

# City of San Diego

ORIGINAL

CONTRACTOR'S NAME: Atlas Development  
ADDRESS: 991C Lomas Santa Fe Dr. #115, Solana Beach, CA 92075  
TELEPHONE NO.: 619-200-0902 FAX NO.: 858-350-9337  
CITY CONTACT: Clementina Giordano, Contract Specialist, Email: Cgiordano@sanidiego.gov  
Phone No. (619) 533-3481, Fax No. (619) 533-3633  
ACorsiMorgan/A.Jaro/egz

## BIDDING DOCUMENTS



FOR

### Larsen Field ADA Improvements Phase II

BID NO.: \_\_\_\_\_ K-16-1410-DBB-3  
SAP NO. (WBS/IO/CC): \_\_\_\_\_ S-13004  
CLIENT DEPARTMENT: \_\_\_\_\_ 1714  
COUNCIL DISTRICT: \_\_\_\_\_ 8  
PROJECT TYPE: \_\_\_\_\_ GA  
CDBG #: \_\_\_\_\_ B-15-MC-06-0542

**THIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:**

- FEDERAL EQUAL OPPORTUNITY CONTRACTING REQUIREMENTS.
- PREVAILING WAGE RATES: STATE  FEDERAL
- APPRENTICESHIP
- THIS IS A COMMUNITY DEVELOPMENT BLOCK GRANT CONTRACT FUNDED CONTRACT THROUGH THE DEPARTMENT OF HOUSING URBAN AND DEVELOPMENT

**BID DUE DATE:**

2:00 PM  
MARCH 22, 2016  
CITY OF SAN DIEGO  
PUBLIC WORKS CONTRACTS  
1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C  
SAN DIEGO, CA 92101

# ENGINEER OF WORK

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

*Vicki Estrada*      2/2/16      Seal:  
1) Registered Architect      Date



*Samir M*      2/3/16      Seal  
2) For City Engineer      Date



**TABLE OF CONTENTS**

<b>SECTION</b> .....	<b>PAGE</b>
1. NOTICE INVITING BIDS .....	5
2. INSTRUCTIONS TO BIDDERS.....	8
3. PERFORMANCE AND PAYMENT BONDS .....	17
4. ATTACHMENTS:	
A. SCOPE OF WORK.....	20
B. INTENTIONALLY LEFT BLANK .....	22
C. EQUAL OPPORTUNITY CONTRACTING PROGRAM.....	23
D. CDBG FUNDING AGENCY PROVISIONS .....	27
1. Notice of Requirement for Affirmative Action to Ensure EEO (Executive Order 11246) ..	28
2. Equal Opportunity Clauses .....	28
3. Standard Federal Equal Employment Specifications .....	29
4. Violation or Breach of Requirements .....	31
5. Monthly Employment Utilization Reports.....	31
6. Records of Payments to DBEs .....	31
7. Federal Wage Requirements for Federally Funded Projects.....	31
8. Prevailing Wage Rates .....	32
9. Wage Rates .....	34
10. Section 3 of the Housing and Urban Development Act of 1968.....	34
11. Federal Labor Standards Provisions.....	36
12. Agency Specific Provisions .....	41
13. DBE Potential Resources Centers .....	41
14. Good Faith Effort Documentation Submittals .....	43
15. Forms .....	43
Form AA61 List of Work Made Available .....	46
Form AA62 Summary of Bids Received .....	47
Form AA63 DBE Good Faith Effort List of Subcontractors Solicited .....	48
E. SUPPLEMENTARY SPECIAL PROVISIONS.....	49
1. Appendix A – Notice of Exemption.....	89
2. Appendix B - Fire Hydrant Meter Program .....	113
3. Appendix C - Materials Typically Accepted by Certificate of Compliance .....	127
4. Appendix D - Sample City Invoice .....	129
5. Appendix E - Location Map.....	131
6. Appendix F - Pavement Recommendations and Hydraulic Conductivity Test Results....	133
7. Appendix G - Play Equipment and Site Furnishings .....	139

8. Appendix H - Sample of Public Notices .....190  
9. Appendix I– Water Quality Technical Report, January 21, 2016 by Nasland Engineering ..... 192  
10. Appendix J–Hydrology Study, January 21, 2016 by Nasland Engineering ..... 267  
F. RESERVED.....286  
G. CONTRACT AGREEMENT .....287  
H. CERTIFICATIONS AND FORMS.....290



## NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for this project provides for construction of Larsen Field accessibility upgrade work, including demolition, grading, paving, two new play area structures (2-5 and 5-12 year olds) with new safety surfacing, concrete player's dugout, baseball fencing, benches, picnic tables, drinking fountain, planting, irrigation, drainage and other park amenities as shown on plans. For additional information refer to Attachment A.
2. **FULL AND OPEN COMPETITION:** This contract is open to full competition and may be bid on by Contractors who are on the City's current Prequalified Contractors' List. For information regarding the Contractors Prequalified list visit the City's website: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$1,038,000**.
4. **BID DUE DATE AND TIME ARE: MARCH 22, 2016 at 2:00 PM.**
5. **PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D.
6. **LICENSE REQUIREMENT:** The City has determined that the following licensing classification(s) are required for this contract: **A**
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:**
  - 7.1. The City affirms that in any contract entered into pursuant to this advertisement, DBE firms will be afforded full opportunity to submit Bids in response to this invitation.
  - 7.2. This Federally assisted project includes subcontracting participation percentages for DBE participation. DBE goal commitments and Good Faith Efforts (GFE) shall be made prior to bidding. DBE commitments and GFE made after the Bid opening will not be considered for the Award of Contract.
  - 7.3. This project is subject to the federal equal opportunity regulations and the following requirements. The City reserves the right to audit the Contractor's compliance with the federal requirements set forth below.
  - 7.4. Following are federally subcontracting participation percentages for this contract. For the purpose of achieving the subcontractor participation percentage, Additive or Deductive, and Type II Allowance Bid Items will not be included in the calculation.
  - 7.5. **Department of Housing and Urban Development ( HUD):**

1. Small Disadvantaged Business (SDB):	5%
2. Women-Owned Small Business (WoSB):	5%
3. HUBZone Small Business (HubZone):	3%
4. Service Disabled Veteran-owned Small Business (SDVoSB):	3%

7.6. Bid may be **declared non-responsive** if the Bidder fails any of the following conditions:

1. Submission of GFE documentation, as specified in the Special Provisions.
2. Attending the Pre-Bid Meeting.
3. Bidder's submission of Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include DBE Subcontractors shall be submitted within **4 Working Days** of the Bid opening.

**8. PRE-BID MEETING:**

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

**Date: MARCH 1, 2016**  
**Time: 10:00 AM**  
**Location: 1010 Second Avenue, Suite 1400, San Diego, CA 92101**

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

**Bidders may not be admitted after the specified start time of the mandatory Pre-Bid Meeting.**

**9. AWARD PROCESS:**

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

**10. SUBMISSION OF QUESTIONS:**

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

Public Works Contracts  
1010 Second Avenue, 14<sup>th</sup> Floor  
San Diego, California, 92101  
Attention: Clementina Giordano

OR:

[Cgiordano@sandiego.gov](mailto:Cgiordano@sandiego.gov)

- 10.2.** Questions received less than 14 days prior to the date for opening of Bids may not be considered.
- 10.3.** Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- 10.4.** Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.

**11. ADDITIVE/DEDUCTIVE ALTERNATES:**

- 11.1.** The additive/deductive alternates have been established to allow the City to compare the cost of specific portions of the Work with the Project's budget and enable the City to make a decision whether to incorporate these portions prior to award. The award will be established as described in the Bid. The City reserves the right to award the Contract for the Base Bid only or for the Base Bid plus one or more Alternates.

## INSTRUCTIONS TO BIDDERS

### 1. PREQUALIFICATION OF CONTRACTORS:

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

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

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

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

- 1.1. **BIDDERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit an electronic bid.
- 1.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.
- 1.3. The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.
- 1.4. **BIDS REMAIN SEALED UNTIL BID DEADLINE.** eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter which has

until the “Bid Due Date and Time” to change, rescind or retrieve its proposal should it desire to do so.

**1.5. BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME.** Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, EOCP compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.

**1.6. UNIT PRICES** must be entered for all unit-price items.

**1.7. RECAPITULATION OF THE WORK.** 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.

**1.8. BIDS MAY BE WITHDRAWN** by the Bidder only up to the bid due date and time.

**1.8.1. Important Note:** Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user’s internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder’s submission to upload and be received by the City’s eBidding system. It is the bidder’s sole responsibility to ensure their bids are received on time by the City’s eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.

**1.9. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE.** : To request a copy of this solicitation in an alternative format, contact the Public Works Contract Specialist listed in the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

## **2. ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT**

**2.1.** The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.

**2.2.** By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.

**2.3.** The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.

**2.4.** The Bidder agrees to the construction of the project as described in Attachment “A– Scope of Work” for the City of San Diego, in accordance with the requirements set

forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days (90 days for federally funded contracts and contracts valued at \$500,000 or less) from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.

3. **BIDS ARE PUBLIC RECORDS:** Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.
4. **CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:**
  - 4.1. **Prior** to the Award of the Contract or each Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:  
  
<http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml>.
  - 4.2. The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.
5. **JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receiving the Contract forms. See 2-1.1.2, "Joint Venture Contractors" in The WHITEBOOK for details.
6. **PREVAILING WAGE RATES WILL APPLY:** Refer to Attachment D.
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract. Refer to Attachment E.
8. **INSURANCE REQUIREMENTS:**
  - 8.1. All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
  - 8.2. Refer to sections 7-3, "LIABILITY INSURANCE", and 7-4, "WORKERS' COMPENSATION INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.
9. **REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK")	2012	PITS070112-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")*	2012	PITS070112-02
City of San Diego Standard Drawings*	2012	PITS070112-03
Caltrans Standard Specifications	2010	PITS070112-04
Caltrans Standard Plans	2010	PITS070112-05
California MUTCD	2012	PITS070112-06
City Standard Drawings - Updates Approved For Use (when specified)*	Varies	Varies
Standard Federal Equal Employment Opportunity Construction Contract Specifications and the Equal Opportunity Clause Dated 09-11-84	1984	769023
NOTE: *Available online under Engineering Documents and References at: <a href="http://www.sandiego.gov/publicworks/edocref/index.shtml">http://www.sandiego.gov/publicworks/edocref/index.shtml</a>		

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

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

**13.2. LISTING OF SUPPLIERS.** Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY)** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.

**13.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES.** For subcontractors or suppliers to be used on additive or deductive alternate items, in addition to the above requirements, bidder shall further note "ALTERNATE" and alternate item number within the description.

**14. SUBMITTAL OF "OR EQUAL" ITEMS:** See Section 4-1.6, "Trade Names or Equals" in The WHITEBOOK and as amended in the SSP.

**15. AWARD PROCESS:**

**15.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions set forth herein and in the Notice of Intent to Award letter

**15.2.** Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.

**15.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.

**16. SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 2-3, "SUBCONTRACTS" in The



GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.

17. **AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <http://www.sandiego.gov/cip/>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Public Works Contracts.
18. **ONLY ONE BID PER CONTRACTOR SHALL BE ACCEPTED:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.
19. **SAN DIEGO BUSINESS TAX CERTIFICATE:** The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.
20. **BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY):**
  - 20.1. For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.
  - 20.2. This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.
  - 20.3. The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.
  - 20.4. At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. Within twenty-four (24) hours after the bid due date and time, the first five (5) apparent low bidders must provide the City with the original bid security.

**20.5.** Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original within twenty-four (24) hours may cause the bid to be rejected and deemed **non-responsive**.

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

**21.1.** This contract may be awarded to the lowest responsible and reliable Bidder.

**21.2.** Bidders shall complete all the eBid forms as required. Incomplete eBids will not be accepted.

**21.3.** The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.

**21.4.** Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.

**21.5.** A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.

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

**21.7.** 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 herein.

**21.8.** The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

**22. BID RESULTS:**

**22.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.

**22.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

**23. THE CONTRACT:**

- 23.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.
- 23.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 23.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
- 23.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.
- 23.5.** The award of the Contract is contingent upon the satisfactory completion of the above mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.

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

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

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

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

26.3. The City of San Diego Municipal Code §22.3004 for Pledge of Compliance.

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

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

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

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

27. **PRE-AWARD ACTIVITIES:**

27.1. The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified herein and in the Notice of Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive**.

27.2. The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

## PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

### FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

Atlas Development Corporation, a corporation, as principal, and Great American 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 One Million Nine Hundred Ninety-Nine Thousand One Hundred Twenty-One Dollars and 82/100 (\$1,099,121.82) for the faithful performance of the annexed contract, and in the sum of One Million Nine Hundred Ninety-Nine Thousand One Hundred Twenty-One Dollars and 82/100 (\$1,099,121.82) for the benefit of laborers and materialmen designated below.

#### Conditions:

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

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

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

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

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

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

Dated May 2, 2016

Approved as to Form

Atlas Development Corporation

Principal

By M. Atefi

Mark Atefi

Printed Name of Person Signing for Principal

Jan I. Goldsmith, City Attorney

By [Signature]

Deputy City Attorney

Great American Insurance Company

Surety

By [Signature]

Tara Bacon

Attorney-in-fact

Approved:

By [Signature]

Stephen Samara, Principal Contract Specialist

Local Address of Surety

750 The City Drive South, Suite 470, Orange, CA 92868

Local Address (City, State) of Surety

(714) 740-3101

Local Telephone No. of Surety

Premium \$ 15,940.00

Bond No. 2119157

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**  
**CIVIL CODE § 1189**

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

State of California  
County of San Diego )

On May 02, 2016 before me, Maria Hallmark, Notary Public  
(insert name and title of the officer)

personally appeared Tara Bacon,  
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  (Seal)



**GREAT AMERICAN INSURANCE COMPANY®**

Administrative Office: 301 E 4TH STREET • CINCINNATI, OHIO 45202 • 513-369-5000 • FAX 513-723-2740

The number of persons authorized by this power of attorney is not more than FIVE

No. 0 14839

**POWER OF ATTORNEY**

**KNOW ALL MEN BY THESE PRESENTS:** That the GREAT AMERICAN INSURANCE COMPANY, a corporation organized and existing under and by virtue of the laws of the State of Ohio, does hereby nominate, constitute and appoint the person or persons named below, each individually if more than one is named, its true and lawful attorney-in-fact, for it and in its name, place and stead to execute on behalf of the said Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; provided that the liability of the said Company on any such bond, undertaking or contract of suretyship executed under this authority shall not exceed the limit stated below.

Name	Address	Limit of Power
DALE G. HARSHAW	KYLE KING	ALL
GEOFFREY SHELTON	JOHN R. QUALIN	\$75,000,000.00
TARA BACON	SAN DIEGO, CALIFORNIA	

This Power of Attorney revokes all previous powers issued on behalf of the attorney(s)-in-fact named above.

IN WITNESS WHEREOF the GREAT AMERICAN INSURANCE COMPANY has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 22ND day of APRIL, 2013  
Attest GREAT AMERICAN INSURANCE COMPANY



*[Signature]*  
Assistant Secretary

*[Signature]*  
Divisional Senior Vice President

DAVID C. KITCHIN (877-377-2405)

STATE OF OHIO, COUNTY OF HAMILTON - ss:

On this 22ND day of APRIL, 2013, before me personally appeared DAVID C. KITCHIN, to me known, being duly sworn, deposes and says that he resides in Cincinnati, Ohio, that he is a Divisional Senior Vice President of the Bond Division of Great American Insurance Company, the Company described in and which executed the above instrument; that he knows the seal of the said Company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by authority of his office under the By-Laws of said Company, and that he signed his name thereto by like authority.



**KAREN L. GROSHEIM**  
NOTARY PUBLIC, STATE OF OHIO  
MY COMMISSION EXPIRES 02-20-16

*[Signature]*

This Power of Attorney is granted by authority of the following resolutions adopted by the Board of Directors of Great American Insurance Company by unanimous written consent dated June 9, 2008.

*RESOLVED: That the Divisional President, the several Divisional Senior Vice Presidents, Divisional Vice Presidents and Divisional Assistant Vice Presidents, or any one of them, be and hereby is authorized, from time to time, to appoint one or more Attorneys-in-Fact to execute on behalf of the Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; to prescribe their respective duties and the respective limits of their authority; and to revoke any such appointment at any time.*

*RESOLVED FURTHER: That the Company seal and the signature of any of the aforesaid officers and any Secretary or Assistant Secretary of the Company may be affixed by facsimile to any power of attorney or certificate of either given for the execution of any bond, undertaking, contract of suretyship, or other written obligation in the nature thereof, such signature and seal when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.*

**CERTIFICATION**

I, STEPHEN C. BERAHA, Assistant Secretary of Great American Insurance Company, do hereby certify that the foregoing Power of Attorney and the Resolutions of the Board of Directors of June 9, 2008 have not been revoked and are now in full force and effect.

Signed and sealed this 2nd day of May, 2016



*[Signature]*  
Assistant Secretary



## ATTACHMENTS

**ATTACHMENT A**  
**SCOPE OF WORK**

## SCOPE OF WORK

1. **SCOPE OF WORK:** This project provides for construction of Larsen Field accessibility upgrade work, including demolition, grading, paving, two new play area structures (2-5 and 5-12 year olds) with new safety surfacing, concrete player's dugout, baseball fencing, benches, picnic tables, drinking fountain, planting, irrigation, drainage and other park amenities as shown on plans.
  - 1.1. The Work shall be performed in accordance with:
    - 1.1.1. The Notice Inviting Bids and Plans numbered **38810-01-D** through **38810-35-D**, inclusive.
2. **LOCATION OF WORK:** The location of Work is as follows:

See Appendix E for location map.
3. **CONTRACT TIME:** The Contract Time for completion of the Work, including the Plant Establishment Period, shall be **189 Working Days**.

**ATTACHMENT B**  
**INTENTIONALLY LEFT BLANK**

**ATTACHMENT C**  
**EQUAL OPPORTUNITY CONTRACTING PROGRAM**

## **EQUAL OPPORTUNITY CONTRACTING PROGRAM REQUIREMENTS**

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

### **D. CITY'S EQUAL OPPORTUNITY COMMITMENT.**

#### **1. Nondiscrimination in Contracting Ordinance.**

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

The Contractor shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers. The Contractor shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions.

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

2. Disclosure of Discrimination Complaints. As part of its Bid or Proposal, the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.
3. Upon the City's request, the Contractor agrees to provide to the City, within 60 days, a truthful and complete list of the names of all Subcontractors and Suppliers that the Contractor has used in the past 5 years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by the Contractor for each subcontract or supply contract.
4. The Contractor further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code §§22.3501 through 22.3517. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the Contract and may result in remedies being ordered against the Contractor up to and including contract termination, debarment and other sanctions for violation of the provisions of the Nondiscrimination in Contracting Ordinance. The Contractor further understands and agrees that the procedures, remedies and sanctions provided for in the Nondiscrimination in Contracting Ordinance apply only to violations of the Ordinance.

**E. EQUAL EMPLOYMENT OPPORTUNITY OUTREACH PROGRAM.**

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

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

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

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

6. The Contractor documents and maintains a record of all bid solicitations and outreach efforts to and from subcontractors, contractor associations and other business associations.
7. The Contractor disseminates its EEO Policy externally through various media, including the media of people of color and women, in advertisements to recruit, maintains files documenting these efforts, and provides copies of these advertisements to the City upon request.
8. The Contractor disseminates its EEO Policy to union and community organizations.
9. The Contractor provides immediate written notification to the City when any union referral process has impeded the Contractor's efforts to maintain its EEO Policy.
10. The Contractor maintains a current list of recruitment sources, including those outreaching to people of color and women, and provides written notification of employment opportunities to these recruitment sources with a record of the organizations' responses.
11. The Contractor maintains a current file of names, addresses and phone numbers of each walk-in applicant, including people of color and women, and referrals from unions, recruitment sources, or community organizations with a description of the employment action taken.
12. The Contractor encourages all present employees, including people of color and women employees, to recruit others.
13. The Contractor maintains all employment selection process information with records of all tests and other selection criteria.
14. The Contractor develops and maintains documentation for on-the-job training opportunities, participates in training programs, or both for all of its employees, including people of color and women, and establishes apprenticeship, trainee, and upgrade programs relevant to the Contractor's employment needs.
15. The Contractor conducts, at least annually, an inventory and evaluation of all employees for promotional opportunities and encourages all employees to seek and prepare appropriately for such opportunities.
16. The Contractor ensures the company's working environment and activities are non-segregated except for providing separate or single-user toilets and necessary changing facilities to assure privacy between the sexes.



**ATTACHMENT D**  
**COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)**  
**HOUSING URBAN DEVELOPMENT (HUD)**  
**FUNDING AGENCY PROVISIONS**

## FUNDING AGENCY PROVISIONS

**IN THE EVENT THAT THESE REQUIREMENTS CONFLICT WITH THE CITY'S GENERAL EOC REQUIREMENTS, THE FUNDING AGENCY'S REQUIREMENTS WILL CONTROL.**

### **1. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246).**

1.1. The goal and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, as follows:

	<u>Goal</u>
1. Minority Participation:	16.9%
2. Female Participation:	6.9%

1.2. These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs Work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the Work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both federally involved and non-federally involved Work.

1.3. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals.

1.4. The hours of minority and female employment and training shall be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

1.5. The Contractor shall provide written notification to the Director the Office of Federal Contract Compliance Programs within 10 Working Days of award of any Subcontract in excess of \$10,000 at any tier for Work under the Contract resulting from this solicitation. The notification shall list the name, address and telephone number of the Subcontractor; employer identification number of the Subcontractor; estimated dollar amount of the Subcontract; estimated starting and completion dates of the Subcontract; and the geographical area in which the subcontract is to be performed. The "covered area" is the City of San Diego.

### **2. EQUAL OPPORTUNITY CLAUSES:**

2.1. The following equal opportunity clauses are incorporated by reference herein:

1. The equal opportunity clause located 41 CFR 60.1.4(a), which specifies the obligations imposed under Executive Order 11246.

2. The equal opportunity clause located at 41 CFR 60-741.5, which contains the obligations imposed by Section 503 of the Rehabilitation Act of 1973.
3. The “Equal Opportunity Clause” (Resolution No. 765092) filed on December 4, 1978, in the Office of the City Clerk, San Diego, California and incorporated in the “Standard Federal Employment Opportunity Construction Contract Specifications (Executive Order 11246 - Document No. 769023, filed September 11, 1984, in the Office of the City Clerk, San Diego, California) is applicable to all non-exempt City construction contracts and subcontracts of \$2,000 or more.
4. Age Discrimination Act of 1975, Pub. L. 94-135.
5. Title VI of the Civil Rights Act of 1964, Pub. L. 88-352.
6. Section 13 of the Federal Water Pollution Control Acts Amendments of 1972, Pub. L. 92-5200 (the Clean Water Act).
7. Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (Executive Orders 11914 and 11250).
8. Women’s Minority Business Enterprises, Executive Orders 11625, 12138 and 12432.
9. Section 129 of the Small Business Administration Reauthorization and Amendment Act of 1988, Pub. L. 100-590.

