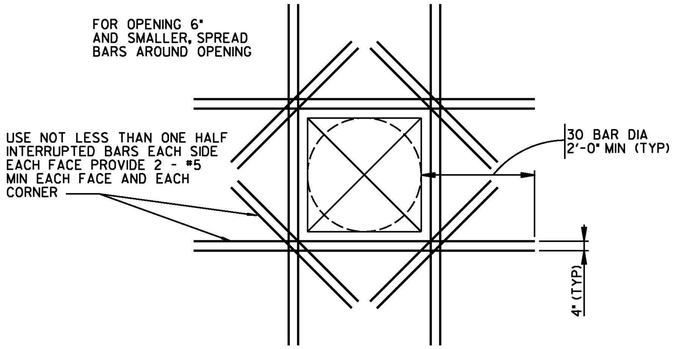
CONTROL CERTIFICATION

LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

REGISTERED PROFESSIONAL ENGINEER — RANIA SARKIS AMER — No. C 63507 — Exp 03-31-2012 — CIVIL — STATE OF CALIFORNIA

31650-09-D



ADDITIONAL REINF RECTANGULAR & CIRCULAR OPENINGS LARGER THAN 12"

NO SCALE

A
VAR

TYPICAL STRUCTURAL DETAILS – 2

S–2

ALVARADO TRUNK SEWER PHASE III

TYPICAL STRUCTURAL DETAILS – 2

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 10 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

CONTROL CERTIFICATION

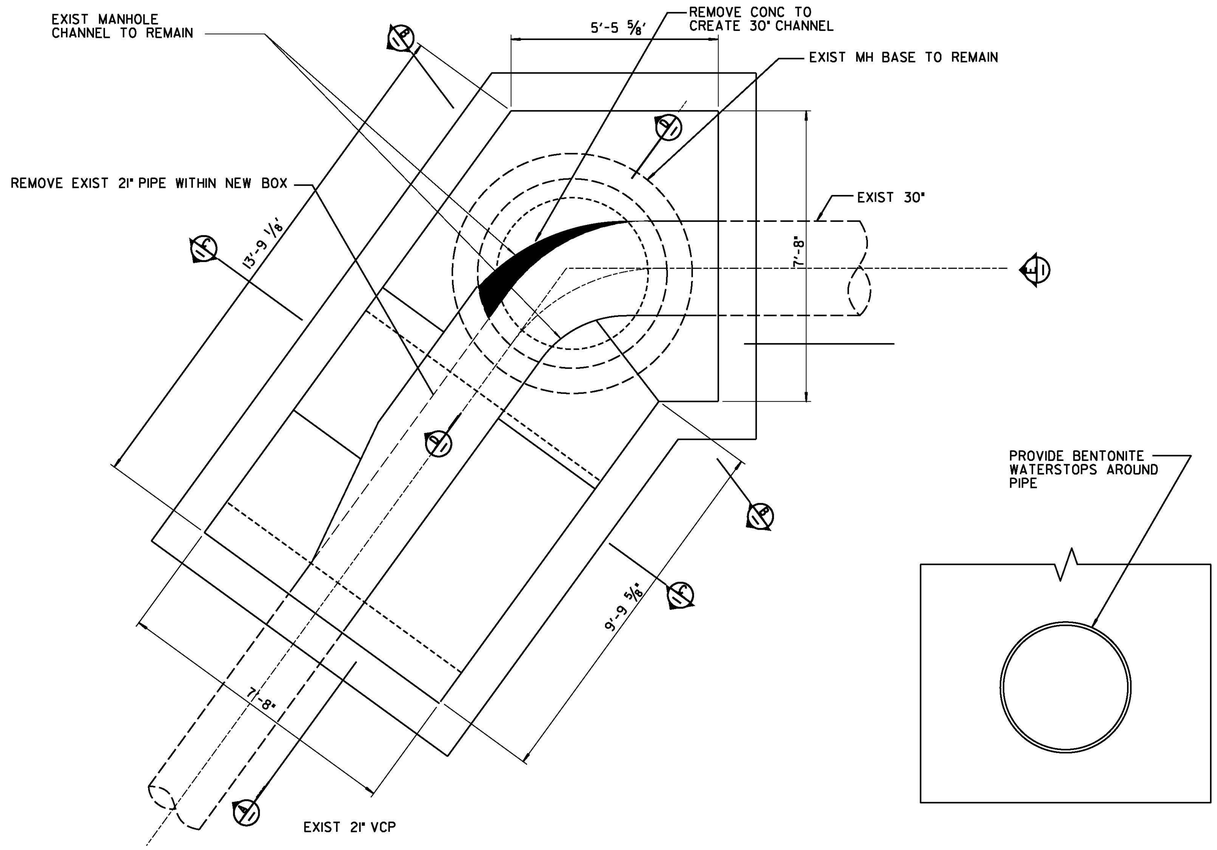
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____

INSPECTOR _____ DATE COMPLETED _____

31650–10–D

REGISTERED PROFESSIONAL ENGINEER — RANIA SARKIS AMEN — No. C 63507 — for 09-30-2012 — CIVIL — STATE OF CALIFORNIA

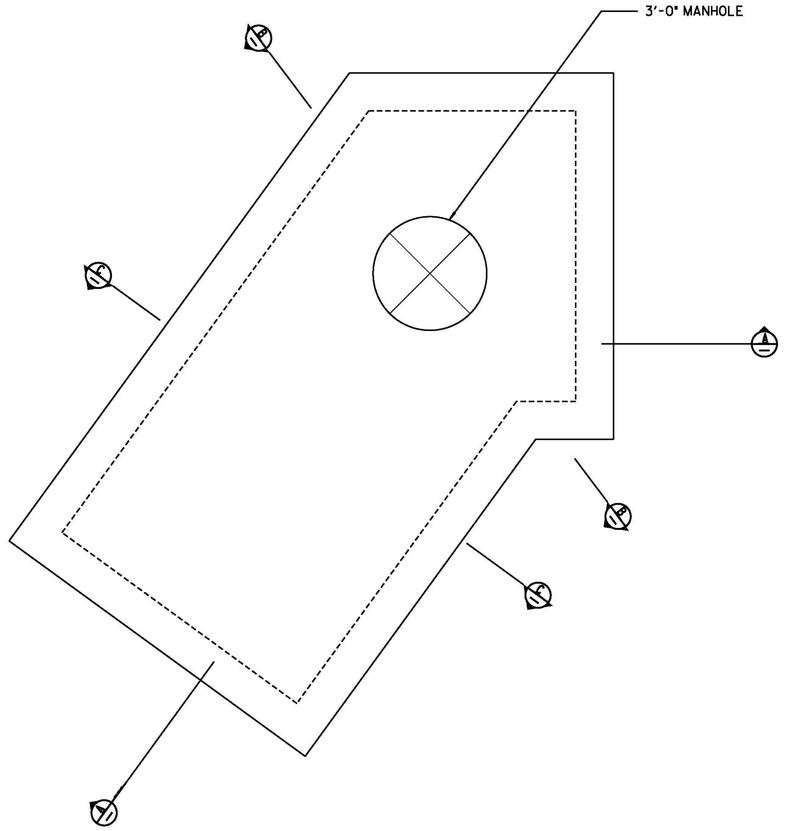


BOTTOM PLAN

SCALE: 1/2"=1'-0"

VIEW E

No Scale



TOP PLAN

SCALE: 1/2"=1'-0"

MANHOLE No.1 STRUCTURAL PLAN & SECTION

S-3

ALVARADO TRUNK SEWER PHASE III

MANHOLE No. 1 STRUCTURAL PLAN & SECTION

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 11 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

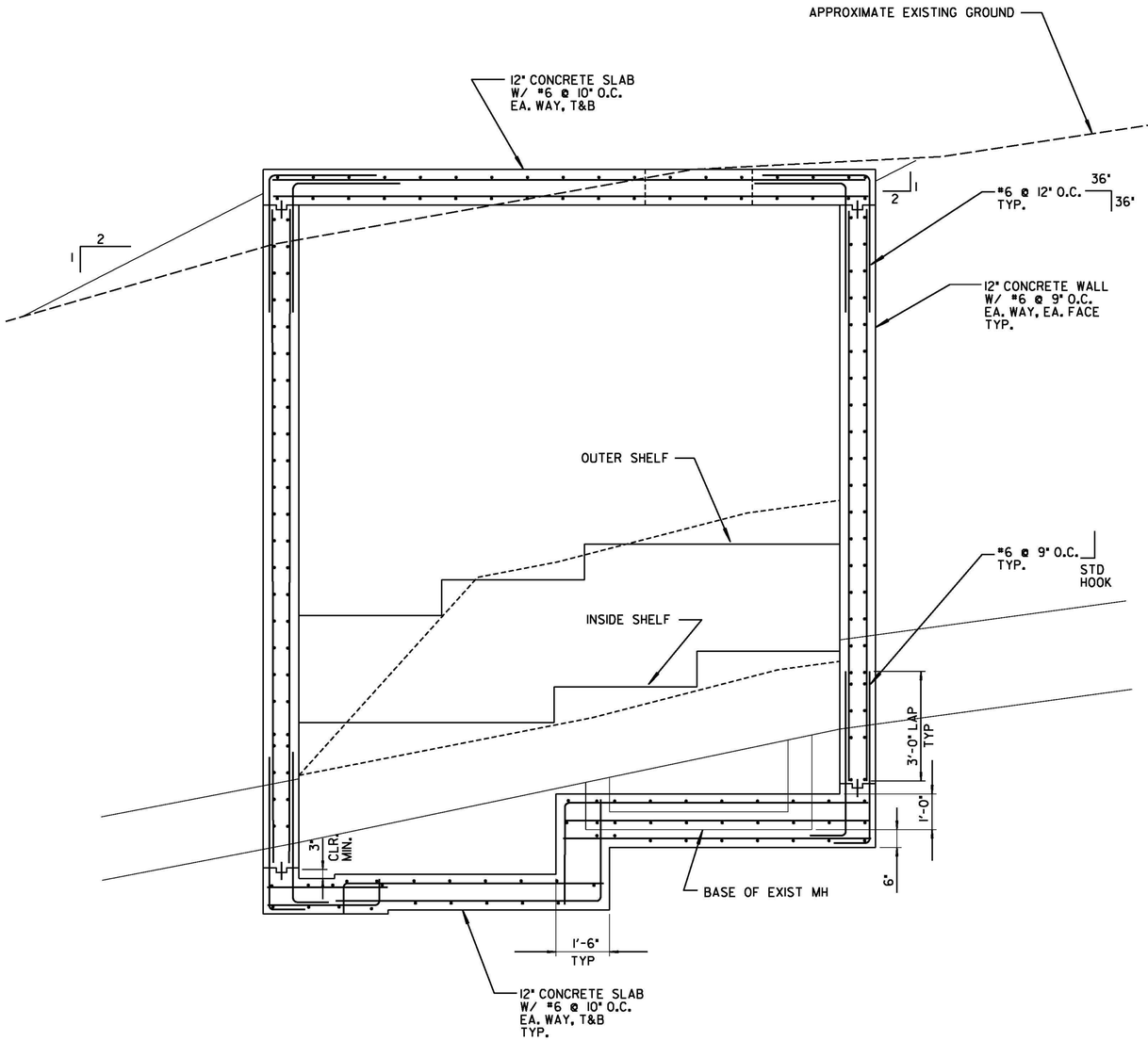
CONTROL CERTIFICATION

LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

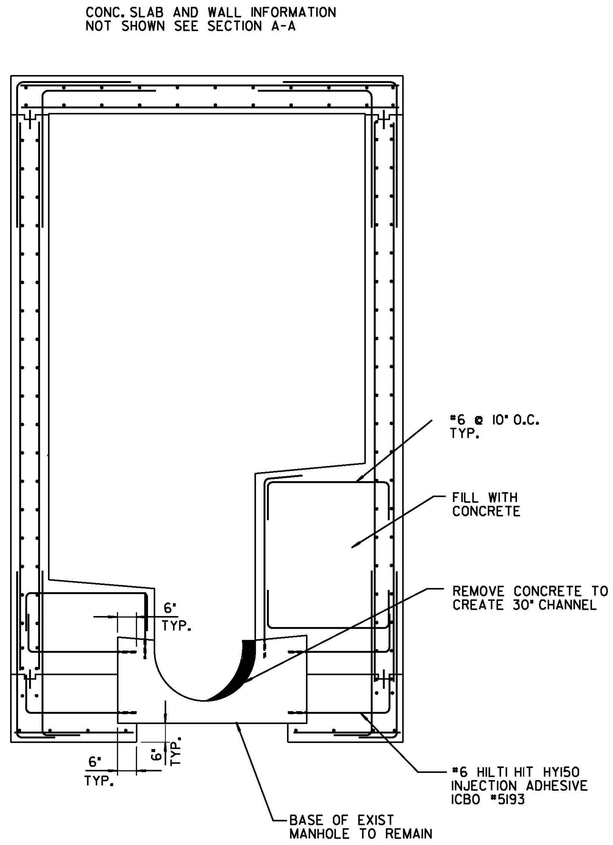
31650-11-D

REGISTERED PROFESSIONAL ENGINEER
ANNA SARKIS AMEN
No. C 63507
Exp 09-30-2012
CIVIL
STATE OF CALIFORNIA



SECTION A–A

SCALE: ½"=1'-0"



SECTION B–B

SCALE: ½"=1'-0"

MANHOLE No.1 STRUCTURAL SECTIONS

S–4

ALVARADO TRUNK SEWER PHASE III

MANHOLE No. 1 STRUCTURAL SECTIONS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 12 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO
PROJECT ENGINEER

CONTROL CERTIFICATION

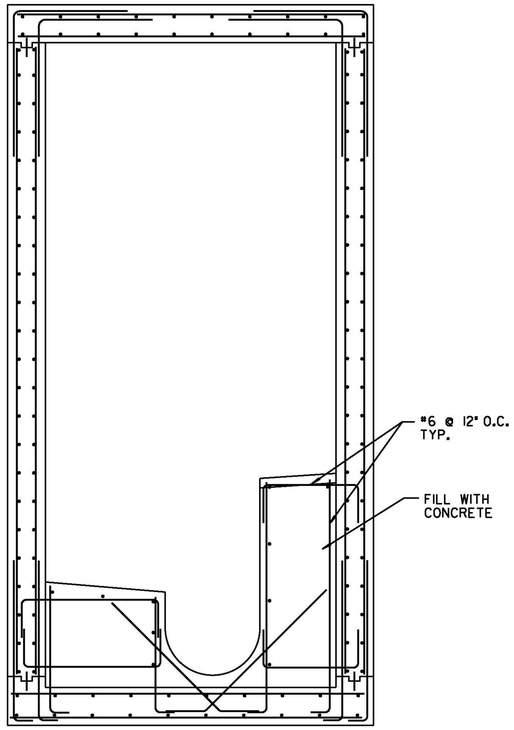
LAMBERT COORDINATES

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

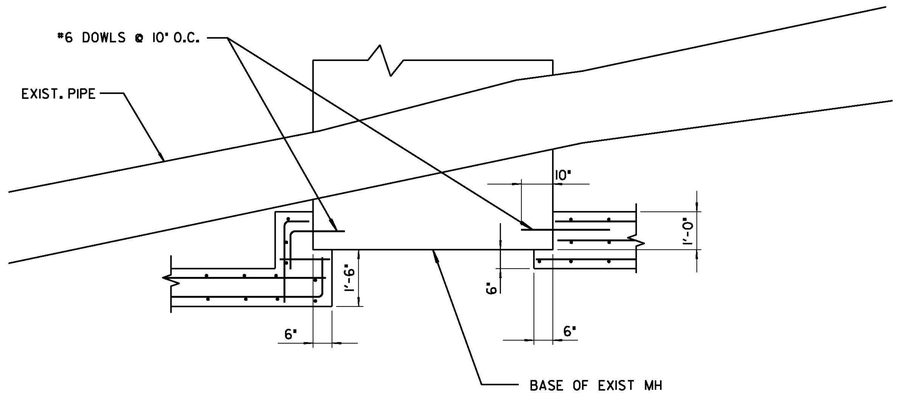
31650–12–D

REGISTERED PROFESSIONAL ENGINEER
RAMIA SARKIS TAMEN
No. C 63507
Exp 09-30-2012
CIVIL
STATE OF CALIFORNIA

CONC. SLAB AND WALL INFORMATION
NOT SHOWN SEE SECTION A-A



SECTION C–C
SCALE: ½"=1'-0"