**3. STANDARD FEDERAL EQUAL EMPLOYMENT SPECIFICATIONS:**

- 3.1. The Contractor is required to comply with the 16 “Standard Federal Equal Employment Specifications” located at 41 CFR 60-4.3 for federal and federally-assisted construction contracts in excess of \$10,000, set forth below.
- 3.2. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of Contractor’s compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative actions steps at least as extensive as the following:
  1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor’s employees are assigned to work. The Contractor, where possible, will assign 2 or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor’s obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations’ responses.
  3. Maintain a current file of the names, addresses and telephone numbers of each minority and female walk-in applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or,

if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
5. Develop on-the-job training opportunities, participate in training programs for the area, or both which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under C.1. above.
6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreements; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignments, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, foreman, etc., prior to the initiation of Work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and dispositions of the subject matter.
8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
10. Encourage present minority and female employees to recruit other minority persons and women and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

12. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
13. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
14. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

**4. VIOLATION OR BREACH OF REQUIREMENTS:**

- 4.1. If at any time during the course of the Contract there is a violation of the Affirmative Action or Equal Employment Opportunity requirements by the Contractor, or the Subcontractors, the City will notify the Contractor of the breach. The City may withhold any further progress payments to the Contractor until the City is satisfied that the Contractor and Subcontractors are in full compliance with these requirements.

**5. MONTHLY EMPLOYMENT UTILIZATION REPORTS:**

- 5.1. Refer to GENERAL EQUAL OPPORTUNITY CONTRACTING PROGRAM REQUIREMENTS, CONSTRUCTION CONTRACTOR REQUIREMENTS in The WHITEBOOK and the following:
  1. State of California Department of Transportation Payroll Report. Due to the City weekly.
  2. Federal and Non-Federal Work in San Diego County. Submit an updated list only if work is complete or new contracts have been awarded during the span of this project.

**6. RECORDS OF PAYMENTS TO DBEs:**

- 6.1. The Contractor shall maintain records and documents of payments to DBEs for 5 years following the NOC. These records shall be made available for inspection upon request by any authorized representative of the City, funding agency, or both. The reporting requirement shall be extended to any certified DBE Subcontractor.

**7. FEDERAL WAGE REQUIREMENTS FOR FEDERALLY FUNDED PROJECTS:**

- 7.1. The successful Bidder's work shall be required to comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR chapter 60).

- 7.2. This Executive Order pertains to Equal Employment Opportunity regulations and contains significant changes to the regulations including new goals and timetables for women in construction and revised goals and time-tables for minorities in construction.
  - 7.3. Minimum wage rates for this project have been predetermined by the Secretary of Labor and are set forth in the Decision of the Secretary and bound into the specifications book. Should there be any difference between the state or federal wage rates, including health and welfare funds for any given craft, mechanic, or similar classifications needed to execute the Work, it shall be mandatory upon the Contractor or subcontractor to pay the higher of the two rates.
  - 7.4. The minimum wage rate to be paid by the Contractor and the Subcontractors shall be in accordance with the Federal Labor Standards Provisions (see pages below) and Federal Wage Rates (see Wage Rates below) and General Prevailing Wage Determination made by the State of California, Director of Industrial Relations pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1, whichever is higher.
  - 7.5. A Contractor having 50 or more employees and its Subcontractors having 50 or more employees and who may be awarded a contract of \$50,000 or more will be required to maintain an affirmative action program, the standards for which are contained in the specifications.
  - 7.6. To be eligible for award, each Bidder shall comply with the affirmative action requirements which are contained in the specifications.
  - 7.7. Women will be afforded equal opportunity in all areas of employment. However, the employment of women shall not diminish the standards of requirements for the employment of minorities.
- 8. PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.
- 8.1. **Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
    - 8.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

**8.1.2.** The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.

**8.2. Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed.

**8.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.

**8.3.1.** For contracts entered into on or after April 1, 2015, Contractor and their subcontractors shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.

**8.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.

**8.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.

**8.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.

**8.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that “I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.”

**8.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego’s Equal Opportunity Contracting Department at 619-236-6000.

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

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

**9. WAGE RATES:** This contract shall be subject to the following Davis-Bacon Wage Decisions:

- CA160001 02/12/2016 CA 1
- Modification number: 1
- Publication Date: 02/12/2016

The required wage information may be accessed and downloaded from:  
<http://www.wdol.gov/>

**10. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968:**

**10.1.** The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the project.



- 10.2. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- 10.3. The Contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- 10.4. The Contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the Subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The Contractor will not subcontract with any Subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the Subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
- 10.5. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its Contractors and Subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

## 11. FEDERAL LABOR STANDARDS PROVISIONS:

### Federal Labor Standards Provisions

U.S. Department of Housing and Urban  
Development  
Office of Labor Relations

#### Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

**A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4).

Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

**(ii) (a)** Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

**(1)** The work to be performed by the classification requested is not performed by a classification in the wage determination; and

**(2)** The classification is utilized in the area by the construction industry; and

**(3)** The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

**(b)** If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

**(c)** In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**(d)** The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

**(iii)** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

**(iv)** If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

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of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

**3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

**(ii) (a)** The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired.

Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

**(b)** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

**(1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

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(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination.

Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

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the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

**(iii) Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract **6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

**10. (i) Certification of Eligibility.** By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24. **(ii)** No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

**(iii)** The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of...influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both".

**11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

**(1) Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

**(2) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

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**(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

**C. Health and Safety.** The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

**(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

**(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

**(3)** The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

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**12. AGENCY SPECIFIC PROVISIONS:**

Note: Failure to comply with these specifications e.g., taking the specified steps prior to Bid opening, and to submit the forms with the Bid will lead to the Bid being declared **non-responsive** and, therefore, shall be rejected.

**12.1. HUD Requirements**

**12.1.1.** Affirmative Good Faith Effort Steps shall include the steps listed at 24 CFR 85.36(e)(2), set forth below:

1. Placing qualified DBE business enterprises on solicitation lists;
2. Assuring that DBE business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBE business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by DBE business enterprises;
5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
6. Requiring the Subcontractors to take the affirmative steps listed in this section.
7. See “DBE Potential Resources Centers” Section in a later part these specifications. Include a completed copy of the form AA61, “List of Work Made Available” with the GFE documentation.

**13. DBE POTENTIAL RESOURCES CENTERS:**

**13.1.** Utilization of SBA and MBDA resources is required at no cost. These agencies offer several services, including Internet access to databases of DBEs.

**13.2.** For additional assistance, the recipient or contractor can telephone the local offices of both agencies in their area (SBA Minority Enterprise Development Offices and DOC MBDA Regional Centers). The Internet web sites also include names, addresses, and phone or fax numbers of local SBA and MBDA centers. Do not write to these sources

**13.3.** The Contractor shall provide documentation that the local SBA/MBDA offices or web sites were notified of the contracting bid opportunity at least 15 Working Days prior to Bid opening and solicitation to DBE subcontractors at least 10 Working Days prior to Bid opening. Documentation shall not only include the efforts to contact the information sources and list the Contract opportunity, but also the solicitation and response to the bid request.

**13.4.** Include qualified DBEs on solicitation lists and record the information on Form AA63. Solicitation shall be as broad as possible. The following web sites include a list of available sources for expanding the search for eligible DBEs:

1. <http://www.sba.gov>
2. <http://www.ccr.gov>
3. <http://www.mbda.gov>

- 13.5. If DBE sources are not located, explain why and describe the efforts made.
- 13.6. The Contractor shall send invitations to at least 3 (or all, if less than 3) DBE vendors for each item of work referred by sources contacted. The invitations shall adequately specify the items for which bids are requested. The record of “good faith” efforts shall indicate a real desire for a positive response, such as a certified mail receipt or a documented telephone conversation.
- 13.7. A regular letter or an unanswered telephone call is not an adequate “good faith” effort. A list of all sub-bidders, including the bidders not selected and non DBE Subcontractors, and bid amount for each item of the Work shall be submitted on Form AA62. If a low bid was not accepted, an explanation shall be provided.
- 13.8. Federal Agencies (must be contacted and solicitations posted on their websites):

Name and Address	Telephone and Web Site
<b>U.S. Small Business Administration</b>	(415) 744-6820 Extension 0
455 Market Street, Suite 600	PRO-Net Database: <a href="http://www.ccr.gov/">http://www.ccr.gov/</a> <sup>1</sup>
San Francisco, CA 94105	Bid Notification: <a href="http://web.sba.gov/subnet/">http://web.sba.gov/subnet/</a> <sup>2</sup>
RE: Minority Enterprise Development Offices	
<b>U.S. Department of Commerce</b>	(415) 744-3001
Minority Business Development Agency	Phoenix/ Opportunity Database:
211 Main Street, Room 1280	<a href="http://www.mbda.gov">http://www.mbda.gov</a> <sup>3</sup>
San Francisco, CA 94105	RE: Business Development Centers

- 13.9. State Agencies (must be contacted):

Name and Address	Telephone and Web Site
<b>California Department of Transportation</b>	Mailing Address: PO Box 942874
(CALTRANS) Business Enterprise Program <sup>4</sup>	Sacramento, CA 94274-0015
1820 Alhambra Blvd.	(916) 227-9599
Sacramento, CA 95816	<a href="http://www.dot.ca.gov/hq/bep">www.dot.ca.gov/hq/bep</a>
<b>CA Public Utilities Commission (CPUC)<sup>5</sup></b>	
505 Van Ness Avenue	<a href="http://www.cpuc.ca.gov/static/supplierdiversity">http://www.cpuc.ca.gov/static/supplierdiversity</a>
San Francisco, CA 94102-3298	



Notes:

1. PRO-Net new database is the SBA's electronic search engine that was put on line January 1, 2004, containing business profiles for nearly 200,000 businesses. The SBA requests Internet contact only for a list of potential DBE subcontractors that can be downloaded from PRO-Net: <http://www.ccr.gov>. Downloading will verify that the prime contractor made the required contact with the SBA. Provide copy of search records with GFE documentation.
2. The Contractor shall use SUB-Net to post subcontracting opportunities. The Contractor shall post Subcontractor opportunities at least 15 Working Days prior to bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Provide copy of the Display Solicitation Record with the GFE documentation.
3. The Contractors shall use MBDA web portal to post subcontracting opportunities. The Contractor shall post subcontractor opportunities at least 15 Working Days prior to Bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Provide copy of the Offer Overview with the GFE documentation.
4. Based on the federal DBE program, CALTRANS maintains a database and provides directories of minority and woman-owned firms. Provide copy of search records with GFE documentation.
5. CPUC maintains a database of DBE-owned business enterprises and serves to inform the public. Provide copy of search records with GFE documentation.

**14. GOOD FAITH EFFORT DOCUMENTATION SUBMITTALS:**

- 14.1. The affirmative GFE steps documentation shall be submitted **within 4 Working Days of the Bid Opening**. If this documentation is not submitted when due, the City will declare the Bid **non-responsive** and reject it.
- 14.2. The required documentation shall be submitted and logged in at the following address:

CITY OF SAN DIEGO  
PUBLIC WORKS CONTRACTS  
1010 SECOND AVENUE, 14<sup>TH</sup> FLOOR, MS 614C  
SAN DIEGO, CA 92101  
SUBJECT: AFFIRMATIVE GOOD FAITH EFFORT DOCUMENTATION  
BID NO.           **K-16-1410-DBB-3**          

- 14.3. The Contractor shall maintain the records documenting compliance with requirements including documentation of its GFE and data relied upon in formulating its fair share objectives.

**15. FORMS:**

- 15.1. The Contractor shall demonstrate that efforts were made to attract DBEs on this contract. The Contractor and Subcontractors shall take the steps listed in these specifications to assure that DBEs are used whenever possible as sources of supplies, construction, equipment, or services. In addition to the specified GFE documentation, the Bidder shall submit the following forms:

**15.2. E-BIDDING FORMS** - The following forms shall be completed and submitted within **4 Working Days of the Bid opening**. Failure to include any of the forms shall cause the Bid to be deemed **non-responsive**.

1. Form AA61 List of Work Made Available
2. Form AA62 Summary of Bids Received
3. Form AA63 Good Faith Effort List of Subcontractors Solicited

**FUNDING AGENCY PROVISIONS**

**FORMS**

**LIST OF WORK MADE AVAILABLE**

List items of the Work the Bidder made available to DBE firms. Identify those items of the Work the Bidder might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar amount and percentage of the Base Bid. The Bidder must demonstrate that enough work to meet the goal was made available to DBE firms.

ITEM OF WORK MADE AVAILABLE	NAICS CODE	BIDDER NORMALLY PERFORMS ITEM (Y/N)	ITEM BROKEN DOWN TO FACILITATE PARTICIPATION (Y/N)	AMOUNT	PERCENTAGE OF BASE BID

**SUMMARY OF BIDS RECEIVED**

Type of Job	NAICS CODES	Company Name	Selected (Y/N)	Bid Amount	DBE	Non-DBE	Explanation for not Selecting

**USE ADDITIONAL FORMS AS NECESSARY**

**DISADVANTAGE BUSINESS ENTERPRISE (DBE)  
GOOD FAITH EFFORT LIST OF SUBCONTRACTORS SOLICITED**

Contractor Name	Contractor Address	How Located	Date of Contact	Contact Method	Task Description	Response (Yes/No)

**USE ADDITIONAL FORMS AS NECESSARY**

**ATTACHMENT E**  
**SUPPLEMENTARY SPECIAL PROVISIONS**

## **SUPPLEMENTARY SPECIAL PROVISIONS**

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

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

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

#### **1-2 TERMS AND DEFINITIONS.**

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

The Normal Working Hours are 7:00 AM to 3:30 PM.

### **SECTION 2 - SCOPE AND CONTROL OF WORK**

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

1. You must perform, with your own organization, Contract work amounting to at least 30% 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 award.
2. The self performance percentage requirement will be waived for contracts when a “B” License is required or allowed.

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

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



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

The Product Submittal Form is available for download at:

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

**2-7 SUBSURFACE DATA.** ADD the following:

4. In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests of subsurface conditions at the Work Site:
  1. Pavement Recommendations and Hydraulic Conductivity Test Results dated May 4, 2015 by Geocon Inc., see Appendix F.

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

Pursuant to Division 3, Chapter 15 of the Business and Professions Code, the Contractor shall not disturb survey monuments that "control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control" until they have been tied out by a Registered Land Surveyor or Registered Civil Engineer authorized to practice land surveying within the State of California.

Monument Preservation will be performed by City Public Works Field Engineering Division (PW-FED) Field Survey Section on all Projects, unless permission is obtained for these services in writing by PW-FED.

The Contractor shall submit to the Engineer a minimum of 7 Days prior to the start of the Work a list of controlling survey monuments which may be disturbed. The Agency (or the owner on a Private Contract) will:

- a) set survey points outside the affected work area that reference and locate each controlling survey monument that may be disturbed,
- b) file a Corner Record or Record of Survey with the County Surveyor after setting the survey points to be used for re-establishment of the disturbed controlling survey monuments, and
- c) file a Corner Record of Record of Survey with the County Surveyor after re-establishment of the disturbed controlling survey monuments.

## 2-9.2

**Survey Service.** DELETE in its entirety and SUBSTITUTE with the following:

1. Prior to start of construction, you shall submit a letter to the Engineer identifying the Licensed Land Surveyor or the Registered Civil Engineer authorized to practice land surveying within the State of California performing the survey services for the Project.
2. You shall perform and be responsible for the accuracy of the surveying adequate for construction. Stakes shall be set for curbs, headers, storm drains, structures, edge of concrete, paving, ball field, grades, limit of work and other staking as required to accurately locate, grade and construct the items of the contract. Cut or fill to finished grade (or flow line) shall be indicated on stakes and on a grade sheet. You shall dig all holes necessary for line and grade stakes. Surveying and staking shall be acceptable to the Engineer.
3. The Engineer will make available to you, a two-dimensional digital file of the project horizontal control in Microstation format for use in surveying. You shall independently verify all survey control prior to use, shall immediately notify the Engineer on any discrepancies between the digital files and construction documents, and shall indemnify and hold harmless the City for the use of digital files.
4. Surveys performed must list the basis of bearings as tied to Record of Survey 14492 or equivalent, based on the California Coordinate System of 1983, Zone 6, U.S. Survey foot, epoch 1991.35, along with a completed calibration sheet (blank form will be supplied by City Surveys). The vertical datum used must be NGVD 29 in accordance with the City of San Diego Vertical Bench Book.
5. You shall preserve construction survey stakes, control points and other survey related marks for the duration of the Project. If any construction survey stakes are lost or disturbed, and need to be replaced, such replacement will be performed by the Engineer at your expense.

## 2-9.2.1

**Survey Files.**

1. All Computer Aided Drafting (CAD) work must be done in accordance with The City of San Diego's Citywide Computer Aided Design and Drafting (CADD) Standards and must be in City seed files (.job, .txt, .dgn, .alg, .raw, .fwd, .dtm, .pdf, .docx, .xlsx, .tif, and .jpg).
2. All survey files must be completed in accordance with the City of San Diego's Citywide CADD Standards and must adhere to City's Microstation level and attribute structure.
3. The survey file deliverable will be either one Master .dgn file containing all xref's in geospatially referenced (and attached) models or one Master dgn with all xref's geospatially referenced (and attached) as dgn files. Resource files will be sent to Contractor if requested.

4. Survey files must include, but not limited to, the following items:
  - a. Street center line and (record width) right-of-way lines
  - b. Project geometry (.alg) files (this will be generated for use in InRoads)
  - c. 3D surface model (.dtm, break line and spot elevation) file
  - d. Spot elevations of the new utility main at each intersection, midblock and for any change in grade
  - e. Monuments
  - f. Curb lines (top curb and gutter)
  - g. All other appurtenances including but not limited to water valves, meters, vaults, manholes, fire hydrants, utility boxes, cleanouts and poles
5. You shall use the survey information to produce red-lines drawings as described in Section 2-5.4 "Red-Lines and Record Documents."

**2-9.2.2 Submittal.**

1. Survey files shall be submitted in accordance with Section 2-5.3 "Submittals" and 2-5.4 "Red-Lines and Record Documents." You shall provide the Survey Files, proposed Drawings and or Red-Line Drawings on a CD/DVD to the Engineer and post the Survey Files, proposed Drawings and or Red-Line Drawings at the following website:  
  
<ftp://ftp.sannet.gov/IN/SURVEYS/>.
2. After the documents have been posted the website, you shall send a confirmation email, which includes the hyperlink to the website, to the Engineer and [SurveyReview@sandiego.gov](mailto:SurveyReview@sandiego.gov).
3. All survey work and submittals which reveal non-compliance with the requirements of the Construction Documents shall be corrected as deemed necessary by the Engineer and the cost of the corrections to your survey submittals will be at your expense.

**SECTION 4 - CONTROL OF MATERIALS**

- 4-1.3.4 Inspection Paid For By the Contractor.** To the City Supplement, ADD the following:  
  
Third-party Certified Playground Safety Inspector to audit the play equipment.

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

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

**4-1.6**      **Trade Names or Equals.** ADD the following:

You must submit your 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 the City’s Product Submittal Form available at:

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

## **SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK**

**6-1.1**      **Construction Schedule.** To item 20, ADD the following:

The 90 Calendar Days for the Plant Establishment Period is included in the stipulated Contract Time.

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

5.      30 Working days for full depth asphalt final mill and resurfacing work required per SDG-107.

## **SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR**

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

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

**7-3.1**      **Policies and Procedures.**

1.      You must procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2.      Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3.      You 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 the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this contract.

4. 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.
5. Policies of insurance must provide that the City is entitled to 30 days (10 days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

**7-3.2 Types of Insurance.**

**7-3.2.1 Commercial General Liability Insurance.**

1. Commercial General Liability Insurance 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.
2. 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).
3. 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.
4. All costs of defense must be outside the policy limits. Policy coverage must be in liability limits of not less than the following:

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

**7-3.2.2**

**Commercial Automobile Liability Insurance.**

1. You 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”).
2. All costs of defense must be outside the limits of the policy.

**7-3.2.5**

**Contractors Builders Risk Property Insurance.**

1. You must provide at its expense, and maintain until Final Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance must be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits must be 100% of this contract value of the Work plus 15% to cover administrative costs, design costs, and the costs of inspections and construction management.
2. Insured property must include material or portions of the Work located away from the Site but intended for use at the Site, and must cover material or portions of the Work in transit. The policy or policies must include as insured property scaffolding, falsework, and temporary buildings located at the Site. The policy or policies must cover the cost of removing debris, including demolition.
3. The policy or policies must provide that all proceeds thereunder must be payable to the City as Trustee for the insured, and must name the City, the Contractor, Subcontractors, and Suppliers of all tiers as named insured. We as Trustee will collect, adjust, and receive all monies which may become due and payable under the policy or policies, may compromise any and all claims thereunder, and will apply the proceeds of such insurance to the repair, reconstruction, or replacement of the Work.
4. Any deductible applicable to the insurance must be identified in the policy or policies documents and responsibility for paying the part of any loss not covered because of the application of such deductibles must be apportioned among the parties except for the City as follows: if there is more than one claimant for a single occurrence, then each claimant must pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid claim to the total paid for insured. The City must be entitled to 100% of its loss. The Contractor must pay the City any portion of that loss not covered because of a deductible, at the same time the proceeds of the insurance are paid to the City as trustee.

5. Any insured, other than the City, making claim to which a deductible applies must be responsible for 100% of the loss not insured because of the deductible. 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.

**7-3.3 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 Approved Surplus Lines Insurers (LASLI 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.

**7-3.4 Evidence of Insurance.** Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document 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.

**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 its respective elected officials, officers, employees, agents, and representatives as additional insured.
- c) 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.

- d) 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 your 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 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.

**7-3.5.5 Builders Risk Endorsements.**

**7-3.5.5.1 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.

**7-3.5.5.2 Builders Risk – Partial Utilization.** If the City desire to occupy or use a portion or portions of the Work prior to Acceptance in accordance with this contract, the City will notify you and you must immediately notify your Builder's Risk insurer and obtain an endorsement that the policy or policies must not be cancelled or lapse on account of any such partial use or occupancy. You must obtain the endorsement prior to our occupation and use.

**7-3.6 Deductibles and Self-Insured Retentions.** You must pay for all deductibles and self-insured retentions. You must disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.



7-3.7 **Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this contract.

7-3.8 **Notice of Changes to Insurance.** You must notify the City 30 days prior to any material change to the policies of insurance provided under this contract.