SECTION D–D
SCALE: ½"=1'-0"

MANHOLE No.1 STRUCTURAL SECTIONS

S–5

ALVARADO TRUNK SEWER PHASE III

MANHOLE No. 1 STRUCTURAL SECTIONS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 13 OF 15 SHEETS

WATER W.O.S. N/A
SEWER W.O.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO
PROJECT ENGINEER

CONTROL CERTIFICATION

LAMBERT COORDINATES

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

31650–13–D

REGISTERED PROFESSIONAL ENGINEER
ANNA SARKIS AMEN
No. C 63507
Exp 09-30-2012
CIVIL
STATE OF CALIFORNIA

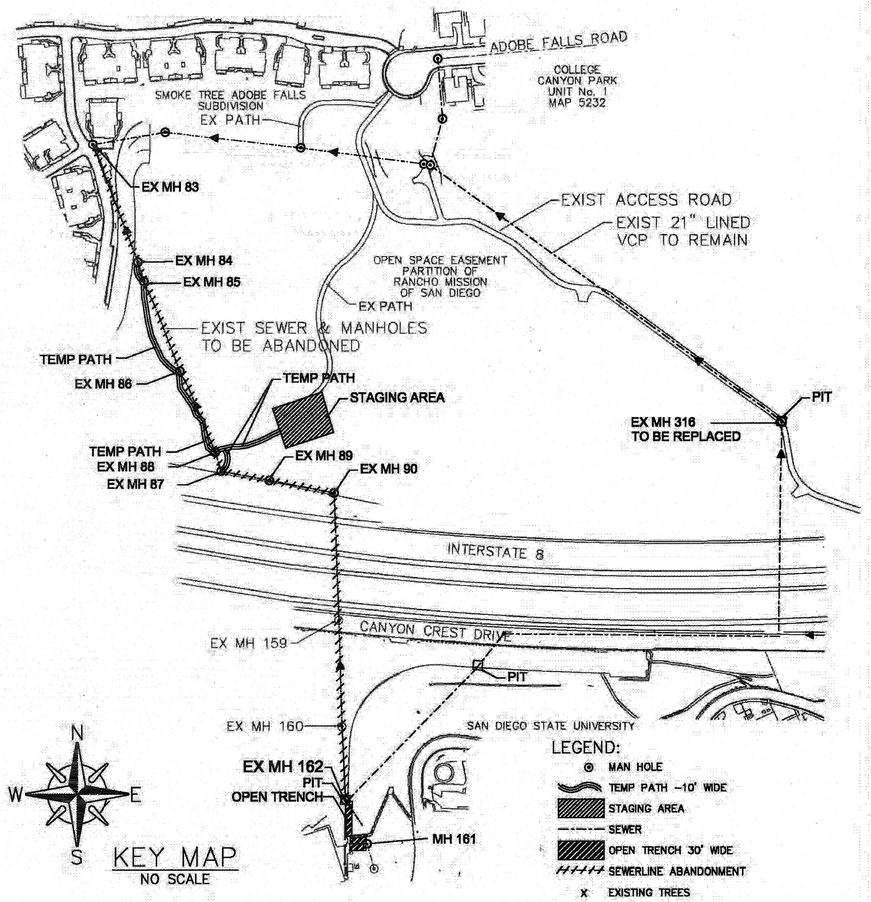


TABLE 1: Restoration Areas	
MANHOLE	**SEED MIX TO BE USED**
84	COASTAL SAGE SCRUB
85	COASTAL SAGE SCRUB
86	COASTAL SAGE SCRUB
87	COASTAL SAGE SCRUB
88	COASTAL SAGE SCRUB
89	COASTAL SAGE SCRUB
90	COASTAL SAGE SCRUB
91	SOUTHERN WILLOW SCRUB
92	SOUTHERN WILLOW SCRUB
93	SOUTHERN WILLOW SCRUB
94	EROSION CONTROL
161	EROSION CONTROL
162	EROSION CONTROL
316	COASTAL SAGE SCRUB
320	SOUTHERN WILLOW SCRUB
STAGING AREA	COASTAL SAGE SCRUB
TEMP PATH	COASTAL SAGE SCRUB, IF REQUIRED/DISTURBED
OPEN TRENCH	EROSION CONTROL

TABLE 2: Seed Mix for Coastal Sage Scrub (0.343 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Artemisia californica	Coastal sagebrush	3.0	0.91
Baccharis sarothroides	Broom baccharis	6.0	1.81
Encelia californica	California Encelia	4.0	1.21
Eriogonum fasciculatum	California buckwheat	6.0	1.81
Lotus scoparius	Deerweed	3.0	0.91
Malosma laurina (cleaned Scarified)	Laurel Sumac	2.2	0.66
Salvia mellifera	Black sage	1.5	0.45

TABLE 3: Seed Mix for Southern Willow Scrub (0.022 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Anemopsis californica	Yerba Mansa	2.0	0.44
Artemisia douglasiana	Douglas mugwort	2.0	0.44
Juncus acutus	Spiny Rush	4.0	0.88
Leymus condensatus	Giant Wild Rye	4.0	0.88
Oenothera elata ssp. hookeri	Great Marsh Evening-Primrose	1.0	0.22

TABLE 4: Seed Mix for Erosion Control (0.082 ACRE)

Scientific Name**	Common Name	Pounds Pure Live Seed/Acre	Total Pounds
Achillea millefolium	White Yarrow	0.43	0.02
Clarkia amoena	Farewell to Spring	1.20	0.04
Eschscholzia californica	California Poppy	1.70	0.06
Hordeum californicum	California Barley	4.80	0.17
Leyia platyglossa	Tidytips	1.20	0.04
Linum lewisi	Blue Flax	3.40	0.12
Lupinus bicolor	Miniature Lupine	1.80	0.07
Lupinus succulentus	Arroyo Lupine	2.70	0.10
Melica californica	California Melic	3.90	0.14
Nasella pulchra	Purple Needlegrass	6.00	0.22
Vulpia microstachys	Small Fescue	5.10	0.18

** SEED TAGS SHALL BE SUBMITTED TO THE PROJECT BIOLOGIST PRIOR TO APPLICATION OF SEED.

** THE SEED MIX IS COMPRISED OF NATIVE PLANT SPECIES. ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE PROJECT BIOLOGIST PRIOR TO APPLICATION OF SEED.

** %PLS IS THE MINIMUM PERCENT PURE LIVE SEED PER POUND OF SEED. THE PERCENTAGE IS CALCULATED BY MULTIPLYING THE PERCENT SEED PURITY BY PERCENT SEED GERMINATION, WHICH SHALL BE THE METHOD USED BY THE PROJECT BIOLOGIST TO DETERMINE SEED QUALITY, UNLESS THE BIOLOGIST SPECIFICALLY REQUEST THE %PLS METHOD TO BE USED.