7-3.9 **Excess Insurance.** Policies providing excess coverage 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.**

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

2. Limits for this insurance must be not less than the following:

<u>Workers' Compensation</u>	<u>Statutory Employers Liability</u>
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which 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 must 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.

**7-9 Protection and Restoration of Existing Improvements.** To the City Supplement, ADD the following:

5. **Protection:** The Contractor shall protect existing work which is to remain in place, that is to be re-used, or which is to remain the property of the City by temporary covers, shoring, bracing, and supports. Items which are to remain or are to be salvaged and which are damaged during performance of work shall be repaired to their original condition or replaced with new by the Contractor at no additional cost to -the City. The Contractor shall protect all services and utilities which are to remain. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical utilities.

**7-10.5.3 Steel Plate Covers.** Table 7-10.5.3(A), REVISE the plate thickness for 5'-3" trench width to read 1 3/4".

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

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

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

**ADD:**

**7-16 COMMUNITY OUTREACH.**

**7-16.1 General.**

1. To ensure consistency with the City's community outreach plan for the project, the City shall work with you to inform the public (which includes, but shall not be limited to, property owners, renters, homeowners, business owners, recreational users, and other community members and stakeholders) of construction impacts. Your efforts to mitigate construction impacts by communicating with the public require close coordination and cooperation with the City.
2. You shall perform the community outreach activities required throughout the Contract Time. You shall assign a staff member who shall perform the required community outreach services.
3. You shall closely coordinate the Work with the businesses, institutions, residents, and property owners impacted by the Project.
4. Your example duties include notifying businesses, institutions, and residents of the commencement of construction activities not less than 5 Days in advance, coordinating access for vehicular and pedestrian traffic to businesses,

institutions, and residences impacted by the Project, reporting activities at all Project progress meetings scheduled by the Engineer, attending the Project Pre-construction meeting, attending 2 community meetings, responding to community questions and complaints related to your activities, and documenting, in writing, as well as logging in all inquiries and complaints received into the City's internal public contact tracking system.

5. You shall execute the Information Security Policy (ISP) Acknowledgement Form - For Non-City Employees within 15 Days of the award of the Contract if any of the following apply:

- a) Your contact information is made available on any outreach materials.
- b) You will be the primary point of contact to resolve project related inquiries and complaints.

6. Electronic Communication.

- a) All inquiries and complaints shall be logged in to the City's internal public contact tracking system within 24 hours of receipt of inquiries and complaints.
- b) Any updates or a resolution of inquiries and complaints shall be documented in the City's internal public contact tracking system within 24 hours.
- c) Copies of email communications shall be saved individually on to the City's internal public contact tracking system in an Outlook Message Format (\*.msg).
- d) All graphics, photos, and other electronic files associated with inquiries and/or complaints shall be saved into the individual records, located within the City's internal public contact tracking system.

**7-16.1.1 Quality Assurance.**

1. During the course of community outreach, you shall ensure that the character of all persons that conduct community outreach (distributing door hangers, attending community meetings, interacting with the public, and etc.) on your behalf shall:

- a. Have the ability to speak and comprehend English and/or Spanish, as appropriate for the community or public they are informing.
- b. Possess and display easily verifiable and readable personal identification that identifies the person as your employee.
- c. Have the interpersonal skills to effectively, professionally, and tactfully represent you, the project, and the City to the public.

**7-16.1.2**

**Submittals.**

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

**7-16.2**

**Community Outreach Services.**

**7-16.2.1**

**Public Notice by Contractor.**

1. Post Project Identification Signs in accordance with 7-10.6.2, "Project Identification Sign".
2. Notify businesses, institutions, property owners, residents or any other impacted stakeholders, within a minimum 300 feet (90 m) radius of the Project, of construction activities and utility service interruptions not less than 5 Days in advance.
3. Furnish and distribute public notices in the form of door hangers using the City's format to all occupants and/or property owners along streets:
  - a. Where Work is to be performed at least 5 Days before starting construction or survey activities or impacting the community as approved by the Resident Engineer.
  - b. Within 5 Days of the completion of your construction activities where Work was performed, you shall distribute public notices in the form of door hangers, which outlines the anticipated dates of Asphalt Resurfacing or Slurry Seal.
  - c. No less than 48 hours in advance and no more than 72 hours in advance of the scheduled resurfacing.

4. Leave the door hanger notices on or at the front door of each dwelling and apartment unit and at each tenant of commercial buildings abutting each of the street block segments. Where the front doors of apartment units are inaccessible, distribute the door hanger notices to the apartment manager or security officer.
5. Door Hanger Material: You shall use Blanks/USA brand, Item Number DHJ5B6WH, 1¼ inch (31.8 mm) Holes (removed), 2-up Jumbo Door Hanger in Bristol White, or approved equal.
6. Mailed Notice Material: You shall use Cougar by Domtar, Item Number 2834, or approved equal.
7. For all Work on private property, contact each owner and occupant individually a minimum of 15 Days prior to the Work. If the Work has been delayed, re-notify owners and occupants of the new Work schedule, as directed by the Resident Engineer.
8. A sample of public notices is included in the Contract Appendix.

**7-16.2.2 Communications with the Public.**

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

**7-16.2.3 Communications with Media.**

1. The City may allow members of the media access to its construction site(s) on a case-by-case basis only.
2. Occasionally, uninvited members of the media may show up at construction Sites. Members of the media (including, but not limited to newspapers, magazines, radios, television, bloggers, and videographers) do not have the legal right to be in the construction Site without the City's permission.

3. In the event that media representatives arrive near or on the construction Site(s), you shall keep them off the Site(s) in a courteous and professional manner until a Public Information Officer is available to meet them at an approved location.
4. You shall report all visits from members of the media to the Resident Engineer as quickly as possible so that the City's Public Information Officer can meet with the members of the media at the construction Site(s).
5. If the City allows members of the media to access a construction Site, you shall allow the City to escort the media representatives while they are on the construction Site and shall ensure their safety.
6. You shall require media representatives to sign in and out of the Site Visitor Log and to use personal protective equipment.
7. You have a right to speak to members of the media about your company and its role on the project. All other questions shall be referred to the City.

**7-16.4 Payment.**

1. The payment for the community outreach services shall be included in the Contract Price.

**7-20 ELECTRONIC COMMUNICATION.** ADD the following:

Virtual Project Manager will be used on this contract.

**SECTION 9 - MEASUREMENT AND PAYMENT**

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

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

**ADD:**

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

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

ADD the following:

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

## SECTION 200 - ROCK MATERIALS

**200-2.1 General.** ADD the following:

Base material for sidewalks and driveways shall conform to 3/4" Class 2 aggregate base per section 200-2.9 Class 2 Aggregate Base.

## SECTION 201 - CONCRETE, MORTAR AND RELATED MATERIALS

**201-1.1.2 Concrete Specified By Class and Alternate Class.** ADD the following:

The concrete class and maximum slump for the various items of concrete work shall be as specified in Table 201-1.1.2(A) under 201-1.1.2, Concrete Specified By Class and Alternate Class, with the following additions or modifications:

<u>Item</u>	<u>Concrete Class</u>	<u>Max. Slump (in.)</u>
Concrete (sidewalk, driveways)	560-C-3250	4-inch (Must be certified by truck ticket)
Concrete Base	560-C-3250	4-inch
Deepened Concrete Curb	560-C-3250	4-inch
Concrete Sub-Slab	560-C-3250	4-inch
Concrete Footings	520-C-2500	4-inch
Concrete Mow Curb	560-B-3250	4-inch

**201-1.2.2 Aggregates.** ADD the following:

For exposed aggregate concrete, the aggregate shall be of 3/8" in size and shall be tan, rust, and brown in color and shall be integral to the concrete mix to provide an approximate 50% coverage over all areas designated for exposed aggregate finish. Aggregate shall be 'Carroll Canyon 3/8' crushed rock as available from KRC Rock, or approved equivalent. Provide sample to Resident Engineer for approval.

**201-1.2.4 Chemical Admixtures.** To item a), ADD the following:

For exposed aggregate concrete, the retardant shall be a water soluble, water-thinned, non-flammable liquid deep etch surface retarding compound, affecting only the top 1/8" of the surface. Retardant shall not leave any residue or discolor the surface (Specs AE retardant, by E L Moore, Surface Etch, or approved equivalent).

Curing: Concrete shall be cured with Scofield Lithochrome 'Cureseal W' Concrete Sealer (or approved equivalent). See Section 201 of these Special Provisions for Concrete Curing Materials. Contractor shall provide a maintenance schedule for integral colored concrete.

Admixture products and procedures for installation shall be in strict accordance with the manufacturer's specifications and recommendations, and those published by the American Concrete Institute (ACI) and the Portland Cement Association (PCA).

**ADD:**

**201-2.4.5 Tie Wire.** Tie wire shall be 16 gauge, black annealed.

**201-2.4.6 Reinforcing Supports.** All horizontal reinforcing shall be supported on approved chairs or supports to the specified height and locations.

**201-3.4 Type "A" Sealant (Two-Part Polyurethane Sealant).** ADD the following:

Contractor shall submit product data from the manufacturer of each joint sealant product required, including instructions for joint preparation and joint sealer application. Contractor shall also submit samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view. Samples shall be submitted to Resident Engineer. Submit complete schedule of type (and location where type is to be used) of each sealant.

All finished concrete surfaces shall have a 1/2" continuous expansion joint at locations indicated on the plans and notes and shall be located either parallel or perpendicular to the curb line. When not otherwise indicated all expansion joints located adjacent to colored or stained concrete shall be sealant Type "A" colored to match the color of the concrete surface.

Provide joint sealants, joint-fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

Provide color selections made by Engineer from manufacturer's full range of standard colors for products of type indicated. Sealant color parallel to curb line shall match color of adjacent paving.

Contractor shall engage an experienced installer who has completed joint sealant applications similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.



**ADD:**

**201-9 WATER BASE PENETRATING SEALER FOR CONCRETE PAVING.**

**201-9.1 General.** Water based penetrating sealer shall be a sealer designed for the protection of natural colored concrete. Sealer shall be Scofield Cureseal-W concrete curing compound and sealer, or approved equivalent.

Water base penetrating sealer shall be a sealer designed for the protection of natural concrete and other masonry surfaces to preserve the natural appearance of the masonry without darkening or adding gloss to the surface. It shall preserve the natural slip resistance of the concrete, etc. Sealer shall repel spills and soils, minimizing staining and maintenance.

Seal shall leave no visible material on the surface and shall be absorbed and locked into the pores of the masonry, repelling liquids and soils but leaving the top surface natural in appearance. Install per manufacturer's directions – two thin coats. Seal shall be compatible with the surfaces and materials which it is applied. Concrete sealer shall conform to the following specifications:

Color:	Clear, non-yellowing
Odor:	Mild
Flash Point:	None (C.O.C. method)
Specific Gravity:	1.03
Density:	8.6 pounds per gallon
Drying Time:	30 minutes to 60 minutes
Cure Time:	24 to 48 hours
VOC Content:	None (0 g/l) excluding water
Polymer Type:	Proprietary Reactive Resin System
Coverage's (approximate):	(2) thin coats; apply on mock-up as test for coating.
Smooth Concrete:	300 to 400 square feet per gallon
Rough Concrete:	200 to 300 square feet per gallon
Note:	Coverage's vary depending on porosity and condition of surface and method of application.
Methods of Application:	Airless sprayer

**201-9.2 Manufacturer.** Manufacturer of Scofield Cureseal-W, or approved equivalent shall be:

L. M. Scofield Company  
6533 Bandini Boulevard  
Los Angeles, California 90040  
1-800-800-9900

All materials shall be furnished, prepared, applied, cured, and stored according to the product manufacturer's direction.

**SECTION 212 - LANDSCAPE AND IRRIGATION MATERIALS**

**212-1.1.1 General.** ADD the following:

Topsoil for this project shall be class “C”. All shrub planting areas shall have a minimum of 9" of class “C” topsoil or topsoil that meets the horticultural requirements for Class “A” topsoil per section 212-1.1.2 Class “A” Topsoil.

**212-1.2.3 Commercial Fertilizer.** ADD the following:

Pre-plant fertilizer shall be granular commercial fertilizer with not more than 6 percent total nitrogen; and not less than 20 percent available phosphoric acid and 20 percent soluble potash.

Post-plant fertilizer shall be 16-6-8 or approved equivalent with CA, FE, ZN, and MN and with the majority of nitrogen in non-ammoniac form.

Iron sulphate (FESO4•H2O), iron shall be expressed as metallic-derived from sulfate-deep green with a minimum analysis of 200% and 98.3% retained on a 10 mesh screen.

**212-1.2.4 Organic Soil Amendment.** ADD the following:

Type 4 organic soil amendment (compost) shall be derived from Green Material (yard waste and/or food waste) that is composted in accordance with California Code of Regulations, Title 14, Chapter 3 Article 7, 17868.3 (15-day Process to Further Reduce Pathogens and kill weed and other seeds). Incorporated into the soil, compost improves soil texture; increases both nutrient and water holding capacity; and reduces the need for commercial fertilizer. Where applicable, Organic Soil Amendment can qualify as a component of LEED certification.

Type 4 organic soil amendment must come from a compost facility that tests its compost on a quarterly basis and meets the requirements listed in Table 212-1.2.4(B). Contractor shall provide a copy of the most recent quarterly test results, and a current representative sample of the compost to be used on the project, to the City, prior to approval and the compost being used.

The City of San Diego’s Miramar Greenery produces Type 4 organic soil amendment (compost) and complies with the U.S. Composting Council’s Seal of Testing Assurance Program. The Miramar Greenery is located within the City’s Miramar Landfill at State Hwy. 52 and Convoy St. in San Diego.

<http://www.sandiego.gov/environmental-services/miramar/greenery/>

**Table 212-1.2.4 (B)**

Test Criteria	Acceptable Range	Unit of Measure	TMCC Test Method
pH	6.0 - 8.0		04.11-A 1:5 Slurry pH

Test Criteria	Acceptable Range	Unit of Measure	TMCC Test Method
Soluble salts	0 - 10	dS/m (mmhos/cm)	04.10-A 1:5 Slurry Method
Organic Matter	30 - 75%	% dry weight basis	05.07-A Loss-on-ignition Organic Matter Method (LOI)
Stability	≤ 8	mg CO <sub>2</sub> /g OM/day	05.08-B carbon Dioxide Evolution Rate
Maturity	> 80% emergence	average % of control	05.05-A Germination and vigor
<b>Pathogens</b>			
Fecal coliform	Pass	Pass/Fail per U.S. EPA Class A standard, 40CFR 503.32(a)	07.01-B Fecal coliforms
Salmonella	Pass	Pass/Fail per U.S. EPA Class A standard, 40CFR 503.32(a)	07.02 Salmonella
Heavy Metal	Pass	Pass/Fail per U.S. EPA Class A standard, 40CFR 503.13(a) Tables 1 and 3.	04.06-Heavy Metals standards, and Hazardous Elements.
Particle Size	≥ 90%	% dry weight passing through 11mm	02.02-B Sample Sieving for Aggregate Size Classification

**212-1.2.5 Mulch.** To the City Supplement, Paragraph (g), ADD the following:

Mulch for this project shall be Type 7. Average dimensions shall be 1" to 3" in length and 1/2" in thickness and naturally colored. Submit two (2) samples for approval by the Resident Engineer prior to installation.

**212-1.2.6 Inorganic Soil Amendments.** To the City Supplement, ADD the following:

Soil sulfur. Soil sulfur shall be 99.5% elemental. Sizing on stacked screen shall be approximately: 8 mesh 4.3%; 20 mesh 7.8%; 50 mesh 46.9%; 100 mesh 39.3%; 200 mesh 1.7%.

**ADD:**

**212-1.2.7 Herbicides and Pesticides.** Herbicides and pesticides shall be used in their appropriate applications with strict adherence to manufacturers' specifications and instructions.

Pre-emergent herbicide for shrub and groundcover areas (planted from flats) shall be Treflan, Surflan, Eptan, or approved equivalent.

It is the goal of this project, that herbicides and pesticides shall not be used on this project site. The project is located within the Chollas Creek drainage area, which is targeted as a pesticide clean up area. In the event that the project Biologist and Resident Engineer determine that a post emergent herbicide is necessary to treat specific weed infestations that would be detrimental to the establishment of the revegetation, a post emergent herbicide may be recommended. The Contractor shall obtain approval for any and all pesticide and herbicide use in writing from the Resident Engineer. All pesticides and herbicides shall be used in strict adherence to manufacturers' specifications and instructions, and shall be applied only by a licensed applicators.

Post-emergent herbicide for all areas shall be Round Up, Diquat, Montar, or approved equivalent, except for areas where it may contact standing or running water.

Post-emergent herbicide for all areas where herbicide may come in contact with standing or moving water shall be Aquamaster, Rodeo, or approved equal specifically approved for use near water bodies.

All herbicides shall be selected for suitability for the specific uses required, and shall be applied by a licensed pesticide applicator.

**212-1.4.1 General.** ADD the following:

Contractor shall notify the Resident Engineer a minimum of 48 hours before each plant delivery so the Resident Engineer can schedule a review. Availability: Within 2 weeks of the start of work, the Contractor shall place orders for all plant material in sufficient time to reserve or grow the plants for the project. No substitutions will be allowed. If plants are not available, the Contractor shall have the specified species contract grown by a reputable plant nursery such as Las Pilitas, Tree of Life, or Recon, or approved equal. Provide nursery name and resume for review and approval prior to contract growing.

Quality and Size: Plants shall be in accordance with the California State Department of Agriculture Regulations for Nursery Inspections of Rules and Grading. Nursery tags must be submitted to the Resident Engineer. Sizes shall conform to the dimensions indicated on the planting plan. All plants shall be reviewed and approved for acceptable size and quality by Resident Engineer prior to planting.

Immediately upon Notice to Proceed for work in this section, locate and purchase or hold for purchase all trees required. Color photos of all trees shall be submitted to Engineer for approval a minimum of 15 days prior to delivery of the plants to the site. The Engineer reserves the right to reject any plant species upon conducting a physical inspection after delivery to the site.

Quantities: Quantities of all plant materials shall be furnished as needed to complete work as shown on the Drawings.

Inspection of plant materials required by City, County or State authorities, shall be the responsibility of the Contractor, and where necessary, permits or certificates shall have been secured prior to delivery of plans to site.

The Resident Engineer is the sole judge as to acceptability of each plant. Vigorous, healthy, well-proportioned plants are the intent of this specification. Plants which are even moderately "overgrown," or are showing signs of decline or lack of vigor are subject to rejection. The size of the plants will correspond with that normally expected for species and variety of commercially available nursery stock, or as specified in the special conditions or drawings. Plants larger in size than specified may be used with the approval of the Resident Engineer, but the use of larger plants will make no change in contract price. If the use of larger plants is approved, the ball of earth and spread of roots for each plant shall be increased proportionately.

Rejection or Substitution: The Resident Engineer reserves the right to reject any plant material found to be defective or not in conformance with plans and specifications. Plants shall be subject to inspection and approval or rejection at the project site at any time before or during progress of work, for size, variety, condition, latent defects, and injuries. All plants not conforming to the requirements herein specified shall be considered defective, and such plants, whether in place or not, shall be marked as rejected and immediately removed from the site and replaced with new plants by the Contractor at their expense. Rejected plant material shall be replaced within one week of written notice, unless otherwise approved by the Resident Engineer.

Substitutions will not be permitted except if proof is submitted that any plant specified is not obtainable, then a proposal will be considered for use of the nearest equivalent size or variety and cost. All substitutions are subject to Resident Engineer's written approval.

Right to Changes: The Resident Engineer reserves the right to change the species, variety, and/or sizes of plant material to be furnished, provided that the cost of such plant changes do not exceed the cost of plants in the original bid, and with the provision that the Contractor shall be notified, in writing, at least thirty (30) days before the planting operation has commenced.

**212-1.4.2 Trees. ADD the following:**

All trees (24" box, 36" box, 48" box) shall:

- a) Be of the specified type and size as indicated on the Drawings, selected from high quality, well-shaped and proportioned Southern California-grown nursery container stock. Field grown stock grown in climatic regions which are different (as determined by the Resident Engineer) to those conditions found at the project site, shall have been acclimated to a climate similar to their intended locations prior to delivery and shall be accompanied by letter and/or certificate from the nursery that the plant materials are suitable for said locations or they will not be accepted.

- b) Have grown in containers for sufficient time to permit full rooting within the container to bind the soil but not so long as to create a root bound condition. No container plants that have cracked or broken balls of earth, when taken from the container, shall be planted. No plants with damaged roots, broken root balls, or root bound, when taken from the container shall be planted.
- c) Have a main leader branch and not have a co-dominant branching structure, unless the tree is intended to be multi-trunk.
- d) Be free of weeds, native grasses, Bermuda grass, and Kikuyu grass.

**212-1.4.3 Shrubs.** ADD the following:

Field grown stock grown in climatic regions which are different (as determined by the Resident Engineer) to those conditions found at the project site, shall have been acclimated to a climate similar to their intended locations prior to delivery and shall be accompanied by letter and/or certificate from the nursery that the plant materials are suitable for said locations or they will not be accepted.

Contractor shall assure that shrubs are grown in containers for sufficient time to permit full rooting within the container to bind the soil but not so long as to create a root bound condition. No container plants that have cracked or broken balls of earth, when taken from the container, shall be planted. No plants with damaged roots, broken root balls, or root bound, when taken from the container shall be planted.

Shrubs shall be free of weeds, native grasses, Bermuda grass, and Kikuyu grass.

Shrubs shall be full and bushy to ground.

Groundcover plants shall be healthy, vigorous, rooted cuttings grown in flats or 1 gallon cans until transplanting. The soil and spacing of the plants in the container shall ensure the minimum disturbance of the root system at time of transplanting.

**212-1.4.5 Sod and Stolons (turf grass).** ADD the following:

Sod shall be fresh, clean, vigorous living sections of turfgrass as designated in the contract documents. Sod shall be free of turf disease, insects or weeds and capable of healthy vigorous growth. Sod shall be GN-1 hybrid Bermuda grass by Pacific Sod, or approved equal, overseeded with ‘Grand Slam’, or ‘Turfstar’ perennial ryegrass at a rate of 5 lbs./1,000 square feet.

**212-1.5.3 Tree Stakes.** To the City Supplement, REVISE as follows:

First paragraph, second sentence, DELETE in its entirety and SUBSTITUTE with the following:

Tree stakes shall be two (2) inch diameter lodge pole pine of lengths required, pointed on end, and minimum 10' in length.

Second paragraph, ADD the following:

Tree ties shall be commercially manufactured of virgin flexible vinyl meeting ASTM-D-412 standards for tensile and elongation strength. Material shall be manufactured with a double back locking configuration and secured with one galvanized nail to prevent slippage. Material shall be ultraviolet resistant. Minimum length shall be twenty (20) inches. Tree ties shall be "Cinch-Tie" by V.I.T., or approved equivalent.

**212-1.10 Perforated Pipe.** To the City Supplement, ADD the following:

Perforated pipe for tree drain: Poly vinyl chloride SDR35 perforated pipe. Perforated pipe shall meet ASTM F-758 and AASHTO M-219. Pipe shall be supplied with a spun bonded filter sleeve to protect pipe from soil intrusion.

**ADD:**

**212-2.1.5 Copper Pipe.** Type "K" copper pipe shall be used to extend the existing water main at the meter to the new reduced pressure principle backflow assembly.

**212-2.2.7 Valve Boxes.** To the City Supplement, ADD the following:

3. Valve boxes shall be sized accordingly to allow wires in pull boxes to be loose and maintain a three inch (3") clearance from the lid.

**ADD:**

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

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

**ADD:**

**212-3.2.2.4 Master Valve Conductors.** Master valve conductors shall be compliant with 212-3.2.2 Conductors. Master valve conductor shall be installed below grade adjacent to flow sensor data cable conduit.

**ADD:**

**212-3.2.2.5 Flow Sensor Data Cable.** Flow Sensor data cable shall be two 12 AWG double-shielded data cable for use in relaying communications between flow sensor and controller. Flow sensor cable shall be UL listed as Type TC and meet the requirements of ICEA/NEMA, 600-V control cable, 90° C, and the following:

- a) The cable shall consist of two No. 16, minimum, stranded copper conductors. Each conductor shall be insulated with 0.48 mm, minimum nominal thickness, color coded, polypropylene or polyethylene material. Color coding shall distinguish each conductor.

- b) The shield shall be either tinned copper braid or aluminized polyester film with a nominal 20 percent overlap. Where the film is used, a No. 18 or larger, stranded, tinned, copper drain wire shall be placed between the insulated conductors and the shield and in contact with the conductive surface of the shield.
- c) The jacket shall be black polyvinyl chloride with minimum ratings of 600-V and 90° C and a minimum nominal thickness of 1.25 mm. The cable jacket shall be marked with the manufacturer's name, or trademark, insulation type designation, number of conductors and conductor size, and voltage and temperature ratings.
- d) The finished outside diameter of the cable shall not exceed 0.35 inches.
- e) The capacitance, as measured between any conductor and the other conductors and the shield, shall not exceed 88 pf per meter at 1000 Hz.
- f) The cable run between flow sensor and the irrigation controller shall be continuous without splices.

Flow sensor data cable shall be installed in 3/4" PVC conduit from controller to flow sensor.

## SECTION 300 – EARTHWORK

### 300-1.1

**General.** To the City Supplement, ADD the following:

- 4. Clearing and grubbing shall consist of clearing natural ground surfaces of all trees, shrubs, vegetation and objectionable materials within the limits of construction in accordance with the provisions of Section 300-1, "Clearing and Grubbing," and in accordance with the plans, with these Special Provisions to the satisfaction of the Resident Engineer.
- 5. Clearing and grubbing shall also include the removal and disposal of all miscellaneous concrete, pavement, pipes, hardware, timber, rubble or any other objectionable material encountered beneath the ground surface as a result of grading or trenching operations connected with the construction of the project improvements.
- 6. Clearing and grubbing shall also include the removal, relocation, adjusting, or salvaging of all facilities so indicated on the plans.
- 7. In addition to the above items, clearing and grubbing shall include, but not limited to the following items as shown on the plans or specified in these Special Provisions:
  - a) Deleterious materials resulting from clearing and grubbing operations shall be hauled away and disposed of at a site obtained by the Contractor.



- b) Provide continuous pedestrian and driveway access within the project area, satisfactory to the Resident Engineer.
  - c) Minor grading for swales and drainage control.
  - d) Sawcutting of concrete and asphalt concrete at joints and construction limits and the removal and disposal of asphalt concrete, base and concrete.
  - e) Protection of existing and relocated utility structures prior to and during construction of proposed improvements.
  - f) Removal and disposal of pipe, ditches, protection posts, guardrail, inlets, trees, stairways, and any additional items not specifically mentioned which may be found within the work limits.
  - g) Furnishing and applying water.
  - h) Maintenance of project appearance.
  - i) Control of water and dewatering during construction.
  - j) Clean-up of project upon completion of work.
  - k) Adjustment to grade of miscellaneous items such as drainage inlets, utility boxes, valves, manholes, pullboxes, interfering portions of storm drain pipes, posts.
  - l) Clear tree roots for 6" below sidewalk, where tree roots are the cause of damages.
8. The Contractor shall protect all existing structures or facilities which are adjacent to, or fall within, the limits of the work to be done under this contract in accordance with Section 7-9 Protection and Restoration of Existing Improvements and 300-1 Clearing and Grubbing. This item shall also include those structures and facilities which the plans show or these Specifications indicate to be protected. Any structure or facility to be protected which is damaged as a result of the Contractor shall be repaired or replaced at his cost, to the satisfaction of the Resident Engineer.
9. The Contractor shall remove and transport debris and rubbish in a manner that will prevent spillage on streets or adjacent areas. Clean-up of spillage will be at the Contractor's expense.
10. All material removed from the site shall be disposed of at the Contractor's expense.

**300-1.3.2 Requirements.** DELETE (a) in its entirety and SUBSTITUTE with the following:

- (a) Bituminous pavement shall be cut and removed in such a manner so as not to tear, bulge or displace adjacent paving by use of construction machinery. Wheel type pressure cutters and drop hammer cutters will not be permitted for final edge cut.

Sawcutting of edges to be joined is required. Where only the surface of existing bituminous pavement is to be removed, the method of removal shall be approved by the Engineer, and a minimum laying depth of 25 mm (1 inch) of new pavement material shall be provided at the join line. Where bituminous pavement adjoins a trench, the edges adjacent to the trench shall be trimmed to neat straight lines before resurfacing to ensure that all areas to be resurfaced are accessible to the rollers used to compact the subgrade or paving materials.

ADD the following:

- (f) Miscellaneous materials: Buried pavements, old subsurface pavements and other materials encountered under existing pavements, which are within designated excavation areas on the demolition plans shall be removed.
- (g) The work includes demolition of removal (unclassified demolition) of all materials and facilities indicated or specified. Remove rubbish and debris daily, unless otherwise directed. Store materials that cannot be removed daily.
- (h) Personnel: Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Notify the Resident Engineer prior to beginning any such work.
- (i) Explosives: Use of explosives will not be permitted.

**ADD:**

**300-1.3.3**

**Execution.**

- (a) Paving: Remove concrete and asphaltic concrete paving to a depth as indicated on plans.
- (b) Concrete: Where concrete work is to be removed, saw cut concrete along straight lines to a depth of not less than two inches. Make each cut in walls perpendicular to the face and in alignment with the cut in the opposite face. The remainder of the concrete shall be broken out, provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, it shall be ground smooth or the sawcut shall be made entirely through the concrete.
- (c) Filling: Fill holes and other hazardous openings in accordance with Section 300 Earthwork.
- (d) Title to Materials: Title to all materials resulting from demolition, and all materials and equipment to be removed, is vested in the Contractor upon approval by the Resident Engineer of the Contractor's demolition and removal procedures, and authorization by the Resident Engineer to begin demolition. The City will not be responsible for the condition or loss of, or damage to, such property after notice to proceed. Materials and equipment shall not be viewed by prospective purchasers or sold on or near the site.

- (e) Re-use of materials and equipment: Carefully remove and store materials and equipment indicated to be re-used or relocated to prevent damage, and reinstall as the work progresses.
- (f) Salvaged Materials and Equipment: Contractor to carefully remove materials and equipment that are designated to be removed on the plans.
- (g) Debris and Rubbish: Remove and transport debris and rubbish in a manner that will prevent spillage on streets or adjacent areas. Clean up spillage from streets and adjacent roads.
- (h) Regulations: Comply with federal, state and local hauling and disposal regulations.

**300-2.1 General.** ADD the following.

In general, the on-site soils are suitable for reuse as fill if free from vegetation, debris, and other deleterious matter.

**300-2.9 Payment.** DELETE in its entirety and SUBSTITUTE with the following.

Unclassified Excavation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidents, and for doing all the work involved in the excavation and embankments to achieve the subgrades and final grades as shown on the plans and as specified and as directed by the Resident Engineer.

The contractor shall be required to prepare their own earthwork for bidding and construction purposes. Any reference to earthwork quantities on the plans is strictly for bonding purposes and shall not be used by the contractor for a price basis. No additional compensation for excavation, embankment, import, or export of material shall be allowed.

Payment for Unclassified Excavation shall be included in the lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the excavation and embankments to achieve the subgrades and final grades as shown on the plans and as specified and as directed by the Resident Engineer.

**ADD:**

**300-12 FINISH GRADING.** Finish grades shall be measured at the top surface of compacted materials.

The Contractor shall take every precaution to protect and avoid damage to underground utilities during his grading and conditioning operations.

The Contractor shall coordinate all drainage work with all other trades. Established site drainage shall be maintained by the Contractor during all phases of landscape construction.

Final finish grades shall ensure positive drainage of the site with all surface drainage away from trails, buildings, play areas, walls, and toward, drainage facilities, and catch basins or water courses.

Final grades shall be acceptable to the Resident Engineer. Grading operations shall conform with the Geotechnical Report.

### **SECTION 302 – ROADWAY SURFACING**

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

**302-3 PREPARATORY REPAIR WORK.**

1. Prior to roadway resurfacing or the application of slurry, the Contractor shall complete all necessary preparation and repair work to the road segment e.g., tree trimming, weed spray, weed abatement, crack sealing, asphalt repair, hump removal, miscellaneous asphalt patching, removal of raised pavement markers, removal of pavement markings, etc. and as specified in the Special Provisions.
2. Preparatory work shall include, but not be limited to, tree trimming, weed spray, weed abatement, crack sealing, asphalt repair i.e., mill and pave, hump removal, miscellaneous asphalt patching, removal of raised pavement markers, removal of pavement markings, etc.
3. The Contractor shall repair areas of distressed asphalt concrete pavement by milling or removing damaged areas of pavement to a minimum depth of 2” for Residential streets, and a minimum depth of 3” for all others to expose firm and unyielding pavement. The Contractor shall prepare subgrade as needed and install a minimum of 2” for residential streets, and a minimum of 3” for all others, of compacted asphalt concrete pavement over compacted native material as directed by the Engineer.
4. If, in order to achieve the minimum specified depth, the base material is exposed, the material shall be compacted to 95% relative compaction to a depth 10” below the finished grade (dig out). Compaction tests shall be made to ensure compliance with the specifications. The Engineer will determine when and where the test will occur. The City will pay for the soils testing required by the Engineer, which meets the required compaction. The Contractor shall reimburse the City for the cost of retesting failing compaction tests. If additional base material is required, the Contractor shall use Class 2 Aggregate Base in accordance with 200-2.2, “Crushed Aggregate Base.”
5. Recycled base material shall conform to Crushed Miscellaneous Base Material in accordance with 200-2.4, “Crushed Miscellaneous Aggregate Base.”
6. Prior to replacing asphalt, the area shall be cleaned by removing all loose and damaged material, moisture, dirt, and other foreign matter and shall be tack coated in accordance with 302-5.4 “Tack Coat.”

7. The Contractor shall install new asphalt within the repair area or for patches in accordance with 302-5, "ASPHALT CONCRETE PAVEMENT." Asphalt concrete shall be C2-PG 64-10 in compliance with 400-4, "ASPHALT CONCRETE."
8. No preparatory asphalt work shall be done when the atmospheric temperature is below 50 °F or during unsuitable weather.
9. Following the asphalt placement, the Contractor shall roll the entire area of new asphalt in both directions at least twice. The finished patch shall be level and smooth in compliance with 302-5.6.2 "Density and Smoothness." After placement and compaction of the asphalt patch, the Contractor shall seal all finished edges with a 4" wide continuous band of SS-1H.
10. The minimum dimension for each individual repair shall be 4' x 4' and shall be subject to the following conditions:
  - a) If the base material is exposed to achieve the required minimum removal thickness, the base material shall be prepared conforming to 301-1, "SUBGRADE PREPARATION."
  - b) When additional base material is required, then the contractor shall use Class 2 Aggregate Base in accordance with 200-2.2, "Crushed Aggregate Base." Recycled base material shall conform to Crushed Miscellaneous Base Material in accordance with 200-2.4, "Crushed Miscellaneous Base."
  - c) The Contractor may use grinding as a method for removal of deteriorated pavement when the areas indicated for removal are large enough (a minimum of the machine drum width) and when approved by the Engineer.
  - d) For both scheduled and unscheduled base repairs, failed areas may be removed by milling or by excavation provided that the edges are cut cleanly with a saw. The areas shall be cleaned and tack coated in accordance with 302-5.4, "Tack Coat" before replacing the asphalt. The areas for scheduled repairs have been marked on the street.

**302-3.1 Asphalt Patching.**

1. Asphalt patching shall consist of patching potholes, gutter-line erosion, and other low spots in the pavement that are deeper than ½" per 302-5.6.2, "Density and Smoothness." These areas are generally smaller and more isolated than those areas in need of mill and pave.
2. The areas requiring patching have been identified in the Contract Documents, marked on the streets, or as directed by the Engineer. The Contractor shall identify any new areas that may require patching prior to slurry work to ensure the smoothness and quality of the finished product.

3. The Contractor shall identify and repair any areas that may require patching, prior to the placement of slurry seal for smooth finished product.
4. Asphalt overlay shall not be applied over deteriorated pavement. Preparatory asphalt work shall be completed and approved by the Engineer before proceeding with asphalt overlay.
5. The Contractor shall remove distressed asphalt pavement either by saw cutting or milling, to expose firm and unyielding pavement; prepare subgrade (as needed); and install compacted asphalt concrete pavement over compacted native material as directed by the Engineer.
6. Prior to replacing asphalt, the area shall be cleaned and tack coated per 302-5.4, "Tack Coat".
7. Following the asphalt placement, the Contractor shall roll the entire patch in both directions covering the patch at least twice.
8. After placement and compaction of the asphalt patch, the Contractor shall seal all finished edges with a 4" wide continuous band of SS-1H.
9. Base repairs shall not exceed 20% RAP in content.

**302-3.2 Payment.**

1. Payment for replacement of existing pavement when required shall be included in the lump sum bid price for Construction of Park improvements for the total area replaced and no additional payment shall be made regardless of the number of replacements completed. No payment shall be made for areas of over excavation or outside trench areas in utility works unless previously approved by the Engineer. No payment for pavement replacement will be made when the damage is due to the Contractor's failure to protect existing improvements. The Contractor shall reimburse the City for the cost of retesting all failing compaction tests.
2. Milling shall be included in the lump sum bid price for Construction of Park Improvements.
3. Payment for miscellaneous asphalt patching shall be included in the lump sum bid price for Construction of Park Improvements and no additional payment shall be made therefore.

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

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

**302-5.2.1 Measurement and Payment.** To the City Supplement, item c), ADD the following:  
Imported Subgrade material shall be paid per bid item "Imported Backfill".

## SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

### 303-1.8.6 **Joints.** To Paragraph (4), ADD the following:

Dowels shall be sections of deformed steel reinforcing rod in sizes and lengths as indicated on the plans. Dowels shall be provided in locations where resilient paving sub-slab abuts existing or new concrete curbs, where concrete curbs abut new concrete walkways, at expansion joints, and anywhere else indicated on the plans. Dowels shall also be provided for the concrete walkway where it abuts the existing concrete slabs. Provide dowels at the on-center spacing as indicated on the plan, centered vertically within the concrete slab section, with a minimum of two dowels abutting into any adjacent slab sections.

### 303-1.11 **Payment.** ADD the following:

Payment for Cast in Place Wall footings shall be included in the lump sum bid price for Construction of Park Improvements and shall include full compensation for furnishing all items of work necessary to construct walls, signage walls, etc., including but not limited to grading include full compensation for furnishing all items of work necessary to construct new sidewalk, base material, finishing, forming, etc. No additional compensation for this work will be allowed.

### 303-5.1.1 **General.** ADD the following:

This work shall consist of preparing the area on which the concrete work is to be placed, which may include preparation of sub-grade, removal of tree roots, and placement of base materials in accordance with these Specifications and as shown on the plans.

### 303-5.5.3 **Walk.** To First paragraph, DELETE in its entirety and SUBSTITUTE with the following:

The forms shall be set to place, the finish surface, in a plane sloping from one edge of paving to the other edge a maximum of 1.5 percent perpendicular to the edge of paving.

To Third paragraph, DELETE fifth and sixth sentences and SUBSTITUTE with the following:

At locations indicated on the drawings, after final troweling, portland cement concrete paving shall receive a medium broom finish or an exposed aggregate finish on all surfaces for a slip resistant finish.

ADD the following:

If after final troweling all walk surfaces shall receive a uniform light broom finish with a stiff fiber broom perpendicular to the edge of the walk, verify direction with Resident Engineer. Upon final curing walk surface shall meet or exceed a static coefficient of friction of .6 wet and approximately .8 dry. Finished surface shall meet ADA Accessibility Guidelines (ADAAG), Section 4.5 Ground and Floor Surfaces requirements for paving.

**ADD:**

**303-9.1**

**Installation.** The work in this section includes requirements for membrane waterproofing of concrete and masonry walls. The extent of the waterproofing is indicated on the plans and details.

Delivery - materials should be delivered in manufacturer's original, unopened packaging with labels attached. Store materials indoors, or otherwise protected from the weather. Materials stored outside should be covered with a tarpaulin. Any material damaged must be removed from the project area and replaced with new materials.

Material shall be applied as shown on the drawings and in compliance with the manufacturer's recommendations. The materials shall be applied at temperatures above 40° f, unless specifically listed for application below 40° F

Concrete should be cured a minimum of seven days before waterproofing application. Lightweight structural concrete must have dried a minimum of 14 days.

Clean all surfaces that will receive membrane with a broom, vacuum cleaner, or air hose to remove dust, dirt, loose aggregate, or other foreign materials. Surfaces to receive the waterproofing system materials must be smooth, dry, and free of dust, dirt, loose aggregate or other foreign materials. Surfaces must be free of voids, spalled areas, loose aggregate, and sharp protrusions. Repair any surfaces that are not structurally sound, that have voids, protrusions, rough spalled areas, loose aggregate, or exposed coarse aggregate. Remove all grease, oil, and other contaminants.

Smooth brick or block must have joints struck off flush before applying membrane. When walls are rough, use a well-adhered plaster coat to create a smooth surface.

A compatible primer of the same manufacturer as the membrane shall be applied as direct by manufacturer. Prime only the area which can be covered with membrane in the same working day. Areas primed and not covered with membrane within 24 hours should be re-primed. Smoothness and porosity of the concrete will effect coverage rate.

Waterproofing membrane should be applied vertically in sections of 8 feet in length or less. On walls higher than 8 feet, apply two or more sections with the upper section overlapping the lower. Side laps should be a minimum of 2-1/2 inches and end laps should be a minimum of 5 inches. Use a hand roller and firmly press in the material as it is placed on the vertical surface.

Waterproofing membrane and protection board shall be applied to the face of footing, top of footing and face of wall on all sides which will be below grade.

All terminations of the membrane should receive a bead of mastic. The bead should be troweled to a flat surface approximately 1/8 inch thick by 3/4 inches wide. The mastic should be worked into cut edge terminations.

Inadequately lapped seams and damaged areas should be patched with small sections of membrane. The patch area should extend at least 6 inches beyond the defect. Fishmouths and severe wrinkles should be slit, flaps overlapped, and repaired as above.



All inside and outside corners shall be treated either with 12 inch strips of or a 12 inch wide by 90 mil thick application of liquid membrane. The field membrane should be placed over the corner treatment. All inside horizontal corners shall have a minimum 3/4 inch fillet or latex modified cement mortar. Laps occurring within 12 inches of a 90° change in direction must be sealed with a troweled bead of mastic.

A protection board of expanded polystyrene or drainage panel shall be placed on foundation walls and other vertical surfaces to protect the surface from damage.

Contractor shall be responsible for repairing any damage, leaks or related damage attributable to his installation of operations. Installation shall be guaranteed leak free for a period of one year.

**303-9.2 Measurement and Payment.** Waterproofing for Masonry Walls shall be included in the total lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all items of work necessary to construct new Waterproofing for Masonry Walls, including but not limited to: substrate preparation, membrane installation, protection board installation, labor, materials, and all other incidentals, etc. No additional compensation will be allowed therefore.

## **SECTION 308 – LANDSCAPE AND IRRIGATION INSTALLATION**

**308-4.9.3 Seeding and Mulching.** DELETE in its entirety and SUBSTITUTE with the following:

Seed, fertilizer, mulch, and other specified materials shall be applied on slopes by Method B described in 308-4.8.2 Seed. Method B Hydroseed shall be composed of materials as follows:

Hydroseed shall consist of a mixture of bonded fiber matrix, seed, commercial fertilizer, binder, and water. Mixture will be as specified as follows:

The hydromulch slurry mixes shall be applied in a two (2) step process which allows seed to be in close contact with soil. The hydromulch shall be applied at the following rates:

Step 1: Seed Application Hydromulch:

Bonded Fiber Matrix (BFM): 500 lbs. per acre.  
Fertilizer (Pre-Plant12-12-12): 100 lbs per acre  
Water: As required per manufacturer's instructions  
Mycorrhizal Inoculum: 60 lbs. per acre.  
Seed Mix: Pure live seed in weights as indicated on plans

Step 2: Erosion Control Hydromulch

Bonded Fiber Matrix (BFM): 2,500 lbs. per acre.  
Water: As required

Contractor must provide the Resident Engineer with seed “bag tags” and receipt forms prior to installation of hydroseed mixture. All bare spots shall be re-seeded and mulched by the Contractor within thirty days of the initial application.

The preferred time for performing seeding is between the dates of October 15 and November 30 or before the first substantial winter rains if this is not possible, seeding shall occur between October 15 and February 28. Since an irrigation system is specified for the slope areas, seeding of those areas can be performed between September 15 and March 15, if the site is ready for seeding.

Seeding shall be started only after weed eradication, soil preparation and finish grading has been completed and soil has been permitted to settle.

Floating: After finish grading, deep watering, the areas to be seeded shall be loosened to a depth of two inches, raked, and floated to the final finish grade by a standard method acceptable to the Resident Engineer/Project Biologist (Restoration Ecologist), with the finish surfaces left even and smooth, free from ridges and depressions and reasonably well firmed.

All seed shall be separated and containerized by species. Each species of seed shall be labeled with the species, purity, germination, percent live seed and quantity of the seed in pounds. Save all seed tags and provide to the Resident Engineer with a small sample of seed from the seed containers prior to mixing to verify the seed quality.

Seeding application is to be performed prior to application of the hydromulch so that seed is in direct contact with the soil.