** SOIL SHALL BE PRESOAKED WITHIN 3 DAYS OF SEEDING TO A DEPTH OF 3 INCHES, OR AS RECOMMENDED BY THE PROJECT BIOLOGIST.

GENERAL REVEGETATION NOTES:

1. REVEGETATION OF THE PROJECT AREA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF SAN DIEGO LANDSCAPE STANDARDS.
2. REVEGETATION SHALL BE PERFORMED IN ACCORDANCE WITH THE BIOLOGICAL IMPACT REPORT AND THIS REVEGETATION PLAN PREPARED FOR THIS PROJECT, DATED JANUARY 2011 AND PREPARED BY ICF INTERNATIONAL.
3. THE UPPER SIX-INCHES OF TOPSOIL FROM THE SITE SHALL BE SALVAGED, AS DIRECTED BY THE PROJECT BIOLOGIST. PROJECT BIOLOGIST SHALL ENSURE THAT SOIL WILL BE STOCKPILED WITHIN THE LIMITS OF THE PROJECT, NO MORE THAN THREE FEET HIGH WHEN POSSIBLE. BMPS, SILT FENCING, AND/OR COVER SHALL BE INSTALLED AROUND THE STOCKPILE TO PREVENT EROSION AND AS A BARRIER TO PRECLUDE ANY UNAUTHORIZED ACCESS, OR AS RECOMMENDED BY THE PROJECT BIOLOGIST.
4. PRIOR TO REVEGETATION AND/OR PLANT INSTALLATION, THE PROJECT BIOLOGIST SHALL DIRECT THE CONTRACTOR AND LANDSCAPE CONTRACTOR AS TO THE SALVAGED SOIL RELOCATION, RE-COMPACTION (70 TO 80 PERCENT), AND PREPARATION FOR REVEGETATION PURPOSES.
5. SEED MIX AND/OR CONTAINER STOCK USED FOR EROSION CONTROL AND ON SLOPES SHALL ACHIEVE 100 PERCENT (OR AS APPROVED BY THE PROJECT BIOLOGIST AND CITY REPRESENTATIVE BASED ON SITE CONDITIONS IF LESSER % COVERAGE) SOIL COVERAGE WITHIN 25 MONTHS OF BEING INSTALLED, AFTER THE 120 DAY PLANT ESTABLISHMENT PERIOD (PEP). AT THE END OF YEAR 1, PLANT COVERAGE SHALL MEET50% PERCENT COVERAGE, AS VERIFIED BY THE PROJECT BIOLOGIST (TABLE 8).
6. REVEGETATION OF MANUFACTURED SLOPES AND OTHER DISTURBED AREAS ADJACENT TO AREAS OF NATIVE VEGETATION SHALL BE ACCOMPLISHED IN A MANNER SO AS TO PROVIDE VISUAL AND HORTICULTURAL COMPATIBILITY WITH THE INDIGENOUS NATIVE PLANT MATERIALS.
7. INVASIVE, NON-NATIVE PLANT SPECIES INCLUDING BUT NOT LIMITED TO THOSE LISTED IN THE CITY'S LANDSCAPE STANDARDS ARE PROHIBITED.
8. REVEGETATION AND EROSION CONTROL TIMING - ALL REQUIRED REVEGETATION AND EROSION CONTROL SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS OF THE COMPLETION OF GRADING OR DISTURBANCE IN ORDER TO START THE 120 DAY PEP, OR AS RECOMMENDED BY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST.
9. ALL SLOPES 3:1 OR GREATER SHALL REQUIRE BIODEGRADABLE EROSION CONTROL BLANKET OR OTHER SLOPE PROTECTION METHODS AS RECOMMENDED BY THE PROJECT BIOLOGIST PRIOR TO THE INSTALLATION OF THE REVEGETATION, OR IN THE EVENT OF SLOPE OR RESTORATION FAILURE. ANY ABOVE GRADE EROSION CONTROL MEASURES SUCH AS BUT NOT LIMITED TO SILT FENCING, GRAVEL BAGS, FIBER ROLLS AND/OR HAY BALES SHALL BE REMOVED BY THE CONTRACTOR AND AS DIRECTED BY THE PROJECT BIOLOGIST FOLLOWING ACCEPTANCE OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD BY CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
10. 1:1 REPLACEMENT OF ORNAMENTALS (IN KIND) SHALL BE MONITORED AND MAINTAINED FOR A PERIOD OF NO LESS THAN 90 DAYS TO ENSURE SUCCESSFUL ESTABLISHMENT OF PLANTINGS PER CONTRACT SPECIFICATIONS.
11. ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR AT THE INSTALLATION OF ALL REVEGETATION PLANT MATERIALS THROUGH THE 120 DAY PEP, AND UNTIL THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD. FOLLOWING ACCEPTANCE OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST THE CONTRACTOR SHALL REMOVE ALL ORANGE FENCING.
12. CONTRACTOR SHALL REMOVE ALL TRASH AND/OR DEBRIS FROM THE REVEGETATION SITE PRIOR TO AND FOLLOWING THE REVEGETATION INSTALLATION, AND UNTIL THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD.

SEED MIXES:

1. THE NATIVE SEED MIXES IN TABLES 2 - 4 SHALL BE PLANTED IN COASTAL SAGE SCRUB, BACCHARIS SCRUB, COASTAL SAGE-CHAPARRAL SCRUB, NON-NATIVE GRASSLAND, AND DISTURBED HABITAT REVEGETATION AREAS IN ACCORDANCE WITH TABLE 1. THE SEED SHALL BE INSTALLED VIA HYDROSEED METHODS, UNLESS OTHERWISE DIRECTED BY THE PROJECT BIOLOGIST.
2. THE NATIVE SOUTHERN WILLOW SCRUB SEED MIX IN TABLE 3 SHALL BE PLANTED IN DISTURBED RIPARIAN WOODLAND AND MULE-FAT SCRUB REVEGETATION AREAS. THE SEED SHALL BE INSTALLED VIA HYDROSEED METHODS, UNLESS OTHERWISE DIRECTED BY THE PROJECT BIOLOGIST.
3. THE EROSION CONTROL SEED MIX IN TABLE 4 SHALL BE PLANTED IN THE ORNAMENTAL ASSOCIATED WITH MANHOLES 84, 161, AND 162 OR AS DIRECTED BY PROJECT BIOLOGIST.
4. ALL SEEDS SHALL ORIGINATE FROM WITHIN A 25 MILE RADIUS OF THE PROJECT SITE OR CONTRACTOR TO PROVIDE EVIDENCE THAT THE SEED IS NOT AVAILABLE AND NOTIFY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.

HYDROSEEDING PROCEDURES

1. SEEDING SHALL OCCUR ONLY AFTER THE PROJECT BIOLOGIST HAS OBSERVED AND APPROVED THAT THE SITE HAS BEEN PROPERLY PREPARED.
2. IN AREAS PREVIOUSLY SUPPORTING NON-NATIVE GRASSLAND, SOILS WILL BE PREPARED AS RECOMMENDED BY PROJECT BIOLOGIST PRIOR TO APPLYING HYDROSEED.
3. FIBER MULCH OR BONDED FIBER MATRIX (BFM) SHALL BE APPLIED AT THE MINIMUM RATE OF 2,000 POUNDS PER ACRE.
4. FIBER MULCH OR BFM SHALL BE UNIFORMLY SPREAD AND "TACKED" WITH BINDER AT A MINIMUM RATE OF 160 LBS PER ACRE. THE BINDER SHALL BE AN ORGANIC DERIVATIVE OR PROCESSED ORGANIC ADHESIVE.
5. A WETTING AGENT CONSISTING OF ONE TON PER ACRE AGRICULTURAL GYPSUM (95% ALKYL POLYETHYLENE GLYCOL ETHER OR AS APPROVED BY THE BIOLOGIST) SHALL BE APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS OR RECOMMENDED BY THE BIOLOGIST.
6. EQUIPMENT USED FOR THE APPLICATION OF SLURRY SHALL HAVE A BUILT-IN AGITATION SYSTEM TO SUSPEND AND HOMOGENEOUSLY MIX THE SLURRY, THE SLURRY MIX SHALL BE DYED GREEN. THE EQUIPMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY.
7. HYDROSEED SHALL BE APPLIED BETWEEN OCTOBER 1 AND FEBRUARY 15 DURING RAINY SEASON. PROJECT BIOLOGIST SHALL RECOMMEND TEMPORARY IRRIGATION MEASURES AS NEEDED. CONTRACTOR SHALL PROPOSE METHODS OF IRRIGATION AND SHALL PROVIDE IRRIGATION LINES AND APPURTENANCES.
8. HYDROSEED APPLIED FEBRUARY 15 - OCTOBER 1 SHALL REQUIRE A COMPREHENSIVE IRRIGATION PLAN AND APPROVAL BY CITY REPRESENTATIVE AND PROJECT BIOLOGIST . CONTRACTOR SHALL PREPARE AND SUBMIT THE PLAN TO THE CITY FOR APPROVAL. CONTRACTOR SHALL PROVIDE ALL IRRIGATION LINES AND APPURTENANCE IN ACCORDANCE WITH THE PLAN AND MAKE ANY ADJUSTMENTS NECESSARY TO MET THE SUCCESS CRITERIA PER PROJECT BIOLOGIST RECOMMENDATIONS.