The seed shall be evenly applied over the entire area at the rates indicated for each area. During the sowing, care shall be exercised to keep uniform seed spacing. Seeding shall not be performed during times when wind may cause uneven distribution of the seed.

**308-5.1 General. ADD the following:**

Contractor shall check and verify the water pressure at P.O.C. prior to beginning of work. Notify Resident Engineer of any discrepancy between pressure indicated on plans and actual water pressure.

Contractor shall check and verify all site conditions, utilities, and services prior to trenching. Verify point of connection location prior to beginning of work.

No irrigation equipment except pipe crossings and electrical crossings shall be located in or under sidewalks or in the street. Except where street crossings or trench rerouting is required to protect existing trees.

All irrigation equipment shall be installed, flushed, pressure tested, and the coverage test approved prior to plant installation.

**308-5.2.1 General. To Paragraph (2), DELETE in its entirety and SUBSTITUTE with the following:**

Trenches through paved areas shall be resurfaced in accordance with 306-1.5.

Concrete thrust blocks, minimum 1 cu. ft. with sufficient bearing area to resist the thrust of water, shall be constructed against undisturbed earth at all changes of direction exceeding 45 degrees for pressure mainline pipe larger than 2", thrust blocks shall be installed at gate valves, tees, elbows, crosses, and ends of pipe runs; or wherever the Resident Engineer deems one to be necessary. Thrust blocks are to be installed as per Standard Drawing, sized as for 4" pipe minimum.

Contractor shall install sleeves and chases where any waterline or controller wire passes under paving. Sleeves and chases shall extend 12" beyond each side of the improvement. The letter "E" for electrical or the letter "W" for water shall be stamped or chiseled on the improvement directly above the chase or sleeve. The chases shall be a minimum 15" deep for electrical and the sleeves 21" below grade for water. Sleeves and chases shall be Schedule 40 PVC, typical. The diameter of the sleeve shall be two (2) pipe sizes larger than the diameter of waterline, to be installed in sleeve.

All pressure pipe shall have a continuous blue colored trench marker metallic tape placed nine inches (9") below finished grade directly above the buried pipe. (See Section 212-3.2.2.3 for material.)

Avoid installing pipe through proposed tree locations to avoid conflict with root ball.

**308-5.2.4 Copper Pipeline.** To First Paragraph, ADD the following:

Copper pipe shall be cut square and all burrs and fins removed.

Second paragraph, change 50 – 50 to 40 – 60.

**308-5.3 Installation of Valves, Valve Boxes, and Special Equipment.** To Paragraph (6), ADD the following:

The Contractor shall rework the locking toggles of the concrete valve boxes by replacing the existing clevis pin and sheet metal clip with a cadmium-plated machine bolt and self-locking nut. Apply oil to lubricate and to prevent rust. The Contractor shall paint the identification number of the valve and the controller clock on the cover of the valve box. Valve boxes shall be sized accordingly to allow wires in pull boxes to be loose and maintain a three inch (3") clearance from the lid. All wires in pull boxes shall be loose and shall not come within three inches 75 mm (3 inches) from lid. Boxes shall be sized accordingly to accommodate this requirement.

**ADD:**

**308-5.12 Operation and Maintenance Manuals.** Prepare and deliver to the Resident Engineer within ten calendar days prior to completion of construction, two (2) three ring hard cover binders containing the following information:

Index sheet stating Contractor's address and telephone number, list of equipment with name and addresses of local manufacturers' representatives.

Catalog and parts sheets on all material and equipment.

Contractor Guarantee statement.

Complete operating and maintenance instructions for all equipment.

In addition to the above mentioned maintenance manuals, provide the maintenance personnel with instructions for maintaining equipment and show evidence of such instruction in writing to the Resident Engineer at the conclusion of the project.

Payment for operation and maintenance manuals shall be included in the lump sum bid price for Construction of Park improvements and no additional compensation shall be allowed.

**ADD:**

**308-5.13 Extra Equipment.** Contractor shall provide to the Resident Engineer:

Three (3) keys for opening and locking each automatic controller enclosure.

Two (2) globe valve keys with a minimum four (4) foot long handle.

Five (5) sprinkler heads with nozzles, screens and flexible swing joints of each type used on the project.

Five (5) quick coupler keys with swivel hose ells to match quick coupler valves used on the project.

Payment for extra equipment shall be included in the lump sum price for irrigation system and the overall project total lump sum cost, and no additional payment will be allowed.

**308-7 GUARANTEE.** To the City Supplement, DELETE in its entirety.

**308-8 PAYMENT.** To the City Supplement, DELETE in its entirety.

**SECTION 701 – WATER POLLUTION CONTROL**

**701-11 POST-CONSTRUCTION REQUIREMENTS.** To the City Supplement, Second paragraph, ADD the following:

Comply with the following post-construction requirements:

Catch basin/inlet marker

**SECTION 705 – WATER DISCHARGES**

**705-2.6.1 General.** To Paragraph (3), CORRECT reference to Section 803 to read “Section 703.”

**705-2.6.3 Community Health and Safety Plan.** To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

**705-2.6.3 Community Health and Safety Plan.** See 703-2, “Community Health and Safety Plan.”

## SECTION 707 – RESOURCE DISCOVERIES

### ADD:

**707-1.1**      **Environmental Document.** The City of San Diego Environmental Analysis Section (EAS) of the Development Services Department has prepared a **Notice of Exemption (NOE)** for **Larsen Field ADA Improvements Phase II** as referenced in the Contract Appendix. You must comply with all requirements of the **NOE** as set forth in the Contract **Appendix A**.

Compliance with the City’s environmental document is included in the various Bid items, unless a bid item has been provided.

**END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)**

**SUPPLEMENTARY SPECIAL PROVISIONS**

**APPENDICES**

**APPENDIX A**  
**NOTICE OF EXEMPTION**

NOTICE OF EXEMPTION

(Check one or both)

TO: X RECORDER/COUNTY CLERK  
P.O. BOX 1750, MS A-33  
1600 PACIFIC HWY, ROOM 260  
SAN DIEGO, CA 92101-2422

FROM: CITY OF SAN DIEGO  
DEVELOPMENT SERVICES DEPARTMENT  
1222 FIRST AVENUE, MS 501  
SAN DIEGO, CA 92101

           OFFICE OF PLANNING AND RESEARCH  
1400 TENTH STREET, ROOM 121  
SACRAMENTO, CA 95814

PROJECT TITLE: LARSEN FIELD IMPROVEMENTS

PROJECT LOCATION-SPECIFIC: 395 Sycamore Road, San Diego, CA 92173. The project site is located within City Council District 8 and the San Ysidro Planning Area.

PROJECT LOCATION-CITY/COUNTY: San Diego/San Diego

DESCRIPTION OF NATURE AND PURPOSE OF THE PROJECT: The proposed project activities will include improvements in two playground areas to meet ADA compliance standards with the installation of new accessible play equipment, rubberized playground surfacing, accessible path of travel, drinking fountains and parking improvements at the Larsen Athletic Fields.

NAME OF PUBLIC AGENCY APPROVING PROJECT: City of San Diego

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: Alexandra Corsi City of San Diego, B&CP Dept  
325 B Street, Suite 750  
San Diego, CA 92101  
619-533-4644

EXEMPT STATUS: (CHECK ONE)

- MINISTERIAL (SEC. 21080(b)(1); 15268);
- DECLARED EMERGENCY (SEC. 21080(b)(3); 15269(a));
- EMERGENCY PROJECT (SEC. 21080(b)(4); 15269 (b)(c))
- CATEGORICAL EXEMPTION: 15301 (c) EXISTING FACILITIES AND 15302 (c) REPLACEMENT OR RECONSTRUCTION
- STATUTORY EXEMPTIONS:

REASONS WHY PROJECT IS EXEMPT: The City of San Diego conducted an environmental review which determined that the project meets the criteria set forth in State CEQA Guidelines Sections 15301 (c) Existing Facilities and 15302 (c) Replacement or Reconstruction, which allow for minor alteration or reconstruction of existing public structures or facilities; and does not trigger any of the exceptions to categorical exemptions found in State CEQA Guideline Section 15300.2.

LEAD AGENCY CONTACT PERSON: Kerry Santoro

TELEPHONE: (619) 446-5121

IF FILED BY APPLICANT:

1. ATTACH CERTIFIED DOCUMENT OF EXEMPTION FINDING;
2. HAS A NOTICE OF EXEMPTION BEEN FILED BY THE PUBLIC AGENCY APPROVING THE PROJECT?  
 YES     NO

IT IS HEREBY CERTIFIED THAT THE CITY OF SAN DIEGO HAS DETERMINED THE ABOVE ACTIVITY TO BE EXEMPT FROM CEQA

Kerry M. Santoro DEPUTY DIRECTOR  
SIGNATURE/TITLE

6/4/2015  
DATE

CHECK ONE:

SIGNED BY LEAD AGENCY

DATE RECEIVED FOR FILING WITH COUNTY CLERK OR OPR:





U.S. Department of Housing and Urban  
 Development  
 451 Seventh Street, SW  
 Washington, DC 20410  
 www.hud.gov  
 espanol.hud.gov

**Environmental Review for Activity/Project that is Categorically  
 Excluded Subject to Section 58.5  
 Pursuant to 24 CFR 58.35(a)**

**Project Information**

**Project Name:** Larsen Field Improvements

**Responsible Entity:** City of San Diego

**Grant Recipient (if different than Responsible Entity):**

**State/Local Identifier:** California / City of San Diego (063210)

**Preparer:** Krissy Toft-Maier

**Certifying Officer Name and Title:** Kerry Santoro, Deputy Director, Development Services Department, City of San Diego

**Grant Recipient (if different than Responsible Entity):**

**Consultant (if applicable):**

**Direct Comments to:** Krissy Toft-Maier, email: ktoft@sandiego.gov

**Project Location:** 395 Sycamore Road, San Diego, CA 92173

**Description of the Proposed Project** [24 CFR 50.12 & 58.32; 40 CFR 1508.25]: The proposed project activities will include improvements in two playground areas to meet ADA compliance standards with the installation of new accessible play equipment, rubberized playground surfacing, accessible path of travel, drinking fountains and parking improvements at the Larsen Athletic Fields.

**Level of Environmental Review Determination:**

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5:  
Categorically excluded per 24 CFR 58.35(a)(3)(iii): Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and improvements (other than buildings).

**Funding Information**

Grant Number	HUD Program	Funding Amount
B-16-MC-06-0542	CDBG	\$1,000,000

**Estimated Total HUD Funded Amount:** \$1,000,000

**Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]:** \$1,689,175

**Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 &amp; 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project does not involve the sale or acquisition of existing property. The proposed project site is not located within the RCZ or APZ of any airport or military CZ. Source: City of San Diego PTS Database Metadata-San Diego Regional Airport Authority.
<b>Coastal Barrier Resources</b>  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project is located in HUD Region IX (CA). There are no designated coastal barrier resources in HUD Region IX.
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project does involve the acquisition, construction or rehabilitation of insurable structures, buildings or mobile homes. The structure or part of the structure is not located in a FEMA designated Special Flood Hazard Area.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 &amp; 58.5</b>		
<b>Clean Air</b>  Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project site is located within a "non-attainment" area and conforms with the EPA-approved California State Implementation Plan- San Diego County Air Quality Management Plans per contact with the California Environmental Protection Agency Air Resources Board. Source: CA EPA Air Resources Board SIP Strategy <a href="http://www.arb.ca.gov/planning/sip/sip.html">http://www.arb.ca.gov/planning/sip/sip.html</a>
<b>Coastal Zone Management</b>  Coastal Zone Management Act, sections 307(c) & (d)	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project does not involve the placement, erection, or removal of materials or an increase in the intensity of use in the Coastal Zone per the City of San Diego and California Coastal Commission Coastal Development Permit

		<p>Jurisdiction boundaries.</p> <p>Source:  <a href="http://coastalmanagement.noaa.gov/mystate/ca.html">http://coastalmanagement.noaa.gov/mystate/ca.html</a>  City of San Diego PTS (Project Tracking System)  Database Metadata- City of San Diego and  California Coastal Commission Coastal  Development Permit Jurisdiction.</p>
<p><b>Contamination and Toxic Substances</b></p> <p>24 CFR Part 50.3(i) &amp; 58.5(i)(2)</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed project site is not located adjacent to any uses associated with hazardous materials. There are no dumps, landfills, industrial sites, underground storage tanks, or any other facilities capable of releasing toxic chemicals, hazardous wastes or radioactive materials near the project.</p>
		<p>Source: Envirostor CA Department of Toxic Substance Control:  <a href="http://www.envirostor.dtsc.ca.gov">http://www.envirostor.dtsc.ca.gov</a>  State Water Resources Control Board:  <a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a></p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Due to the highly urbanized nature of the area, there are no sensitive plant or animal species, habitats or wildlife migration corridors within or adjacent to the area.</p> <p>Source: City of San Diego PTS Database Metadata- Multiple Habitat Planning Area July 2002</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed project site is not located adjacent to any uses associated with hazardous materials. There are no dumps, landfills, industrial sites, underground storage tanks, or any other facilities capable of releasing toxic chemicals, hazardous wastes or radioactive materials near the project.</p> <p>Source: Envirostor CA Department of Toxic Substance Control:  <a href="http://www.envirostor.dtsc.ca.gov">http://www.envirostor.dtsc.ca.gov</a>  State Water Resources Control Board:  <a href="http://geotracker.waterboards.ca.gov">http://geotracker.waterboards.ca.gov</a></p>
<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes No</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project does not include prime and unique farmland, or other farmland of statewide or local importance. The site is located within a completely urbanized neighborhood and is developed with urban land uses.</p> <p>Source: State of California Department of Conservation Farmland Mapping and Monitoring Program, 1984-2004 and State of California Department of Conservation, California Williamson Act Lands 2004.</p>

<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The project does not involve property acquisition, management, construction or improvements within a 100-year floodplain identified by FEMA maps. Project site is located in Zone X and would not affect any floodplain management</p> <p>Source: Panel 2166 of 2375; May 16, 2012.</p>
<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed project site is not listed on the National Register of Historic Places or identified as a historic resource designated by the City of San Diego Historical Resources Board. No historic properties located on the National Register are located on or adjacent to the project.</p> <p>Source: National Park Service National Register of Historic Places Database- <a href="http://www.nps.gov/nr/">http://www.nps.gov/nr/</a></p>
		<p>HRB Listing of Historical Sites/Resources <a href="http://www.sandiego.gov/planning/programs/historical">www.sandiego.gov/planning/programs/historical</a></p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed project is rehabilitation of an existing park facility and does not involve development of noise sensitive uses. The construction activities will not cause a permanent increase in ambient noise levels that exceed an average of 65 decibels.</p> <p>Source: <a href="https://www.onecpd.info/onecpd/assets/File/Noise-Guidebook">https://www.onecpd.info/onecpd/assets/File/Noise-Guidebook</a></p>
<p><b>Sole Source Aquifers</b></p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>There are no sole source aquifers located within the City of San Diego's boundaries.</p> <p>Source: EPA Designated Sole Source Aquifers in EPA Region IX. <a href="http://epa.gov/Region9/water/groundwater/ssa">http://epa.gov/Region9/water/groundwater/ssa</a></p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The proposed project does not involve new construction within or adjacent to wetlands, marshes, wet meadows, mud flats or natural ponds.</p> <p>Source: USDI Fish and Wildlife Service, Wetlands Online Mapper. <a href="http://www.fws.gov/wetlands/Data/Mapper.html">http://www.fws.gov/wetlands/Data/Mapper.html</a></p>
<p><b>Wild and Scenic Rivers</b></p> <p>Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)</p>	<p>Yes No  <input type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>The City of San Diego does not contain a Wild or Scenic River within its boundaries.</p> <p>Source: National Park Service Designated Wild and Scenic Rivers List, 3/24/08 <a href="http://www.rivers.gov/california.php">http://www.rivers.gov/california.php</a></p>

ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	The proposed project site is suitable for its proposed use and will not be adversely impacted by adverse environmental conditions.  <a href="http://www2.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice">http://www2.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice</a>

**Field Inspection** (Date and completed by): November 21, 2014; Krissy Toft-Maier, Meredith Dawson, Andrew Fields, Jim Winter and Albert Cuevas

**Summary of Findings and Conclusions:** Proposed project site is an existing facility which does not require any mitigation for compliance with any listed statutes or authorities.

**Mitigation Measures and Conditions [40 CFR 1505.2(c)]**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure

**Determination:**

- This categorically excluded activity/project converts to **EXEMPT** per Section 58.34(a)(12), because it does not require any mitigation for compliance with any listed statutes or authorities, nor requires any formal permit or license; Funds may be committed and drawn down after certification of this part for this (now) EXEMPT project; OR
- This categorically excluded activity/project cannot convert to Exempt status because one or more statutes or authorities listed at Section 58.5 requires formal consultation or mitigation. Complete consultation/mitigation protocol requirements, publish NOI/RROF and obtain "Authority to Use Grant Funds" (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR
- This project is not categorically excluded OR, if originally categorically excluded, is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature: Krissy Toft-Maler Date: 5/18/15

Name/Title/Organization: Krissy Toft-Maler, HUD Programs Coordinator, City of San Diego

Responsible Entity Agency Official Signature:

Kerry Santoro Date: 5/19/15

Name/Title: Kerry Santoro, Deputy Director, Development Services Department

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).



THE CITY OF SAN DIEGO

Date of Notice: June 4, 2015

# NOTICE OF RIGHT TO APPEAL ENVIRONMENTAL DETERMINATION

DEVELOPMENT SERVICES DEPARTMENT

**PROJECT NAME/NUMBER:** Larsen Field Improvements

**COMMUNITY PLAN AREA:** San Ysidro

**COUNCIL DISTRICT:** 8

**LOCATION:** 395 Sycamore Road, San Diego, CA 92173

**PROJECT DESCRIPTION:** The proposed project activities will include improvements in two playground areas to meet ADA compliance standards with the installation of new accessible play equipment, rubberized playground surfacing, accessible path of travel, drinking fountains and parking improvements at the Larsen Athletic Fields.

**ENTITY CONSIDERING PROJECT APPROVAL:** City of San Diego

**ENVIRONMENTAL DETERMINATION:** This project is exempt pursuant to California Environmental Quality Act (CEQA) Sections 15301 (c) Existing Facilities and 15302 (c) Replacement or Reconstruction

**ENTITY MAKING ENVIRONMENTAL DETERMINATION:** City of San Diego

**STATEMENT SUPPORTING REASON FOR ENVIRONMENTAL DETERMINATION:** The City of San Diego conducted an environmental review which determined that the project meets the criteria set forth in State CEQA Guidelines Sections 15301 (c) Existing Facilities and 15302 (c) Replacement or Reconstruction, which allow for minor alteration or reconstruction of existing public structures or facilities; and does not trigger any of the exceptions to categorical exemptions found in State CEQA Guideline Section 15300.2.

**PROJECT CONTACT:** Alexandra Corsi, City of San Diego, E&CP Dept  
**MAILING ADDRESS:** 525 B Street, Suite 750  
San Diego, CA 92101  
**PHONE NUMBER:** 619-533-4644

On June 4, 2015, the City of San Diego made the above-referenced environmental determination pursuant to CEQA. This determination is appealable to the City Council. If you have any questions about this determination, contact the Development Project Manager listed above.

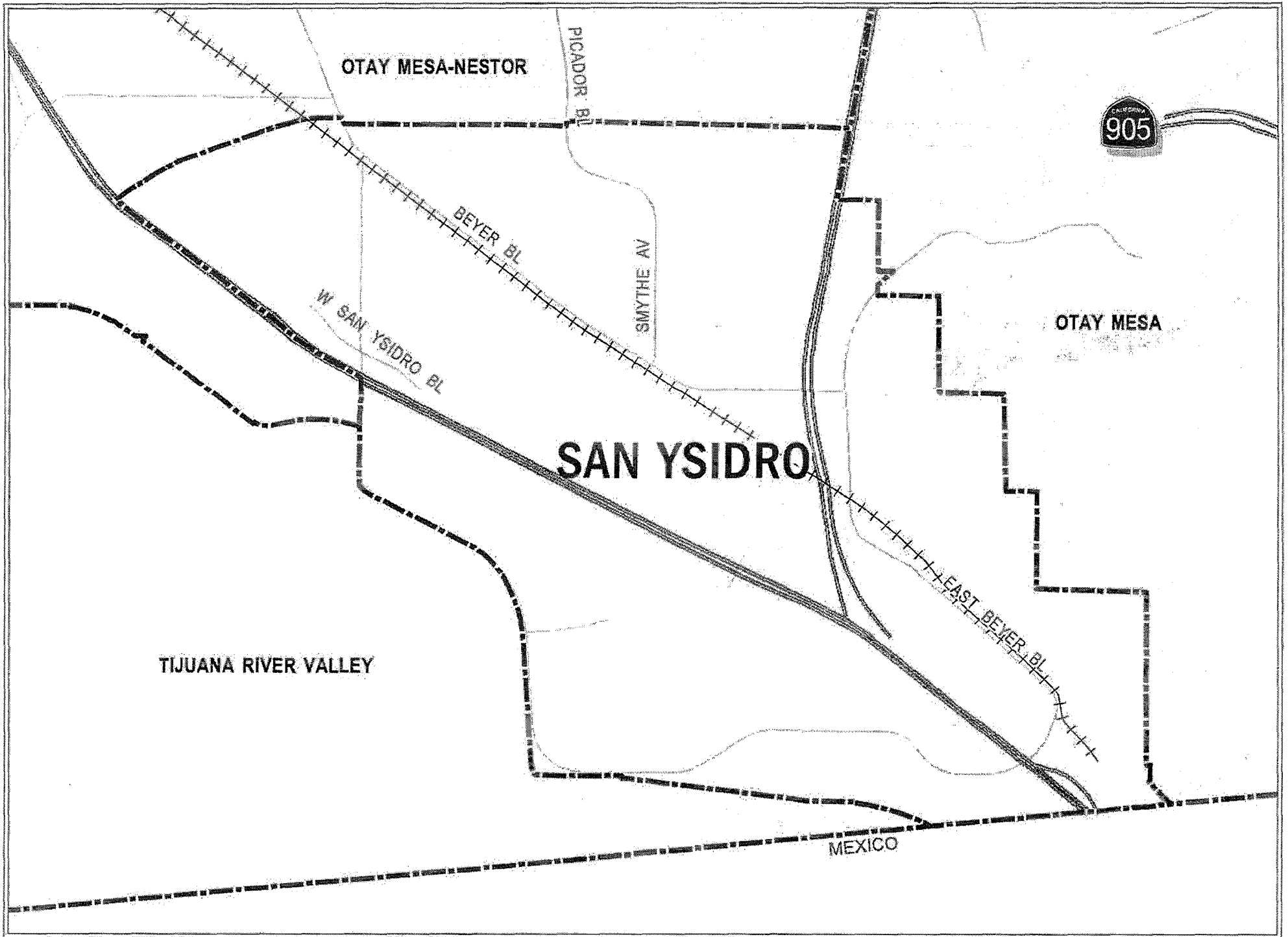
Applications to appeal this CEQA determination must be filed in the office of the City Clerk within 10 business days from the date of the posting of this Notice. The appeal application can be obtained from the City Clerk, 202 'C' Street, Second Floor, San Diego, CA 92101. This information will be made available in alternative formats upon request.



**PROJECT LOCATION MAP – 395 Sycamore Road, San Diego, CA 92173**  
**Larsen Field Improvements (Park and Recreation Department)**







# Parcel Information Report

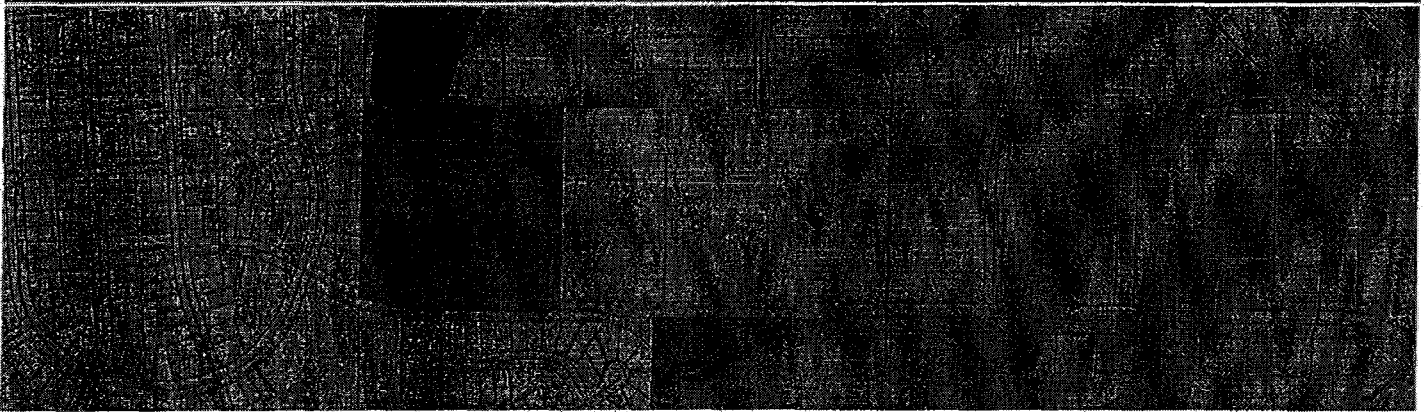


THE CITY OF SAN DIEGO  
Development Services  
1222 First Avenue, San Diego, CA 92101-4164

1/14/2015 12:49:48

Report Number 101

Page 1 of 2



North

569 feet

Scale is Approximate

## Map Layers Included in Report

Description	Visible	Transparent	Has Intersecting Features
Roads	<input checked="" type="checkbox"/>		Yes
Freeways	<input checked="" type="checkbox"/>		No
Parcels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Yes
Multiple Habitat Planning Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Airports: Airport Approach Overlay Zone (SDIA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Airports: Airport Influence Areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Airports: Safety Zones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Base Zones ("Official Zoning Map")	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes
Community Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes
FEMA Floodways & Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes
Historic Districts: Existing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No
Historic Resources: Designated (points)	<input checked="" type="checkbox"/>		No

Every reasonable effort has been made to assure the accuracy of this map. However, neither the SanGIS participants nor San Diego Data Processing Corporation assume any liability arising from its use.

THIS MAP IS PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

PROPRIETARY INFORMATION: The use of this information is pursuant to sublicense agreement only. Any resale or relicensing of this information is prohibited, except in accordance with such sublicense agreements.

## Intersecting Features

### Roads

Road Name

SYCAMORE RD

## Parcels

APN	Recordation	Owner Information	Valuation	Other
016-000-000	Record: 175488 Date: 11/8/1987	CITY OF SAN DIEGO	Land: \$0	Units: 0
	Legal:	PUBLIC AGENCY	Imp: \$0	Taxable: <input type="checkbox"/>
Address(es)	LOT 2	00000	Total: \$0	Own Occ: <input type="checkbox"/>
395 SYCAMORE RD				

## Base Zones ("Official Zoning Map")

Zonename	Ordinance Number	Implementation Date
OP-1-1	R-301263	02/28/2006
RM-1-1	R-301263	02/28/2006

# Parcel Information Report



THE CITY OF SAN DIEGO  
Development Services  
1222 First Avenue, San Diego, CA 92101-4154

1/14/2015 12:49:48

Report Number 101

Page 2 of 2

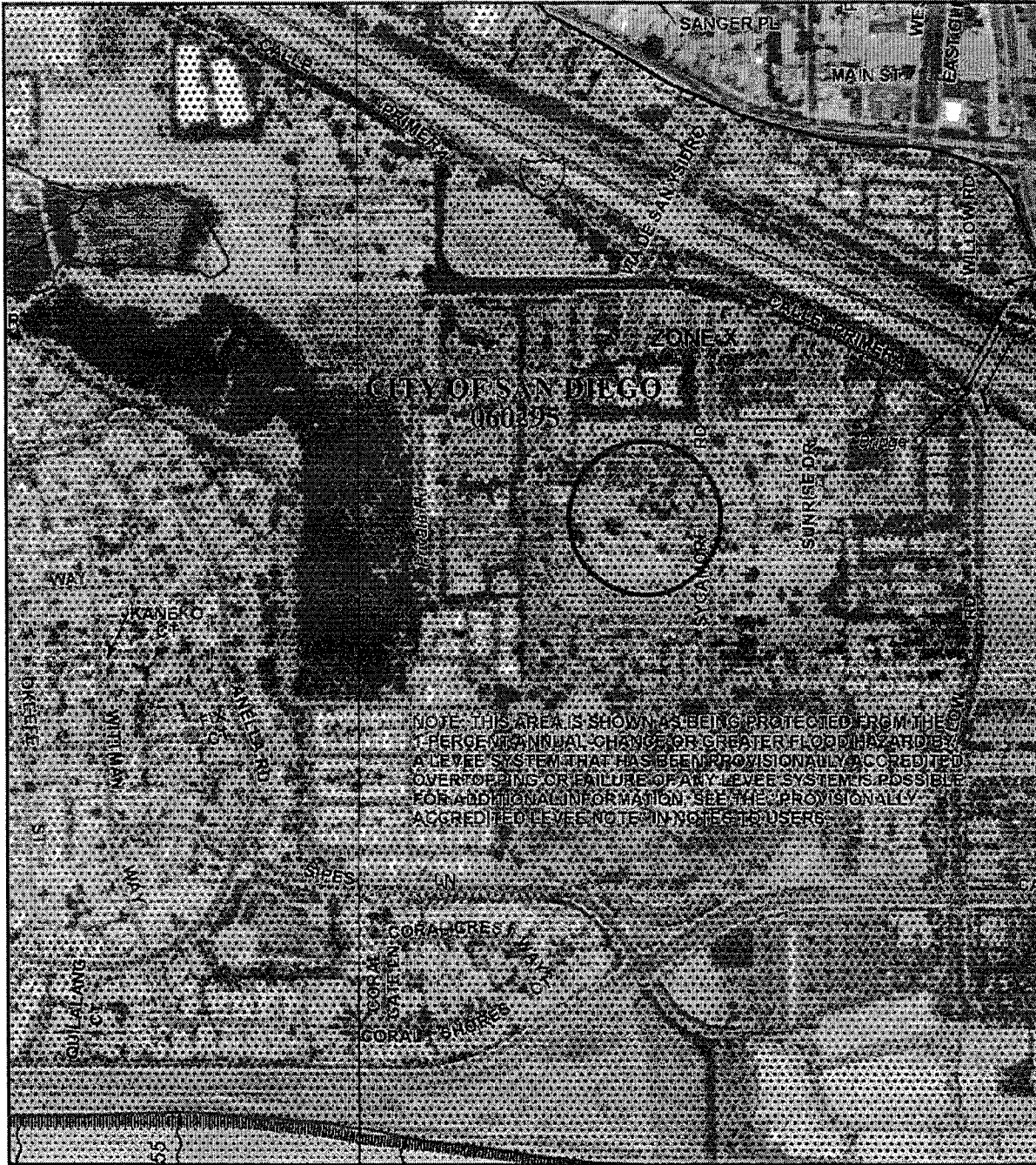
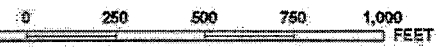
Community Plan	
Community Plan Name	Code
SAN YSIDRO	33

FEMA Floodways Floodplains	
Feature Name	Feature Detail
Flood Designation: FP500	Flood Zone: 0.2 PCT ANNUAL CHANCE FLOOD HAZARD / Special Flood Hazard Area? NO / Floodway? NO

ance Program at 1-800-638-6620.



MAP SCALE 1" = 500'



CITY OF SAN DIEGO  
060295

NOTE: THIS AREA IS SHOWN AS BEING PROTECTED FROM THE 1 PERCENT ANNUAL CHANCE OR GREATER FLOOD HAZARD BY A LEVEE SYSTEM THAT HAS BEEN PROVISIONALLY ACCREDITED. OVERTOPPING OR FAILURE OF ANY LEVEE SYSTEM IS POSSIBLE. FOR ADDITIONAL INFORMATION, SEE THE PROVISIONALLY ACCREDITED LEVEE NOTE IN NOTES TO USERS.

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 2166G

# FIRM

FLOOD INSURANCE RATE MAP  
SAN DIEGO COUNTY,  
CALIFORNIA  
AND INCORPORATED AREAS

PANEL 2166 OF 2375  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SAN DIEGO CITY OF	060295	2166	G

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER  
06073C2166G

MAP REVISED  
MAY 16, 2012



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



U.S. Fish and Wildlife Service  
**National Wetlands Inventory**

**Larsen Field  
 Improvements**

Jan 26, 2015



**Wetlands**

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

**Riparian**

- Herbaceous
- Forested/Shrub

**Riparian Status**

- Digital Data

This map is for general reference only. The U.S. Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:





# Ocotillo-Coyote Wells Sole Source Aquifer Designated Area






## Notes and Explanation:

The Ocotillo-Coyote Wells Sole Source Aquifer was designated under the authority of Section 1424(e) of the Safe Drinking Water Act, Federal Register Citation-61 FR 47752, Publication Date -09/10/86. Please contact US EPA Region 9 (Jameilya Curtis, 415-972-3529) for assistance in determining place locations with respect to the project review area.

## Map Status and Disclaimer:

Please note that this working map is a computer representation compiled by the Environmental Protection Agency (EPA) from sources which have supplied data or information that may not have been verified by the EPA. This data is offered here as a general representation only, and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information. The EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.

## Legend

-  Designation Boundary
-  Highways, Major Roads
-  Streets
-  Streams
-  Cities, Towns

CALIFORNIA



Ocotillo-Coyote Wells  
Sole Source Aquifer



# Campo-Cottonwood Sole Source Aquifer Designated Area







## Notes and Explanation:

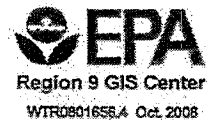
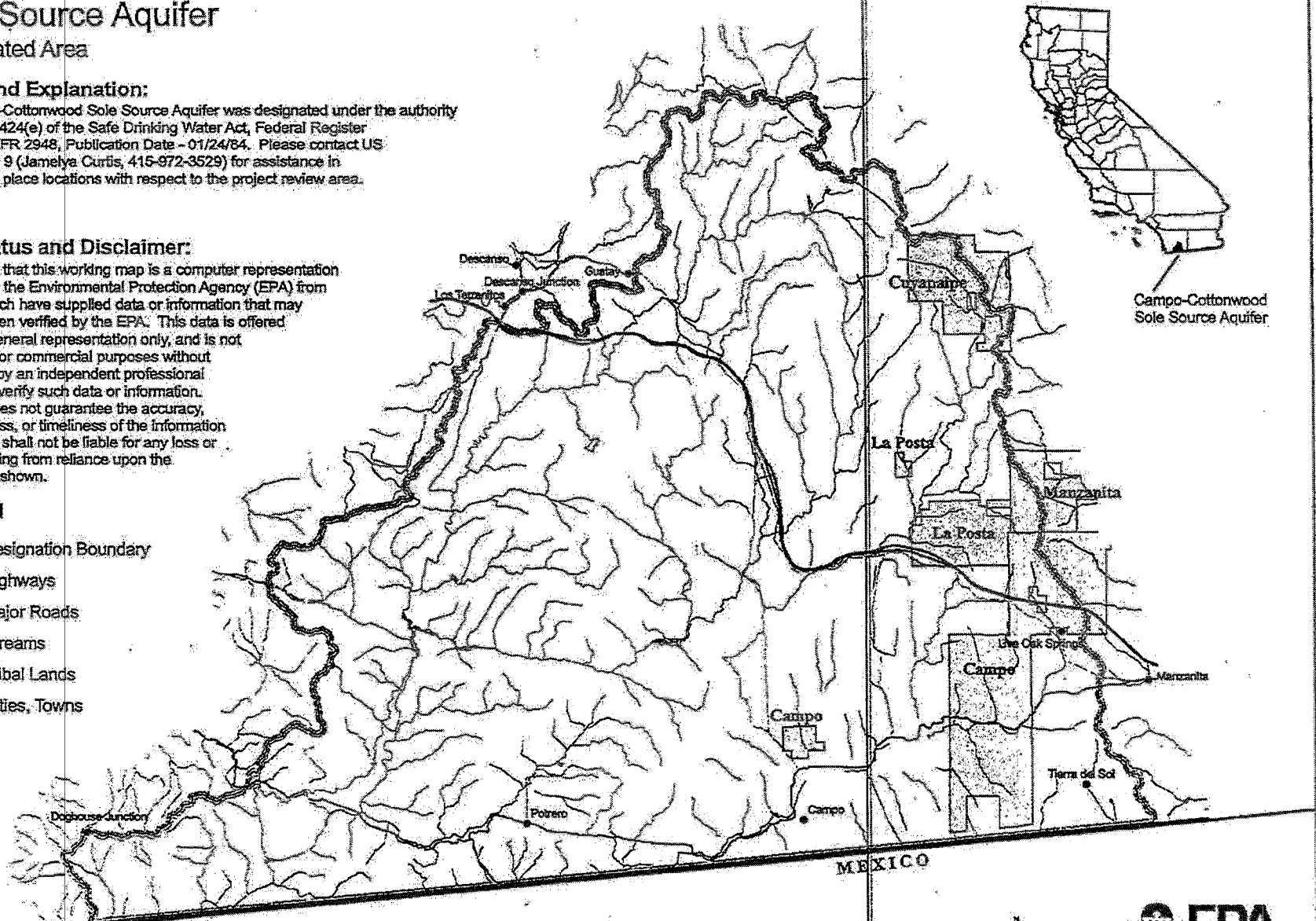
The Campo-Cottonwood Sole Source Aquifer was designated under the authority of Section 1424(e) of the Safe Drinking Water Act, Federal Register Citation-49 FR 2948, Publication Date - 01/24/84. Please contact US EPA Region 9 (Jamelya Curtis, 415-972-3529) for assistance in determining place locations with respect to the project review area.

## Map Status and Disclaimer:

Please note that this working map is a computer representation compiled by the Environmental Protection Agency (EPA) from sources which have supplied data or information that may not have been verified by the EPA. This data is offered here as a general representation only, and is not to be used for commercial purposes without verification by an independent professional qualified to verify such data or information. The EPA does not guarantee the accuracy, completeness, or timeliness of the information shown, and shall not be liable for any loss or injury resulting from reliance upon the information shown.

## Legend

-  Designation Boundary
-  Highways
-  Major Roads
-  Streams
-  Tribal Lands
-  Cities, Towns





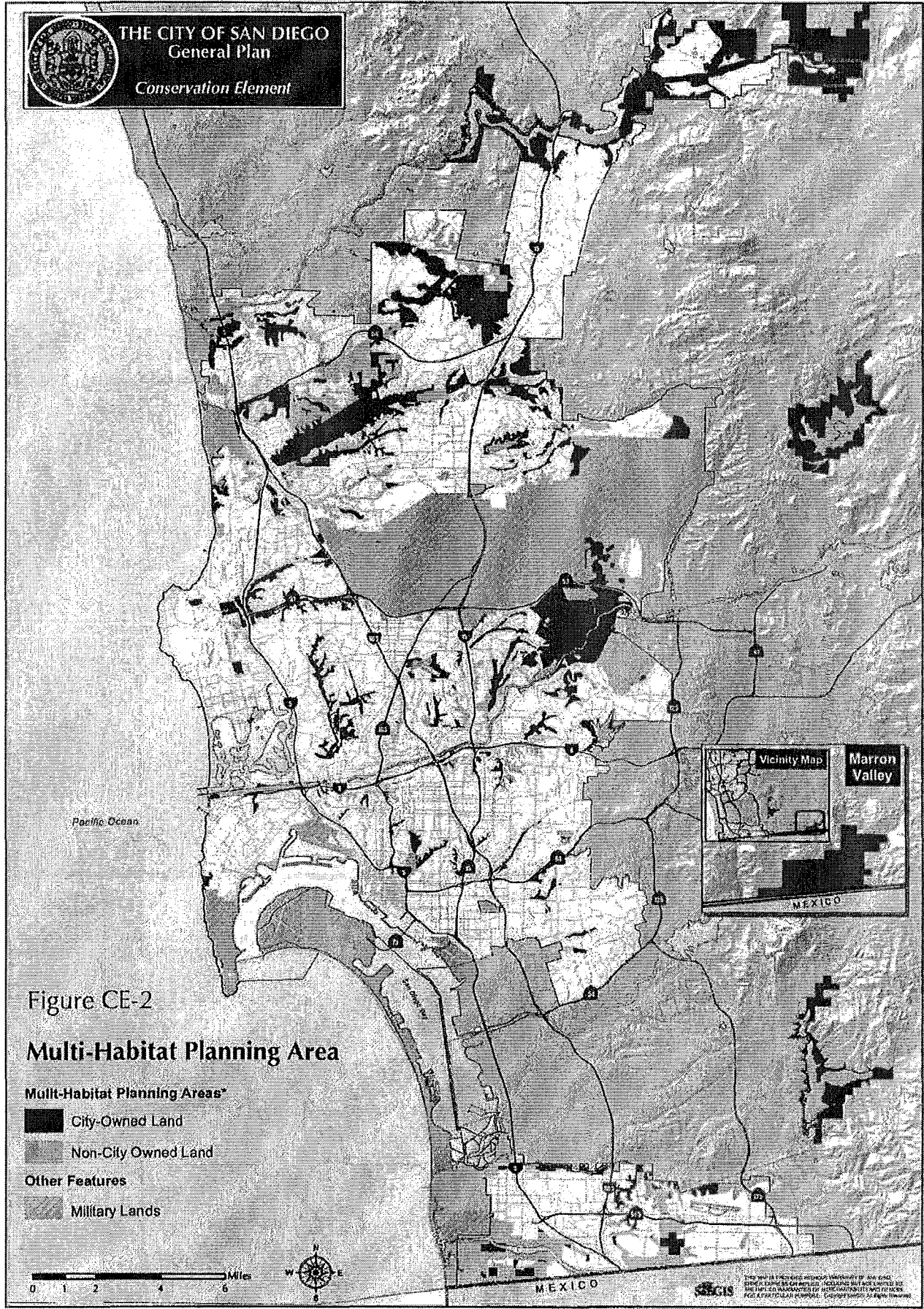


Figure CE-2  
**Multi-Habitat Planning Area**

# ENVIROSTOR MAP – 395 Sycamore Road, San Diego, CA 92173

## Larsen Field Improvements (Park and Recreation Department)

### ENVIROSTOR

**CLEANUP SITES**

- Federal Superfund
- State Response
- Voluntary Cleanup
- School Cleanup
- Evaluation
- School Investigation
- Military Evaluation
- Tiered Permit
- Corrective Action

**PERMITTED SITES**

- Operating
- Post-Closure
- Non-Operating

**OTHER SITES**

- GeoTracker LUFT
- GeoTracker SLIC

Map Satellite



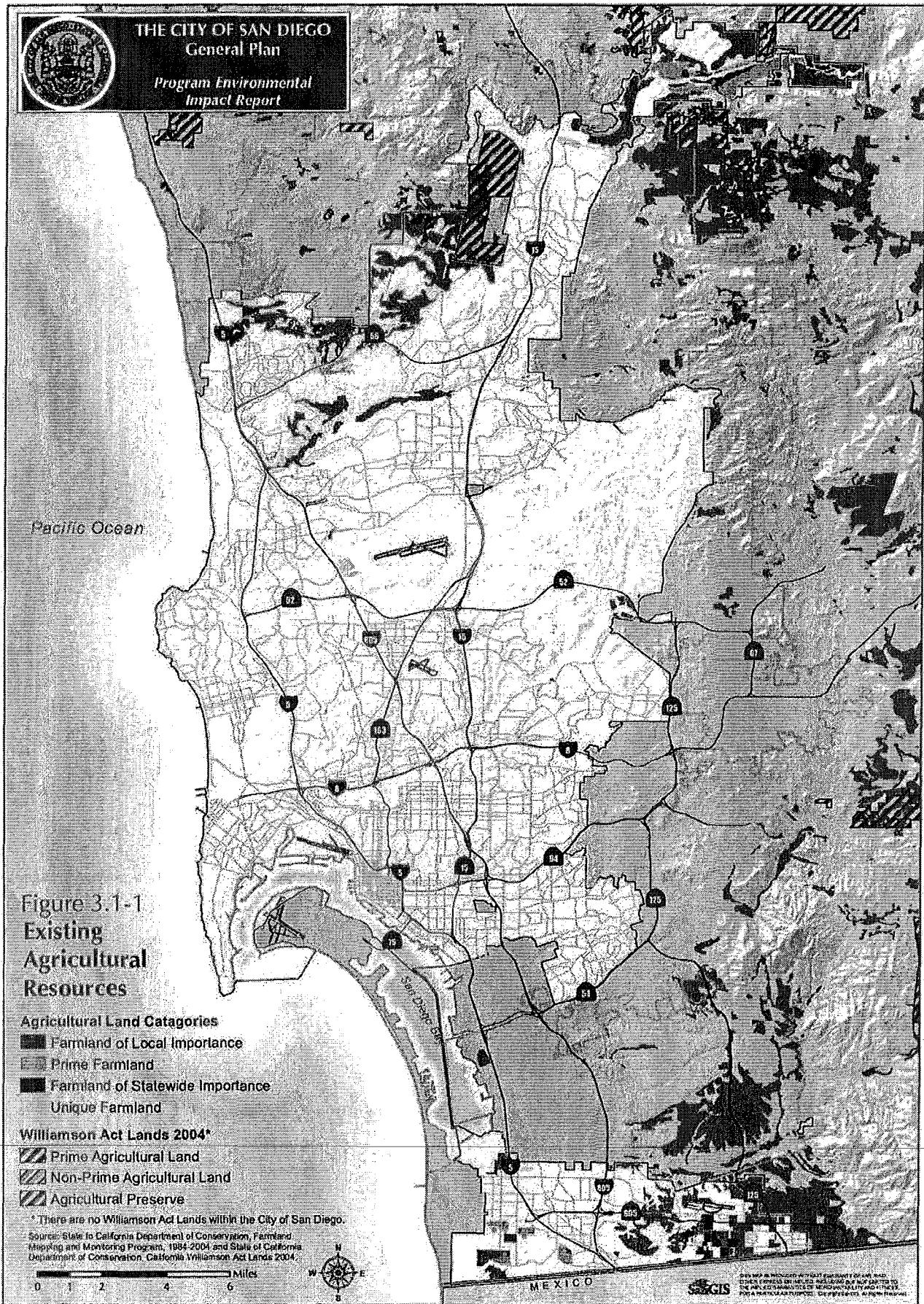
**GEOTRACKER – 395 Sycamore Road, San Diego, CA 92173**  
**Larsen Field Improvements (Park and Recreation Department)**





**THE CITY OF SAN DIEGO**  
General Plan

Program Environmental  
Impact Report



**Figure 3.1-1**  
**Existing**  
**Agricultural**  
**Resources**

**Agricultural Land Categories**

- Farmland of Local Importance
- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland

**Williamson Act Lands 2004\***

- Prime Agricultural Land
- Non-Prime Agricultural Land
- Agricultural Preserve

\* There are no Williamson Act Lands within the City of San Diego.