CONTAINER PLANT PROCEDURES:

1. IN ADDITION TO HYDROSEED IN TABLES 2, 3, AND 4, AND CONTAINER PLANTS LISTED IN TABLES 5 AND 6, CONTRACTOR SHALL SUPPLY AND PLANT UP TO 2000 (1) GALLON CONTAINER PLANTS PER ACRE OF NON-INVASIVE AND NATIVE PLANTS AT THE RECOMMENDATION AND UNDER THE DIRECTION OF THE PROJECT BIOLOGIST. PROJECT BIOLOGIST SHALL CONSIDER THE 120 DAY PEP, 25 MONTH MAINTENANCE AND MONITORING PERIOD, SUCCESS CRITERIA, IN THE EVENT THAT ADDITIONAL CONTAINER PLANTS ARE RECOMMENDED BY THE BIOLOGIST FOR INSTALLATION.
2. CONTAINER PLANTS SHALL BE PROCURED FROM A NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES. SOURCE FOR NATIVE PLANTS MATERIALS SHALL ORIGINATE WITHIN 25-MILES FROM THE COAST WITHIN SAN DIEGO COUNTY TO THE EXTENT PRACTICAL, OR AS DETERMINED BY THE PROJECT BIOLOGIST.
3. CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME AND IN A HEALTHY AND VIGOROUS CONDITION. THE PROJECT BIOLOGIST WILL REJECT PLANT MATERIAL DELIVERED PRIOR TO ITS PLANTING DATE. SPECIMENS SHOWING EVIDENCE OF DISEASE, MISHANDLING, DEFECTS OR DAMAGE, OVER OR UNDERWATERING, OR OTHER DEFICIENCY AT THE TIME OF DELIVERY WILL BE REJECTED.
4. CONTAINER PLANTS WILL BE PLACED FOR PLANTING BY THE PROJECT BIOLOGIST IN THE REVEGETATION AREAS. THE SUGGESTED CONTAINER PLANT INSTALLATION PROCEDURE SHALL BE AS DIRECTED BY THE PROJECT BIOLOGIST.

MAINTENANCE REQUIREMENTS:

1. REVEGETATION AREA SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN 25 MONTHS. ALL REVEGETATED AREAS SHALL BE MAINTAINED BY THE PERMITTEE UNTIL FINAL APPROVAL BY THE CITY. THE MAINTENANCE PERIOD BEGINS ON THE FIRST DAY FOLLOWING ACCEPTANCE (AT END OF 120 DAY PEP) AND MAY BE EXTENDED AT THE DETERMINATION OF THE CITY REPRESENTATIVE.
2. PRIOR TO FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUIRE CORRECTIVE ACTION INCLUDING BUT NOT LIMITED TO REPLANTING, THE PROVISION OR MODIFICATION OR IRRIGATION SYSTEMS, AND THE REPAIR OF ANY SOIL EROSION OR SLOPE SLIPPAGE, IN CONSULTATION WITH THE PROJECT BIOLOGIST.
3. THE 120 DAY PEP FOLLOWS HYDROSEED APPLICATION. THE PEP AND START OF 25 MONTHS MAINTENANCE AS WELL AS ACCEPTANCE FOLLOWING THE MAINTENANCE PERIOD IS DETERMINED BY CITY REPRESENTATIVE IN CONSULTATION WITH PROJECT BIOLOGIST.
4. WEEDING AND/OR HERBICIDE APPLICATION SHALL BE DONE REGULARLY BY THE CONTRACTOR. WEEDING SHALL BE DONE AT A MINIMUM OF BIWEEKLY UNTIL THE END OF THE 120 DAY PEP, AND MONTHLY THROUGHOUT THE 25 MONTHS OF MAINTENANCE. CONTRACTOR SHALL OBTAIN APPROVAL FROM CITY REPRESENTATIVE AND PROJECT BIOLOGIST PRIOR TO HERBICIDE APPLICATION, AND APPLY HERBICIDE PER MANUFACTURER'S RECOMMENDATION AND ANY STATE OF CALIFORNIA GUIDELINES.
5. CONTRACTOR SHALL CONTROL WEEDS AS IDENTIFIED BY THE PROJECT BIOLOGIST SUCH THAT NO WEED COVER EXCEEDS 5% OF THE PROJECT SITE, BEFORE THEY EXCEED TWELVE INCHES (12") IN HEIGHT, AND BEFORE THEY SET SEED.

TEMPORARY IRRIGATION:

1. AT THE DIRECTION OF THE BIOLOGIST, TEMPORARY IRRIGATION WILL BE APPLIED AS FOLLOWS.
2. TEMPORARY IRRIGATION VIA IRRIGATION LINES AND APPURTENANCES (OR ALTERNATE METHOD APPROVED BY PROJECT BIOLOGIST) SHALL BE PROVIDED BY THE CONTRACTOR FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND TO PROVIDE VEGETATIVE COVER THAT PREVENTS SOIL EROSION. THE AMOUNT OF IRRIGATION MUST BE ADJUSTED WHEN WARRANTED BY SITE CONDITIONS. PROJECT BIOLOGIST AND LANDSCAPE CONTRACTOR SHALL MONITOR TO DETERMINE SUCCESS AND ADDED REQUIREMENT FOR TEMPORARY IRRIGATION.
3. IRRIGATION SHALL BE PERFORMED IN A MANNER THAT AVOIDS RUNOFF, SEEPAGE, AND OVERSPRAY ONTO ADJACENT PROPERTIES, NON-IRRIGATED AREAS, WALLS, ROADWAYS, OR STRUCTURES.
4. THE WATER DELIVERY RATE SHALL BE MATCHED TO THE SLOPE GRADIENT AND THE PERCOLATION RATE OF SOIL.
5. IRRIGATION SHALL DELIVER WATER SUFFICIENTLY AND UNIFORMLY AND SHALL BE APPROPRIATE TO THE NEEDS OF THE PLANT MATERIALS. RECOMMENDED REFERENCE MATERIALS FOR IRRIGATION SYSTEMS DESIGN ARE LISTED IN APPENDIX "A" OF THE CITY'S LANDSCAPE STANDARDS.
6. OVERWATERING AS EVIDENCED BY SOGGY SOILS, CONTINUALLY WET PAVEMENT, STANDING WATER, RUNOFF IN STREET GUTTERS AND OTHER SIMILAR CONDITIONS SHALL BE PREVENTED.
7. IF THE PROJECT BIOLOGIST RECOMMENDS AN ALTERNATIVE IRRIGATION METHOD SUCH AS TRUCK WATERING, ALL VEHICLES SHALL STAY ON THE PERMANENT ACCESS ROUTES AND SHALL NOT IRRIGATE BEYOND THE REVEGETATION BOUNDARY.

TABLE 5: Coastal Sage Scrub Container Plant Palette - Manholes 84, 85, 86, 87, 88, 89, 90, & 316*

Scientific Name	Common Name	Container Size	Quantity/ Manhole	Total Quantity
ARTEMISIA CALIFORNICA	COASTAL SAGEBRUSH	1 GALLON	4	32
BACCHARIS SAROTHROIDES	BROOM BACCHARIS	1 GALLON	8	64
ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	1 GALLON	10	80

TABLE 6: Southern Willow Scrub Container Plant Palette - Manholes 91, 92, 93, & 320*

Scientific Name	Common Name	Container Size	Quantity/ Manhole	Total Quantity
Anemopsis californica	Yerba Mansa	1 Gallon	10	40
Artemisia douglasiana	Douglas mugwort	1 Gallon	8	32
Vitis girdiana	California Grape	1 Gallon	2	8

* CONTAINER PLANT TAGS SHALL BE SUBMITTED TO THE PROJECT BIOLOGIST PRIOR TO INSTALLATION OF CONTAINER STOCK.

* CONTAINER PLANTS SHALL BE PLACED WITHIN REVEGETATION CORRIDOR AT THE LOCATIONS RECOMMENDED AND UNDER THE DIRECTION OF THE PROJECT BIOLOGIST.