Source: State to California Department of Conservation, Farmland Mapping and Monitoring Program, 1984-2004 and State of California Department of Conservation, California Williamson Act Lands 2004.

0 1 2 4 6 Miles







**THE CITY OF SAN DIEGO**  
 General Plan  
 Program Environmental  
 Impact Report

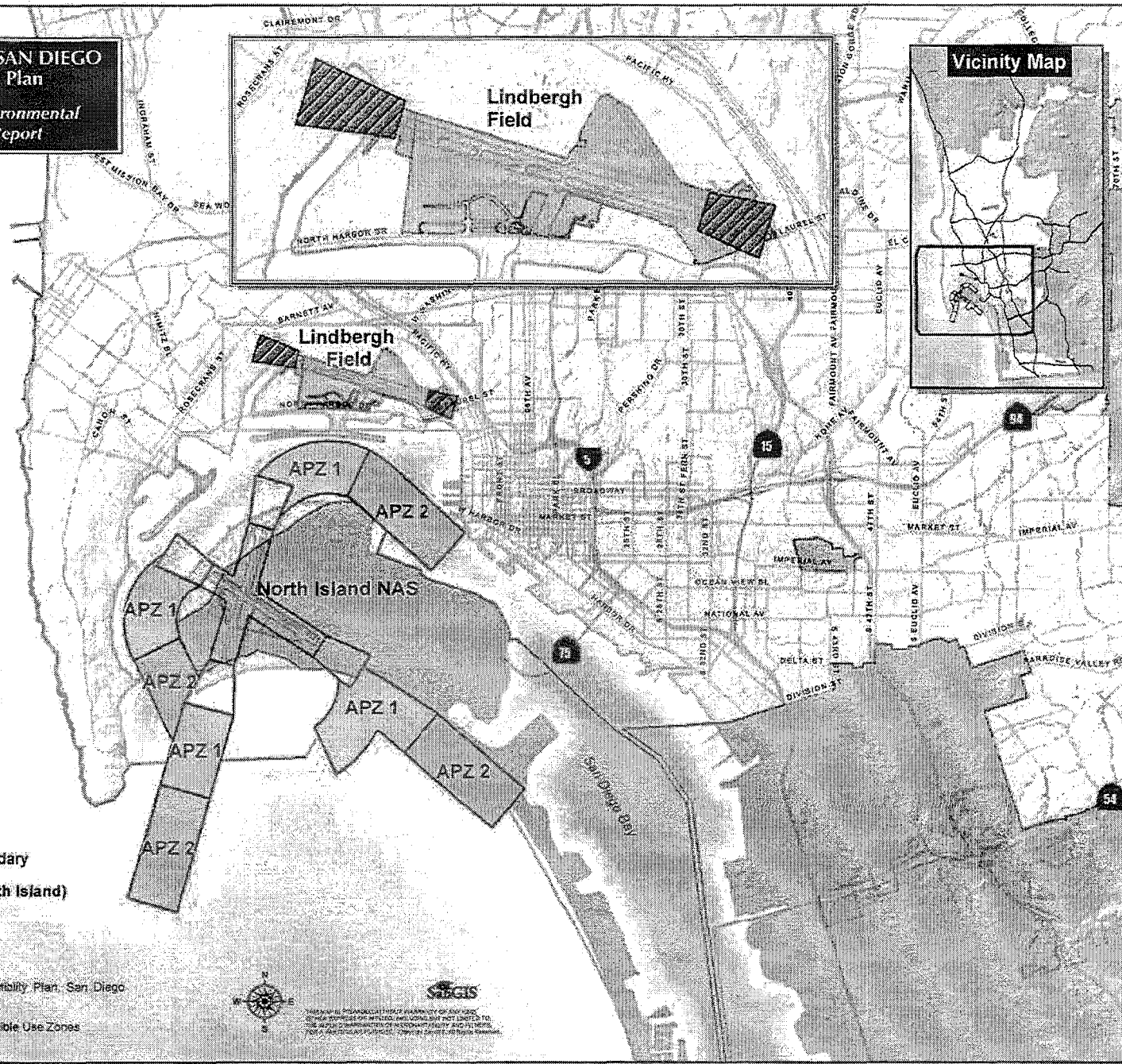


Figure 3.5-5  
**San Diego International  
 Airport-Lindbergh Field  
 and NAS North Island  
 Safety Areas**

**Safety Areas (Lindbergh Field)**

- Runway Protection Zone
- Lindbergh Field Property Boundary

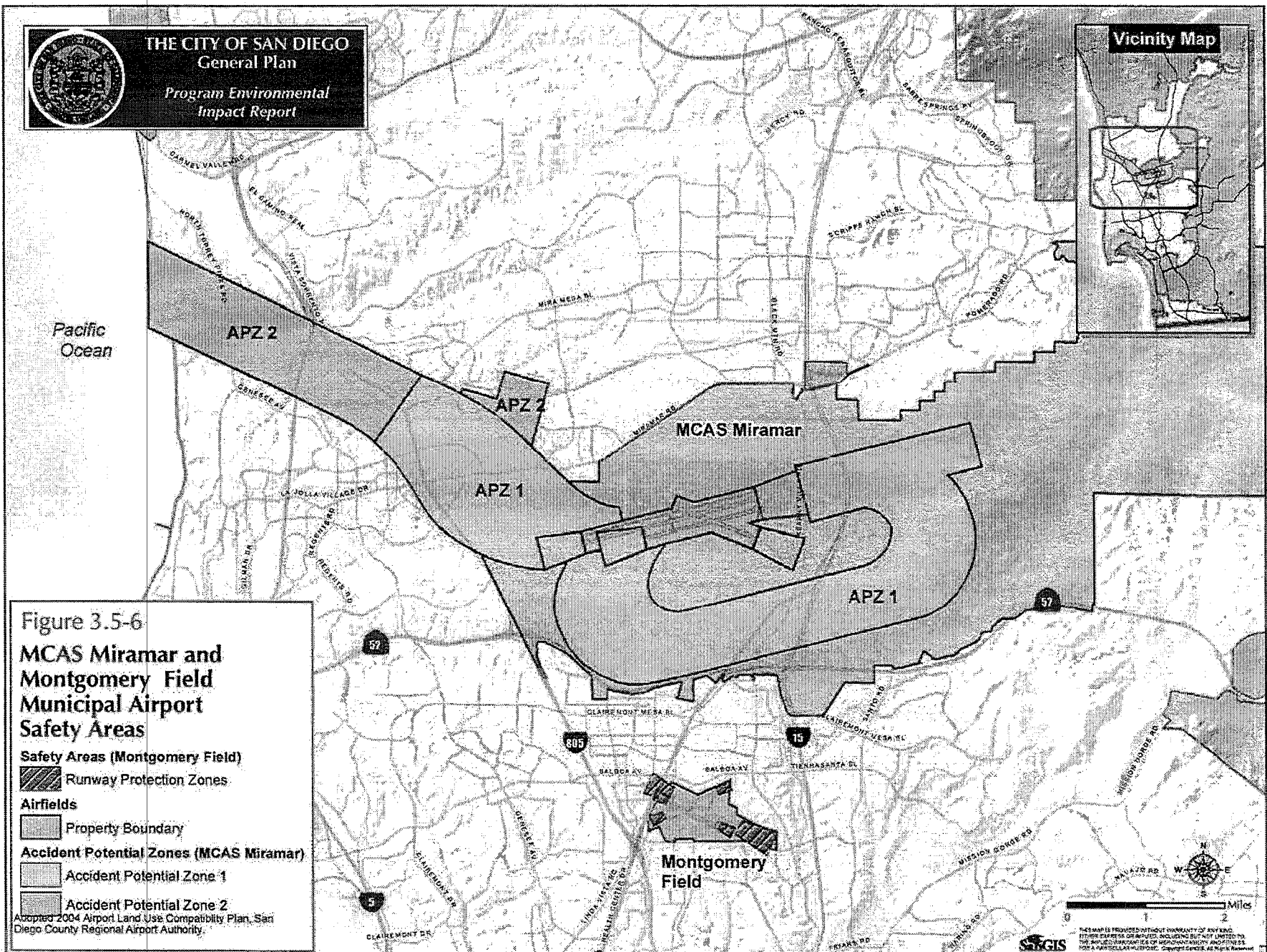
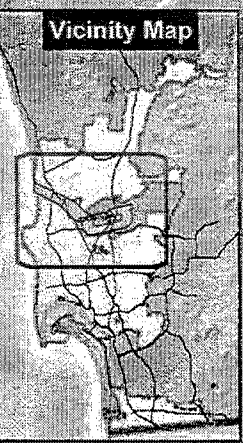
**Accident Potential Zones (NAS North Island)**

- APZ 1
- APZ 2

Source: Adopted 2004 Airport Land Use Compatibility Plan, San Diego County Regional Airport Authority.

Source: NAS North Island Air Installations Compatible Use Zones (January 1964)





**Figure 3.5-6**  
**MCAS Miramar and**  
**Montgomery Field**  
**Municipal Airport**  
**Safety Areas**

**Safety Areas (Montgomery Field)**  
 Runway Protection Zones

**Airfields**  
 Property Boundary

**Accident Potential Zones (MCAS Miramar)**  
 Accident Potential Zone 1  
 Accident Potential Zone 2

Accepted 2004 Airport Land Use Compatibility Plan, San Diego County Regional Airport Authority

**APPENDIX B**  
**FIRE HYDRANT METER PROGRAM**

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

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.)



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

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.

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

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.

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

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.

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 5 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

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

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 6 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

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

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 7 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

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

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 8 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

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.

<b>CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS</b>	<b>NUMBER DI 55.27</b>	<b>DEPARTMENT Water Department</b>
<b>SUBJECT  FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)</b>	<b>PAGE 9 OF 10</b>	<b>EFFECTIVE DATE  October 15, 2002</b>
	<b>SUPERSEDES DI 55.27</b>	<b>DATED April 21, 2000</b>

7. **FEE AND DEPOSIT SCHEDULES**

- 7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. These deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. **UNAUTHORIZED USE OF WATER FROM A HYDRANT**

- 8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.
- 8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.
- 8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.
- 8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.



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

- 8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

**Larry Gardner  
Water Department Director**

- Tabs: 1. Fire Hydrant Meter Application  
2. Construction & Maintenance Related Activities With No Return To Sewer  
3. Notice of Discontinuation of Service

#### **APPENDIX**

**Administering Division:** Customer Support Division

**Subject Index:** Construction Meters  
Fire Hydrant  
Fire Hydrant Meter Program  
Meters, Floating or Vehicle Mounted  
Mobile Meter  
Program, Fire Hydrant Meter

**Distribution:** DI Manual Holders



# Application for Fire Hydrant Meter (EXHIBIT A)

(For Office Use Only)

NS REQ	FAC#
DATE	BY

METER SHOP (619) 527-7449

## Meter Information

Application Date	Requested Install Date:
------------------	-------------------------

Fire Hydrant Location: (Attach Detailed Map//Thomas Bros. Map Location or Construction drawing.) Zip:	T.B.	G.B. (CITY USE)
Specific Use of Water:		
Any Return to Sewer or Storm Drain, If so, explain:		
Estimated Duration of Meter Use:		Check Box if Reclaimed Water

## Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ( )
*Business license#		*Contractor license#	
A Copy of the Contractor's license OR Business License is required at the time of meter issuance.			
Name and Title of Billing Agent: <small>(PERSON IN ACCOUNTS PAYABLE)</small>			Phone: ( )
Site Contact Name and Title:			Phone: ( )
Responsible Party Name:			Title:
Cal ID#			Phone: ( )
Signature:		Date:	
Guarantees Payment of all Charges Resulting from the use of this Meter. Insures that employees of this Organization understand the proper use of Fire Hydrant Meter.			

<b>Fire Hydrant Meter Removal Request</b>	Requested Removal Date:
Provide Current Meter Location if Different from Above:	
Signature:	Title: Date:
Phone: ( )	Pager: ( )

<input type="checkbox"/> City Meter	<input type="checkbox"/> Private Meter
Contract Acct #:	Deposit Amount: <b>\$ 936.00</b> Fees Amount: <b>\$ 62.00</b>
Meter Serial #	Meter Size: <b>05</b> Meter Make and Style: <b>6-7</b>
Backflow #	Backflow Make and Style:
Name:	Signature: Date:

WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER

Auto Detailing  
Backfilling  
Combination Cleaners (Vactors)  
Compaction  
Concrete Cutters  
Construction Trailers  
Cross Connection Testing  
Dust Control  
Flushing Water Mains  
Hydro Blasting  
Hydro Seeing  
Irrigation (for establishing irrigation only; not continuing irrigation)  
Mixing Concrete  
Mobile Car Washing  
Special Events  
Street Sweeping  
Water Tanks  
Water Trucks  
Window Washing

**Note:**

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party  
Company Name and Address  
Account Number: \_\_\_\_\_

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter # \_\_\_\_\_, located at *(Meter Location Address)* ends in 60 days and will be removed on or after *(Date Authorization Expires)*. Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego  
Water Department  
Attention: Meter Services  
2797 Caminito Chollas  
San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619) \_\_\_\_\_ - \_\_\_\_\_.

Sincerely,

Water Department

**APPENDIX C**

**MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE**

## Materials Typically Accepted by Certificate of Compliance

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

**APPENDIX D**  
**SAMPLE CITY INVOICE**

City of San Diego, Field Engineering Div., 9485 Aero Drive, SD CA 92123		<b>Contractor's Name:</b>	
<b>Project Name:</b>		Contractor's Address:	
Work Order No or Job Order No.		Contractor's Phone #:	
City Purchase Order No.		<b>Invoice No.</b>	
Resident Engineer (RE):		Contractor's fax #:	
RE Phone#:	Fax#:	Contact Name:	<b>Invoice Date:</b>
		Billing Period: (      to	

Item #	Item Description	Contract Authorization				Previous Totals To Date		This Estimate		Totals to Date	
		Unit	Price	Qty	Extension	%/QTY	Amount	% / QTY	Amount	% / QTY	Amount
1					\$ -		\$ -		\$ -	0.00%	\$ -
2					\$ -		\$ -		\$ -	0.00%	\$ -
3					\$ -		\$ -		\$ -	0.00%	\$ -
4					\$ -		\$ -		\$ -	0.00%	\$ -
5					\$ -		\$ -		\$ -	0.00%	\$ -
6					\$ -		\$ -		\$ -	0.00%	\$ -
7					\$ -		\$ -		\$ -	0.00%	\$ -
8					\$ -		\$ -		\$ -	0.00%	\$ -
9					\$ -		\$ -		\$ -	0.00%	\$ -
10					\$ -		\$ -		\$ -	0.00%	\$ -
11					\$ -		\$ -		\$ -	0.00%	\$ -
12					\$ -		\$ -		\$ -	0.00%	\$ -
13					\$ -		\$ -		\$ -	0.00%	\$ -
14					\$ -		\$ -		\$ -	0.00%	\$ -
15					\$ -		\$ -		\$ -	0.00%	\$ -
16					\$ -		\$ -		\$ -	0.00%	\$ -
17	<b>Field Orders</b>				\$ -		\$ -		\$ -	0.00%	\$ -
18					\$ -		\$ -		\$ -	0.00%	\$ -
	<b>CHANGE ORDER No.</b>				\$ -		\$ -		\$ -	0.00%	\$ -
					\$ -		\$ -		\$ -	0.00%	\$ -
Total Authorized Amount (including approved Change Order)					\$ -		\$ -		\$ -	<b>Total Billed</b>	\$ -

**SUMMARY**

A. Original Contract Amount	\$ -
B. Approved Change Order #00 Thru #00	\$ -
C. Total Authorized Amount (A+B)	\$ -
D. Total Billed to Date	\$ -
E. Less Total Retention (5% of D )	\$ -
F. Less Total Previous Payments	\$ -
<b>G. Payment Due Less Retention</b>	<b>\$0.00</b>
H. Remaining Authorized Amount	\$0.00

I certify that the materials  
have been received by me in  
the quality and quantity specified

\_\_\_\_\_  
Resident Engineer

\_\_\_\_\_  
Construction Engineer

**Retention and/or Escrow Payment Schedule**

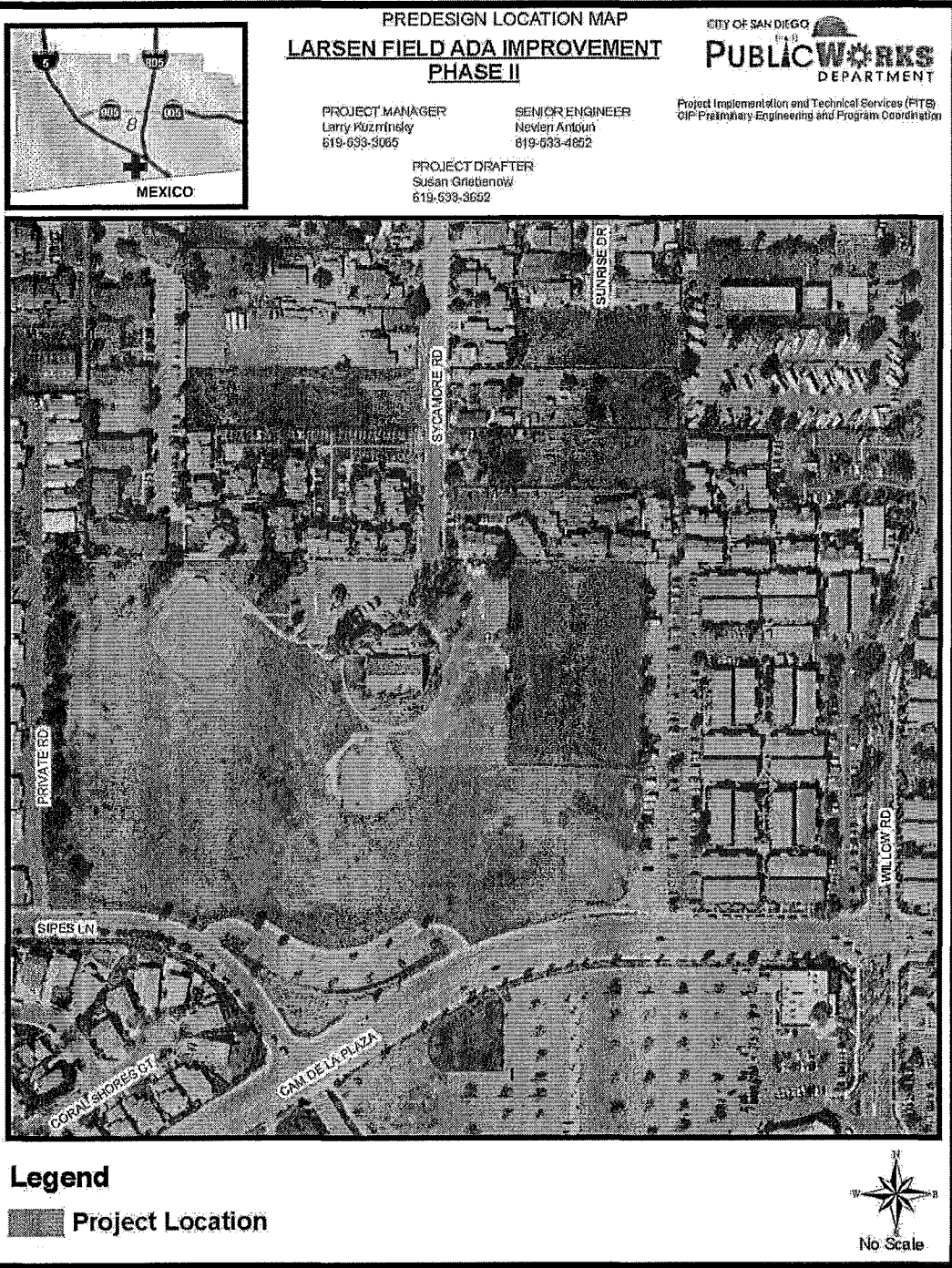
Total Retention Required as of this billing (Item E)	\$0.00
Previous Retention Withheld in PO or in Escrow	\$0.00
<b>Add'l Amt to Withhold in PO/Transfer in Escrow:</b>	<b>\$0.00</b>
<b>Amt to Release to Contractor from PO/Escrow:</b>	

Contractor Signature and Date: \_\_\_\_\_



**APPENDIX E**  
**LOCATION MAP**

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COMMUNITY NAME: San Ysidro  
Date: march 13, 2014

COUNCIL DISTRICT: 08

SAP ID#: S-13004



**APPENDIX F**  
**PAVEMENT RECOMMENDATIONS AND HYDRAULIC CONDUCTIVITY TEST**  
**RESULTS**



Project No. G1835-42-01  
May 4, 2015

Estrada Land Planning  
225 Broadway, Suite 1160  
San Diego, California 92101

Attention: Mr. Kevin Nguyen

Subject: PAVEMENT RECOMMENDATIONS AND  
HYDRAULIC CONDUCTIVITY TEST RESULT  
LARSEN FIELD PAVEMENT RESTORATION  
SAN DIEGO, CALIFORNIA

Dear Mr. Nguyen:

In accordance with your request and authorization of our proposal (LG-15110, dated April 2, 2015), we herein present a summary of our findings and provide preliminary recommendations for rehabilitation of the existing parking lot at Larsen Field. The purpose of our study was to measure the existing pavement section, evaluate the underlying subgrade soil support characteristics by perform laboratory resistance value (R-Value) tests, and providing recommendations for rehabilitation of the existing parking lot pavement with an asphalt overlay. Additionally, we performed one field-saturated hydraulic conductivity test at the southeast corner of the park.