TABLE 7: SUMMARY AND SCHEDULE FOR MAINTENANCE, MONITORING, AND REPORTING FOR PROJECT

Period	Activity for Project Biologist/Contractor	Biologist Site Visit Frequency	Submittals/ Checklist	Reporting Frequency
Revegetation/ Installation	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for installation and maintenance.	As needed or at least once every two weeks.	Reports prepared by the biologist (based on the revegetation plan criteria)	At successful installation as determined by the project biologist
120 Day PEP	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for maintenance.	For Months 1 & 2- biweekly, Months 3 & 4- at least once a month	Reports prepared by the biologist (based on the revegetation plan criteria)	At the end of PEP**
25-month long term maintenance & monitoring	Project Biologist will be responsible for monitoring/ Landscape Contractor will be responsible for maintenance.	Every 3 months	Reports prepared by the biologist (based on the revegetation plan criteria)	Every 3 months for the first 9 months Year 1** 25 Months**

NOTE: If 25 month success criteria are not met, the M&M program will be extended as required. Quarterly maintenance and monitoring with yearly reporting shall continue as needed.
** PEP, 1 year and 25 month final report(s) required to include above information.

TABLE 8: SUCCESS CRITERIA*

PARAMETER	PERCENT VEGETATION COVER		PLANT SURVIVAL	
	HYDROSEED		CONTAINER PLANTS**	
PERFORMANCE STANDARD - IMPACT AREA	YEAR 1: 25 MONTHS :	50 PERCENT 100 PERCENT	YEAR 1: 25 MONTHS:	100 PERCENT 80 PERCENT
PERFORMANCE STANDARD - ACCESS PATH	YEAR 1: 25 MONTHS :	50 PERCENT 100 PERCENT	YEAR 1: 25 MONTHS:	100 PERCENT 80 PERCENT

* SEE GENERAL REVEGETATION NOTE #6 IF LOWER PERCENT APPROVED BY PROJECT BIOLOGIST.
** CONTAINER PLANTS NOT MEETING PLANT SURVIVAL SUCCESS CRITERIA , AS VERIFIED AND RECOMMENDED BY THE PROJECT BIOLOGIST, SHALL BE REPLACED AND MAINTAINED AT CONTRACTOR'S EXPENSE UNTIL THE SUCCESS CRITERIA HAS BEEN MET.

REGISTERED PROFESSIONAL ENGINEER RANA SARKIS ABDA NO. C 65507 EXP. 9/30/12 CIVIL STATE OF CALIFORNIA

L-1

ALVARADO TRUNK SEWER PHASE III

REVEGETATION SHEET

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 14 OF 15 SHEETS

APPROVED: FOR CITY ENGINEER — DATE: 7/2/2012

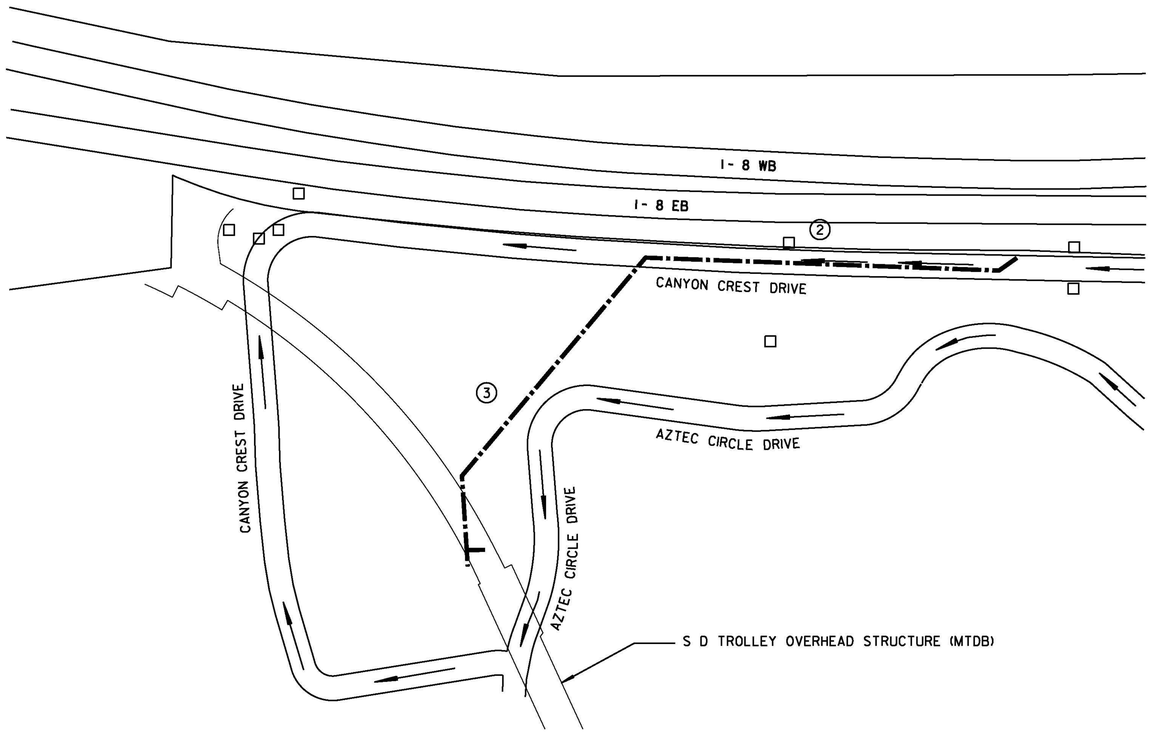
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

WATER W.B.S. N/A
SEWER W.B.S. B-00481
SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER
JOSELITO GUINTO, PROJECT ENGINEER
CONTROL CERTIFICATION
LAMBERT COORDINATES
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31650-14-D

REVEGETATION SHEET

WATER POLLUTION CONTROL SITE PLAN



NOTES

1. THE INFORMATION ON THIS SITE PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUB CONTRACTOR TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE PROJECT SITE. THIS SITE PLAN IS TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE WATER POLLUTION CONTROL PLAN (WPCP) AND WATER POLLUTION CONTROL SPECIFICATIONS.
2. INLET PROTECTION REQUIRED AT ALL STORM DRAINS RECEIVING RUNOFF FROM DISTURBED SOIL AREAS.
3. CONTRACTOR SHALL PROVIDE PLASTIC COVER ON EXCAVATED MATERIAL STORED ON SITE TO ENSURE THE STOCKPILED SOIL IS PROTECTED BEFORE ANY RAIN EVENT OCCURS. STOCKPILING SHALL NOT OCCUR WITHIN CALTRANS BOUNDARY.
4. BMP'S SHALL BE INSTALLED TO ENSURE NO IMPACT TO THE STREAMBED.
5. CONTRACTOR TO UPDATE/RECEIVE SHEET AS NECESSARY.
6. THE INFORMATION ON THE SITE PLAN IS ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.

LEGEND

- STORM DRAINS AFFECTED BY CONSTRUCTION
- SURFACE FLOW TO STORM DRAIN ARROWS
- (2) SHEET NUMBER
- NEW SEWER MAIN

WATER POLLUTION CONTROL SITE PLAN

G-2

ALVARADO TRUNK SEWER PHASE III

WATER POLLUTION CONTROL SITE PLAN

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 15 OF 15 SHEETS

WATER W.B.S. N/A
SEWER W.B.S. B-00481

APPROVED: FOR CITY ENGINEER — DATE 7/2/2012

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	JG/AV			

JOSELITO GUINTO, PROJECT ENGINEER

224-1746 CCS27 COORDINATE

- CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

31650-15-D

REGISTERED PROFESSIONAL ENGINEER — RAWIA SARRIS AMER — No. C 63507 — Exp 09-30-2012 — CIVIL — STATE OF CALIFORNIA

STANDARD TRAFFIC CONTROL NOTES

1. **VALIDATION:** THIS TRAFFIC CONTROL PLAN IS NOT VALID UNTIL WORK DATES ARE APPROVED. THE CONTRACTOR SHALL, PER SECTION 7-10.1.3 OF THE CONTRACT SPECIAL PROVISIONS, CALL THE ENGINEERING TRAFFIC CONTROL SECTION AT (858) 495-4741 TO OBTAIN A PERMIT. THE CONTRACTOR MUST CALL A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, OR FIVE (5) WORKING DAYS WHEN THE WORK WILL AFFECT A TRAFFIC SIGNAL.

2. **STANDARDS:** THIS TRAFFIC CONTROL PLAN SHALL CONFORM TO THE MOST RECENTLY ADOPTED EDITION OF EACH OF THE FOLLOWING MANUALS.

   a. CITY OF SAN DIEGO STANDARD DRAWINGS, APPENDIX "A";

   b. CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; AND

   c. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (**GREENBOOK"), INCLUDING REGIONAL AND CITY OF SAN DIEGO SUPPLEMENT AMENDMENTS.

3. **NOTIFICATIONS:** THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AFFECTED AGENCIES A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION, CONSTRUCTION OR TRAFFIC CONTROL

FIRE DEPARTMENT DISPATCH	(STREET OR ALLEY CLOSURE)	(858) 573-1300
POLICE DEPARTMENT TRAFFIC	(STREET OR ALLEY CLOSURE)	(858) 495-7800
WASTE MANAGEMENT DEPT.	(REFUSE COLLECTION)	(858) 694-7000
STREET DIVISION/ELECTRICAL	(TRAFFIC SIGNALS)	(619) 527-7500
SAN DIEGO TRANSIT	(BUS STOPS)	(619) 238-0100 X424
MTDB	(TAXI ZONES)	(619) 595-7030
UNDERGROUND SERVICE ALERT	(ANY EXCAVATION)	(800) 422-4133

   THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AND TENANTS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CLOSURE OF DRIVEWAYS. THE CONTRACTOR SHALL POST SIGNS NOTIFYING THE PUBLIC A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CLOSURE OF STREETS.

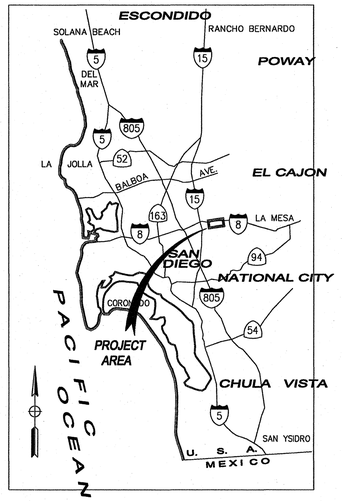
4. **POSTING NO PARKING SIGNS.** THE CONTRACTOR SHALL POST "TOW-AWAY/NO PARKING" SIGNS TWENTY-FOUR (24) HOURS IN ADVANCE FOR TEMPORARY PARKING REMOVAL. SIGNS SHALL INDICATE SPECIFIC DAYS, DATES, AND TIMES OF RESTRICTIONS.

5. **EXCAVATIONS:** EXCEPT AS SHOWN ON THE PLANS, TRENCHES SHALL BE BACKFILLED OR TRENCH-PLATED AT THE END OF EACH WORK DAY. AN ASPHALT RAMP SHALL BE PLACED AROUND EACH TRENCH PLATE TO PREVENT THE PLATE FROM BEING DISLODGED. UPON COMPLETION OF EXCAVATION BACKFILL, THE CONTRACTOR SHALL PROVIDE A SATISFACTORY SURFACE FOR TRAFFIC. WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVELY IN PROGRESS, THE CONTRACTOR SHALL MAINTAIN ALL TRAVEL LANES OPEN TO TRAFFIC, EXCEPT AS SHOWN ON THE PLANS.

6. **RESTORATION OF TRAFFIC CONTROL DEVICES:** THE CONTRACTOR SHALL REPAIR OR REPLACE TRAFFIC CONTROL DEVICES (INCLUDING TRAFFIC SIGNS, STRIPING, PAVEMENT MARKERS, PAVEMENT MARKINGS, LEGENDS, CURB MARKINGS, LOOP DETECTORS, TRAFFIC SIGNAL EQUIPMENT, ETC.) DAMAGED OR REMOVED AS RESULT OF OPERATIONS AND NOT DESIGNATED FOR REMOVAL. REPAIRS AND REPLACEMENTS SHALL BE EQUAL TO EXISTING IMPROVEMENTS. LOOP DETECTORS SHALL BE REPLACED WITHIN THREE (3) WORKING DAYS OF COMPLETION OF UNDERGROUND WORK.

7. **CHANGES IN WORK:** THE RESIDENT ENGINEER WILL OBSERVE THESE TRAFFIC CONTROL PLANS IN OPERATION AND RESERVES THE RIGHT TO MAKE CHANGES AS THE FIELD CONDITIONS WARRANT. SUCH CHANGES SHALL SUPERSEDE THESE PLANS.

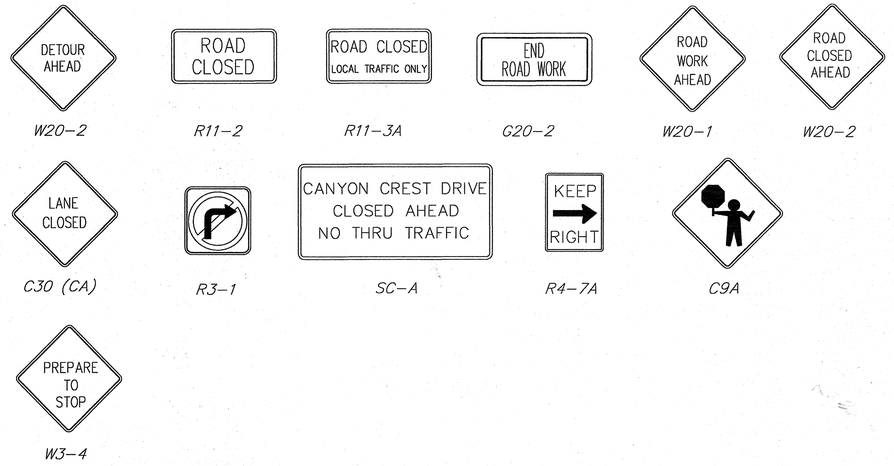
8. FOR WORK NOT COVERED BY THESE TRAFFIC CONTROL PLANS, THE CONTRACTOR SHALL, PER SECTION 7-10.1.1 OF THE CONTRACT SPECIAL PROVISIONS, PREPARE **TRAFFIC CONTROL SHOP DRAWINGS** AND SUBMIT THEM TO THE RESIDENT ENGINEER. THE CONTRACTOR SHALL ALLOW A MINIMUM OF **TWENTY (20) WORKING DAYS** FOR REVIEW OF THE SHOP DRAWINGS. UPON APPROVAL OF THE TRAFFIC CONTROL PLAN, THE ENGINEERING TRAFFIC CONTROL SECTION WILL ISSUE A **TRAFFIC CONTROL PLAN (TCP) PERMIT** FOR THIS WORK.

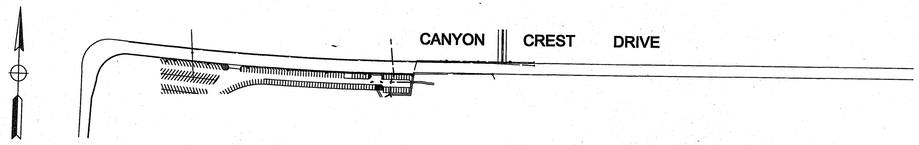


VICINITY MAP

NOT TO SCALE

SIGN LEGEND





LOCATION MAP

NOT TO SCALE

SYMBOL LIST

	WORK AREA
	SIGNALIZED INTERSECTION
	TRAFFIC CONTROL SIGN
	TRAFFIC CONE
	TYPE II BARRICADE
	FLASHING ARROW SIGN (FAS)
	TRAFFIC DIRECTION
NTS	NOT TO SCALE
TNP	TEMPORARY NO PARKING
	FLAGGER

TRASH COLLECTION NOTE

CONTRACTOR SHALL COORDINATE FOR TRASH COLLECTION FOR ALL FULL OR PARTIAL STREET CLOSURES THAT WOULD RESULT IN THE INABILITY OF A GARBAGE TRUCK TO ACCESS ITS NORMAL ROUTE. COORDINATION MAY INCLUDE, BUT NOT BE LIMITED TO:

1. MOVE TRASH FROM PRIVATE PROPERTY OWNERS TO AN APPROVED COLLECTION POINT OUTSIDE THE WORK AREA.
2. ARRANGING TO REMOVE TRASH BY CONTRACTOR.
3. SCHEDULING WORK TO AVOID LIMITING ACCESS FOR TRASH COLLECTION.

ADVANCE NOTICES TO PROPERTY OWNERS AND TENANTS AS REQUIRED BY STANDARD TRAFFIC CONTROL NOTE No. 3, THIS SHEET, SHALL INCLUDE INFORMATION ABOUT TRASH COLLECTION, IF AFFECTED. IN NO CASE SHALL PROPERTY OWNERS BE REQUIRED TO MOVE THEIR OWN TRASH TO ALTERNATE COLLECTION POINTS. CONTRACTOR IS RESPONSIBLE TO MOVE TRASH IF AN ALTERNATE COLLECTION POINT IS TO BE USED.

REGISTERED PROFESSIONAL ENGINEER — RAMA SARKIS ANKA — No. C 63507 — Exp.09-30-2012 — CIVIL — STATE OF CALIFORNIA

TC-01

TRAFFIC CONTROL PLANS FOR:

ALVARADO TRUNK SEWER PHASE III

CANYON CREST DRIVE

NOTES AND LEGENDS

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 1 OF 2 SHEETS

WATER W.O. ____
SEWER W.O. 176571

APPROVED: Ahmed Abuelhad 02/15/2011
FOR CITY ENGINEER — DATE

SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER

DESCRIPTION	DRAWN BY	DATE	FILMED
ORIGINAL	AV		

CHECKED BY: JOSELITO GUINTO, PROJECT ENGINEER

-
CONTROL CERTIFICATION

222-1746
LAMBERT COORDINATES

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

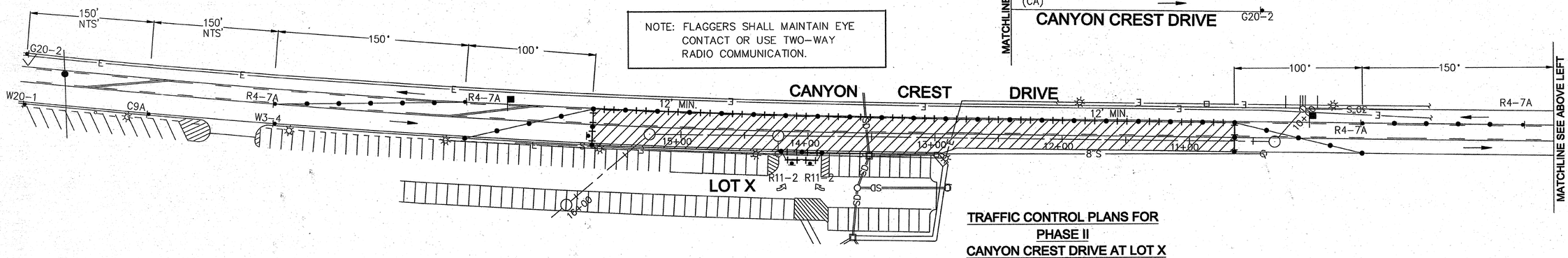
31650-T1-D

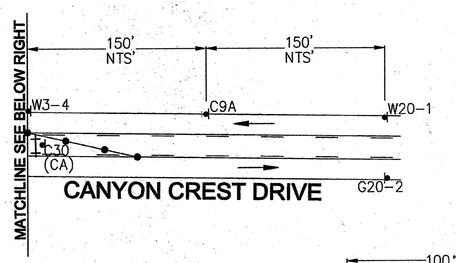
WORK HOURS:
8:00 PM TO 5:00 AM

STANDARD TRAFFIC CONTROL NOTES

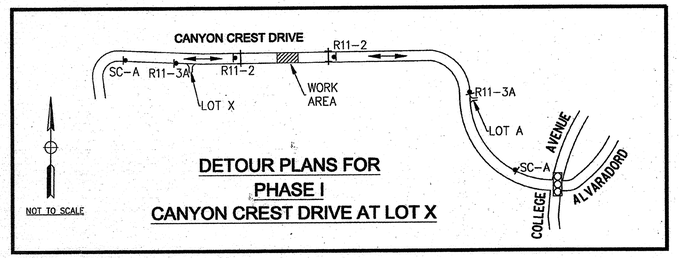
SEE SHEET TC-01

NOTE: FLAGGERS SHALL MAINTAIN EYE CONTACT OR USE TWO-WAY RADIO COMMUNICATION.



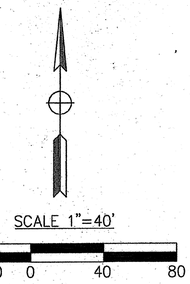


TRAFFIC CONTROL PLANS FOR
PHASE II
CANYON CREST DRIVE AT LOT X
SEWER MAIN STA. 10+64.65 TO STA. 15+69.87



DETOUR PLANS FOR
PHASE I
CANYON CREST DRIVE AT LOT X

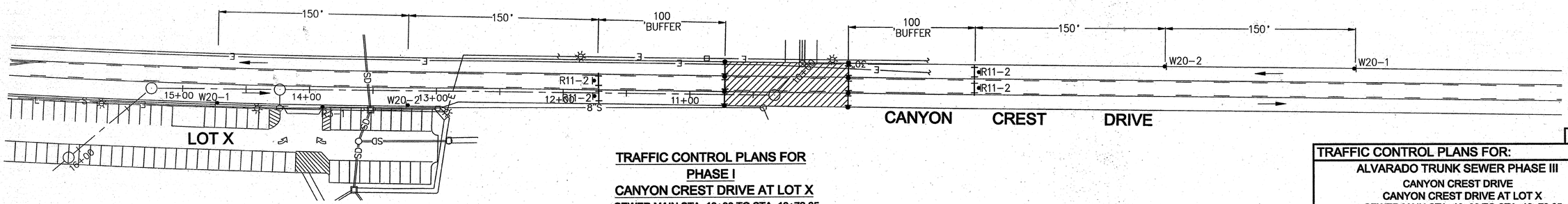
NOTE: CONTRACTOR SHALL NOTIFY DEBBIE RICHESON AT SDSU TRAFFIC CONTROL (619) 594-6671 TWO (2) WEEKS PRIOR TO START OF CONSTRUCTION.



SYMBOL LIST

	WORK AREA
	SIGNALIZED INTERSECTION
	TRAFFIC CONTROL SIGNS
	CONE
	TYPE II BARRICADE
	FLASHING ARROW SIGN (FAS)
	TRAFFIC DIRECTION
NTS	NOT TO SCALE
TNP'	TEMPORARY NO PARKING
	FLAGGER

WORK HOURS:
8:00 PM TO 5:00 AM



TRAFFIC CONTROL PLANS FOR
PHASE I
CANYON CREST DRIVE AT LOT X
SEWER MAIN STA. 10+00 TO STA. 10+72.65

DELINEATOR AND SIGN SPACING CHART

	MPH SPEED	TAPER LENGTH	DELINEATOR SPACING LENGTH TRANSITION	SIGN SPACING
CANYON CREST DRIVE	25	125'	25'	150'

REGISTERED PROFESSIONAL ENGINEER
RAMIA SARKIS MARK
No. C 63507
ex 03-30-2012
CIVIL
STATE OF CALIFORNIA

TC-02

TRAFFIC CONTROL PLANS FOR:
ALVARADO TRUNK SEWER PHASE III
CANYON CREST DRIVE
CANYON CREST DRIVE AT LOT X
SEWER MAIN STA. 10+00 TO STA. 10+72.65

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
SHEET 2 OF 2 SHEETS

WATER W.O. —
SEWER W.O. 176571

APPROVED: FOR CITY ENGINEER — DATE 02/14/2011
SUBMITTED BY: JERICHO GALLARDO, ASSOCIATE ENGINEER
CHECKED BY: JOSELITO GUINTO, PROJECT ENGINEER

DESCRIPTION	DRAWN BY	DATE	FILMED
ORIGINAL	AV		

CONTROL CERTIFICATION
222-1746
LAMBERT COORDINATES
31650- T2 -D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____