Larsen Field is located at the southern terminus of Sycamore Road in San Diego, California (see Vicinity Map, Figure 1). On April 10, 2015, we performed a site reconnaissance and performed three pavement cores to evaluate the existing pavement section thickness and collect samples of the underlying soil subgrade. We also performed one, field-saturated hydraulic conductivity test at the southeast corner of the park. The locations of the cores and hydraulic conductivity test are shown on Figure 2.

### EXISTING PAVEMENT

A majority of the parking lot has experienced distress, deterioration and cracking. Some pavement areas are in relatively good condition. We understand plans are to rehabilitate the existing asphalt pavement by constructing a pavement overlay. A reconstructed pavement section is not planned at this time. Geocon Incorporated should be contacted if pavement reconstruction recommendations are needed.

Table 1 provides the measured pavement section at each core locations. Based on our measurements, the pavement section consists of 2.75 to 5.5 inches of asphalt concrete overlying 3 to 4 inches of aggregate base.

**TABLE 1  
SUMMARY OF EXISTING PAVEMENT SECTION**

Core Designation	Soil Type and Description	Asphalt Concrete Thickness (inches)	Aggregate Base Thickness (inches)
C-1	SM – Silty, fine to medium SAND	2.75	3
C-2	SM – Silty, fine to medium SAND	5.5	4
C-3	SM – Silty, fine to medium SAND	3	3

Laboratory R-Value testing was performed on a sample of the pavement subgrade soil. Test results are provided on Table 2.

**TABLE 2  
SUMMARY OF LABORATORY RESISTANCE VALUE (R-VALUE) TEST RESULTS  
ASTM D 2844**

Sample No.	R-Value
C-2	59

**PAVEMENT OVERLAY RECOMMENDATIONS**

An overlay can extend the service life of the existing pavement , however, an overlay is not expected provide a 20-year service life as a reconstructed pavement section would. We estimate an additional 5 to 10 years of service life could be achieved with a 2-inch overlay provided pavement reinforcing grid as recommended below is utilized and periodic maintenance is performed.

For the overlay, we recommend a minimum 1- to 2-inch grid and a 2-inch overlay. Thicker grinding and asphalt overlays will provide longer service life. To reinforce the pavement section and reduce the potential for reflective cracking, we recommend Mirafi – “PGM-G” paving grid or Mirafi – “TruePave” paving mat be incorporated into the pavement overlay. Manufacture’s recommendations should be followed when installing reinforcing paving grid or paving mat.

**FIELD- SATURATED HYDRAULIC CONDUCTIVITY**

We performed a field-saturated hydraulic conductivity test using an Aardvark Permeameter at the southeast corner of the park site at the location shown on Figure 2. The test result indicated a field-saturated hydraulic conductivity of 4.3 inches per hour. Test results are shown on Table 3. A factor of safety was not applied to the values listed in Table 3. The project civil engineer should apply an appropriate factor of safety when designing for infiltration.

**TABLE 3  
FIELD-SATURATED HYDRAULIC CONDUCTIVITY TESTS**

Location	Test Hole Diameter (in)	Depth of Hole (ft)	Hydraulic Conductivity, $k_{sat}$ (in/hr)
P-1	3.5	3.0	4.3


Soil permeability values from in-situ tests can vary significantly from one location to another due to the non-homogeneous characteristics inherent to most soil. However, if a sufficient amount of field and laboratory test data is obtained, a general trend of soil permeability can usually be evaluated. For this project and for storm water purpose, the soil infiltration rates presented herein should be considered approximate values.

The degree of soil compaction or in-situ density has a marked effect on soil permeability. As the relative compaction is increased the soil permeability decreases. Based on our experience and other studies we performed, we have found that a 10 percent increase in compaction results in an order of magnitude decrease in soil permeability.

Should you have any questions regarding this report, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

  
Rodney C. Mikesell  
GE 2533



RCM:dmc

(2) Addressee  
(e-mail) Nasland Engineering  
Attention: Mr. Sam Waisbord



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NO SCALE

### VICINITY MAP

**GEOCON**  
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GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS  
6960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121 - 2974  
PHONE 858 558-6900 - FAX 858 558-6159

LARSEN FIELD PAVEMENT  
SAN DIEGO, CALIFORNIA

JL / RS

DSK/GTYPD

DATE 05 - 04 - 2015

PROJECT NO. G1835 - 42 - 01

FIG. 1

Plotted:05/28/2015 7:27AM | By:ALVIN LADRILLONO | File Location:Y:\PROJECTS\G1835-42-01\_Larsen Field Pavement\DETAILS\G1835-42-01\_VicMap.dwg

LARSEN FIELD PAVEMENT  
SAN DIEGO, CALIFORNIA



**GEOCON LEGEND**

- C-3 .....APPROX. LOCATION OF PAVEMENT CORE
- P-1 .....APPROX. LOCATION OF Aardvark PERMEAMETER TEST

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4960 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121 - 2974  
PHONE 858.558-6900 - FAX 858.558-6159  
PROJECT NO. G1835-42-01

**SITE PLAN** DATE 05-04-2015

Plot: 05/29/2015 7:29AM | By: ALVIN LADRILLON | File Location: \\G:\PROJECTS\G1835-42-01\_Larsen Field Pavement\GHEETS\G1835-42-01\_SITE PLAN.dwg



**APPENDIX G**  
**PLAY EQUIPMENT AND SITE FURNISHINGS**

## SECTION 1 - PLAY AREA SURFACES

### 1.1 RESILIENT PLAY SURFACING

Playground resilient rubber surfacing shall be 'Tot Turf Supreme' Poured-in-Place Playground Surfacing, or approved equal. Rubber surfacing is manufactured by Robertson Industries Inc., and represented locally by Tot Turf, (760) 809-1875.

**1-1.1 Description.** Tot Turf® Supreme poured in place rubber playground surfacing shall consist of a polyurethane binder mixed with 100% recycled, shredded tire buffings which will make up the Cushion Layer. The Cushion Layer is capped with TPV rubber granules mixed with a polyurethane binder creating the Wear Course. Robertson Industries, Inc. surfaces comply with ADA and CPSC guidelines as well as ASTM Standards. Tot Turf® is certified by IPEMA, a third party testing organization for playground surfaces and equipment.

**1-1.2 Work.** Provide all necessary materials, labor, tools, and equipment to perform the work included in the section for the installation of the poured-in-place resurface.

**1-1.3 Area Safety.** Poured in place within playground equipment use zones shall meet or exceed the performance requirements of the CPSC, ADA and Fall Height Test ASTM F 1292-04. The surface must yield both a peak deceleration of no more than 200 G-max and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on drawings.

**1-1.4 Accessibility.** NOTE: Children's outdoor play areas shall be in compliance with the Uniform Federal Accessibility Standards (UFAS) FED-STD-795 and the Architectural and Engineer Instructions (9AEI) Design Criteria. The requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) 28 CFR Part 36 that provide equal or greater accessibility than the requirements of UFAS must also be met in children's outdoor play areas.

Poured in place surfaces intended to serve as accessible paths of travel for persons with disabilities shall be firm, stable and slip resistant, and shall meet the requirements of ASTM F 1951- 09 and ASTM F 1292-09.

### 1-1.5 Applicable Standards.

ASTM International:

- ASTM C1028 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull Meter Method – This standard replaces ASTM D2047.
- ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers- Tension.

- ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
- ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
- ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
- ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

TPV material shall be angular granules with a (Shore A) hardness of 65°A ±5 and particle size between .5-1.5mm. Binder shall be not less than 15 percent of the total weight of TPV material used in the wear surface, and shall provide 100 percent coating of the particles. No other granule sizes are acceptable.

**1-1.6 Certified installers.** Poured in place surfaces shall be manufactured and installed by trained, experienced company employees or certified installers who have successfully completed the “Certified Installers Training Program” required by Robertson Industries.

**1-1.7 Submittals.**

- a) One original hard copy of the submittal package will be provided. Additional hard copies available by request. All specifications/details/testing data can be found on TotTurf® website [www.totturf.com](http://www.totturf.com).
- b) Manufacturer’s descriptive data and installation instructions.
- c) Manufacturer’s details showing depths of Wear Course and sub-base materials, anchoring systems and edge details.
- d) Upon request, a listing of at least five installations where products similar to those proposed for use have been installed and have been in service for a minimum period of 3 years. This list shall include owner or purchaser, address of installation, date of installation, contact person, and phone number.
- e) A signed statement by an authorized official certifying that the surfacing system meets the requirements of ASTM-F1292-09 for a head-first fall from the highest accessible portion of the specified playground equipment.
- f) A signed statement from the manufacturer of the poured in place surfacing attesting that all materials under this section shall be installed only by the Manufacturer’s Trained Installers.

- g) Upon request, 2 inch X 3 inch samples of the proposed material for this project.
- h) IPEMA certification mandatory.
- i) Third party test results of tensile strength equal to or greater than 170psi and elongation yield equal to or greater than 180%.

**1-1.8 Delivery, Storage and Handling.** Materials and equipment shall be delivered and stored in accordance with the manufacturer's recommendations.

**1-1.9 Project Site Conditions.** Poured in Place surfacing must be installed on a dry sub-surface, with no prospect of rain within the initial drying period, and within the recommended temperature range of the manufacturer. Installation in weather condition of extreme heat, cold (less than 55 degrees F), and/or high humidity may affect cure time, and the structural integrity of the final product.

Immediate surrounding sites must be reasonably free of dust conditions or this could affect the final surface look. The manufacturer's Service Center Manager reserves the right to control the installation based on such factors without penalty to Robertson Industries, Inc. H. Sequencing and Scheduling: Poured in place surfacing shall be installed after all playground equipment, shade structures, signs and any other items that will be within the surfacing area. Surface installation coordinated by a Robertson Industries, Inc. representative.

**1-1.10 Warranty.** Poured in place surface shall maintain required impact attenuation characteristics and be guaranteed against defects in workmanship AND material for a limited seven (7) year period or as specified and agreed upon. Warranty will be specific to maintenance requirements and performance standards of completed product.

**1-1.11 Materials.**

**1-1.11.1 Cushion Layer Section.**

- a) **Impact Attenuating Cushion Layer:** Cushion Layer consists of shredded styrene butadiene rubber (SBR) adhered with a 100 percent solids polyurethane binder to form a resilient porous material.
- b) Strands of SBR may vary from 0.5 mm – 2.0 mm in thickness by 3.0 mm – 20 mm in length. Cushion material may have 10% SBR Ambient Crumb Rubber (5-9 Mesh) using sieve analysis ASTM D 5644 and a fiber content of .1% or less mixed in.
- c) Foam or standard rubber granules are not to be permitted in Cushion Layer
- d) **Binder shall be between 10-14 percent of the total weight of the material, and shall provide 100 percent coating of the particles.**
- e) The Cushion Layer shall be compatible with the Wear Course and must meet requirements herein for impact attenuation.

#### 1-1.11.2

##### **Wear Course.**

- a) The following are TotTurf® Custom Colors available: Cancun, Arizona Gold, Sherwood Forest, Blue Moon and California Dream'n. (See Totturf.com)
- b) Wear Course shall consists of Thermal Plastic Vulcanized (TPV) granules with an Aliphatic binder formulated to produce an even, uniform, seamless surface up to 2000 square feet.
- c) TPV shall be angular granules with a (Shore A) hardness of 65°A ±5 and particle size between 1-4mm. Binder shall be not less than 15 percent of total weight of TVP material used in the wear surface, and shall provide 100 percent coating of the particles. No other granule sizes are acceptable.
- d) Thickness of Wear Course shall be a minimum ½ to 5/8-inch (minimum 1/2-inch).
- e) The Wear Course shall be porous.

#### 1-1.11.3

##### **Binder.**

- a) No Toluene Diphenel Isocyanate (TDI) shall be used.
- b) No filler materials shall be used in urethane such as plasticizers and the catalyzing agent shall contain no heavy metals.
- c) Weight of polyurethane shall be no less than 8.5 lbs/gal and no more than 9.5 lbs/gal.
- d) Manufacturer is permitted to modify the type of urethane required to match extreme weather conditions. Substitutions must be equal to or exceed original Aliphatic quality.

#### 1-1.11.4

##### **Color.**

Selected from Manufacturer's Color Chart and shown on the plans.

### 1-2

#### **RESILIENT RUBBER SURFACING INSTALLATION**

#### 1-2.1

##### **Site Preparation.**

##### 1.2.1.1

**Finished Grade/Slope.** Verify that finished elevations of adjacent areas are as indicated on the site plans, that the appropriate sub-grade elevation has been established for the particular safety surface to be installed, and that the subsurface has been installed per, site or equipment plans while meeting accessibility and use zones requirements.

##### 1-2.1.2

**Sub base.** Tolerance of concrete sub base shall be within 1/8 inch (3.0 mm) in 10 feet (3050 mm). Verify that subgrade has been fully compacted to 95 percent or greater.

- 1-2.1.3 Curing of Concrete.** If poured in place surfacing is installed, verify that concrete Sub base has cured (All areas appear white in color usually between 3-7 days) and that all concrete curing compounds and other deleterious substances that might adversely affect adhesion have been removed. Surface shall be clean and dry.
- 1-2.1.4 Drainage.** Verify that sub-surfacing drainage has been installed to provide positive drainage.
- 1-2.2 Installation.**
- 1-2.2.1 Poured in Place Surfacing.** Components of the poured in place surfacing shall be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations. Installation of surfacing shall be seamless up to *2,000 square feet* per day and completely bonded to concrete of sub base. Material shall cover all foundations and fill around all elements penetrating the surface.
- 1-2.2.2 Cushion Layer.** Whenever practical, cushion layer of surfacing material shall be installed in one continuous pour on the same day of up to 2,000 square feet. When a second pour is required, step the seam (see detail) and fully coat the step of the previous work with polyurethane binder to ensure 100 percent bond with new work. Apply adhesive in small quantities so that new cushion layer can be placed before the adhesive dries.
- 1-2.2.3 Wear Course.** Wear Course must be Thermal Plastic Vulcanized (TPV) granules. Wear surface shall be bonded to Cushion Layer. If necessary, additional primer will be used between the cushion layer and Wear Course. Apply adhesive to Cushion Layer in small quantities allowing the Wear Course to be applied before adhesive dries. Surface shall be hand troweled to a smooth, even finish. Except where the Wear Course is composed of differing color patterns, pour shall be continuous and seamless up to *2,000 square feet per day*. (Contact sales representative for seamless installations in excess of 2000 square feet) Where seams are required due to color change, size or adverse weather, a step configuration will be constructed to maintain Wear Course integrity. The edge of initial pour shall be coated with adhesive and wearing surface mixture shall be immediately applied. Pads with multiple seams are encouraged to include a top coat of urethane before being placed into use. Butt joint seams are not acceptable except for repairs. Under special conditions and with City's written approval seams may be permitted in same color pad. Consult with manufacturer for specific applications.
- 1-2.2.4 Perimeter.** For installations over existing concrete, the perimeter must be saw cut to provide a keyway 1" deep x 1" wide, or formed during the pour, with surfacing rolled down inside void. Primer adhesive must be applied to all sides of the void. When connecting to a concrete curb or boarder the inside vertical edge shall be primed with adhesive and the final 2" of the cushion layer shall be tapered to allow the wear surface material to be 1.5"- 2" thick where it joins the concrete edge.

- 1-2.2.5 **Thickness.** Construction methods, such as the use of measured screeds or guides shall be employed to ensure that full depth of specified surfacing material is installed. Surfacing system thickness throughout the playground equipment use zone shall be as required to meet the impact attenuation requirements specified herein.
- 1-2.3 **Clean Up.** Manufacturer's installers shall work to minimize excessive adhesive on adjacent surfaces or play equipment. Spills of excess adhesive shall be promptly cleaned.
- 1-2.4 **Protection.** The safety surface shall be allowed to fully cure in accordance with Manufacturer's instructions. The surface shall be protected by the City from all traffic during the curing period of 48 hours or as instructed by the manufacturer.
- 1-2.5 **Manufacturer's Services.** For poured in place safety surfacing, a manufacturer's representative who is experienced in the installation of playground safety surfacing shall be provided. The representative shall supervise the installation to ensure that the system meets the impact attenuation requirements as specified herein.

## SECTION 2 - PLAY EQUIPMENT

### 2-1 PLAY STRUCTURES

- 2-1.1 **General.** All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all steel parts by the use of time-tested coatings such as zinc plating, galvanizing, ProShield finish, TenderTuff coating, etc. Colors shall be provided as indicated on the plans.

**Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications). All primary fasteners shall include a locking patch-type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.

**TenderTuff:** Metal components to be TenderTuff-coated, or approved equal, shall be thoroughly cleaned in a hot phosphatizing pressure washer, then primed with a water-based thermosetting solution. Primed parts shall be preheated prior to dipping in UV-stabilized, liquid polyvinyl chloride (PVC), then salt cured at approximately 400 degrees. The finished coating shall be approximately .080" thick at an 85 durometer with a minimum tensile strength of 1700 PSI and a minimum tear strength of 250 pounds/inch. Four standard colors are available all with a matte finish. (Brown only for HealthBeat). Not applicable for Evos.

**ProShield Finish:** All metal components with ProShield finish, or approved equal, shall be thoroughly cleaned and phosphatized through a five-stage power washer. Parts are then thoroughly dried, preheated and processed through a set of automatic powder spray guns where a minimum .002" of epoxy primer is applied. A minimum .004" of architectural-grade Super-Durable polyester TGIC powder is applied. The average ProShield film thickness is .006".

ProShield is formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:

Hardness (D3363) rating 2H

Flexibility (D522) pass 1/8" mandrel

Impact (D2794) rating minimum 80 inch-pounds

Salt Fog Resistance (B117 and D1654) 4,000 hours and rating 6 or greater

UV Exposure (G154, 340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention

Adhesion (D3359, Method B) rating 5B

The Paint Line shall employ a "checkered" adhesion test daily.

Twenty-six standard colors are available.

**Decks:** All Tenderdecks shall be of modular design and have 5/16" diameter holes on the standing surface. There shall be a minimum of (4) slots in each face to accommodate face mounting of components. Tenderdecks shall be manufactured from a single piece of low carbon 12 GA (.105") sheet steel conforming to ASTM specification A-1011. The sheet shall be perforated with a return flange on the perimeter to provide the reinforcement to ensure structural integrity. There shall be no unsupported area larger than 3.5 square feet. The unit shall then be TenderTuff-coated brown only. Tenderdecks shall be designed so that all sides are flush with the outside edge of the supporting posts. Not applicable for Evos, Weevos or HealthBeat.

**Rotationally Molded Polyethylene Parts:** These parts shall be molded using prime compounded linear low-density polyethylene with a tensile strength of 2500 psi per ASTM D638 and with color and UV-stabilizing additives. Wall thickness varies by product from 3/16" to 5/16". Five standard colors are available (Black only for HealthBeat).

**Permalene Parts:** These parts shall be manufactured from 3/4" high-density polyethylene that has been specially formulated for optimum UV stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638. Five standard solid colors are available. Some Permalene parts are available in a two-color product with (2) .100" thick exterior layers over a .550" interior core of a contrasting color. Eight standard two-color options are available. Not applicable for Evos or HealthBeat.

**Recycled Permalene® Parts:** These parts shall be manufactured from 3/4" high-density polyethylene that has been specially formulated for optimum UV stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638. Available in a three-layer product with



(2) .100" thick colored exterior layers over a .550" thick 100% recycled Black interior core. Five standard color options are available (Blue/Black, Yellow/Black, Red/Black, Green/Black and Tan/Black). Not applicable for Evos or HealthBeat.

**Footings:** Unless otherwise specified, the bury on all footings shall be 34" below Finished Grade (FG) on all in-ground play events/posts. Other types of anchoring are available upon request.

**Hardware Packages:** All shipments shall include individual component-specific hardware packages. Each hardware package shall be labeled with the part number, description, a component diagram showing the appropriate component, package weight, a bar code linking the hardware package to the job number, assembler's name, date and time the package was assembled, work center number, and work order number.

**Installation Documentation:** All shipments shall include a notebook or packet of order-specific, step-by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, area required information and detailed material specifications.

**Packing List:** All shipments shall include a packing list for each skid/container, specifying the part numbers and quantities on each skid or within each container.

**Packaging:** PlayBooster posts shall be individually packaged in sturdy, water-resistant, mar-resistant cardboard boxes. Other components shall be individually wrapped or bulk wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. The components and crates are then shrink-wrapped to skids (pallets) to ensure secure shipping.

**Maintenance Kit:** An order-specific maintenance kit shall be provided for each structure order. The kit will include a notebook or packet with a second set of installation documents and order-specific maintenance documentation with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition. The kit also includes touch-up primer, appropriate color touch-up paint, sandpaper, appropriate color touch-up PVC, graffiti remover and additional installation tools for the tamperproof fasteners.

**(PB) PlayBooster General Specifications:**

**Posts:** Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be ProShield finished to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and ProShield finished to match the post color. All caps shall be factory installed and secured in place with (3) self-sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

**Steel Posts:** All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

Steel Post Mechanical Properties:

Yield Strength (min): 50,000 PSI

Tensile Strength (min): 55,000 PSI

% Elongation in 2 inches: 25

Modulus of Elasticity: 29.5 x 1,000,000 PSI

**Aluminum Posts:** All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.

Aluminum Post Mechanical Properties:

Yield Strength (min): 35,000 PSI

Tensile Strength (min): 38,000 PSI

% Elongation in 2 inches: 10

Modulus of Elasticity: 10 x 1,000,000 PSI

**Arch Posts:** Aluminum arch posts shall be manufactured from 6005-T5 alloy. The arch shall be formed to a 21" center line radius to complement the 42" center to center module. The arch shall be of one continuous piece construction. There shall be no welds or additional pieces mechanically fastened to manufacture the arch. Each arch shall be designed to provide a minimum of 90 1/2" clear span from the deck to the inside of the arch at the radius peak. Arches shall be ProShield finished to a specified color.

**Clamps:** All clamps are ProShield finished and, unless otherwise noted, shall be die cast using a 369.1 aluminum alloy and have the following mechanical properties:

Ultimate Tensile: 47,000 PSI

Yield Strength: 28,000 PSI

Elongation: 7% in 2 inches

Shear Strength: 29,000 PSI

Endurance Limit: 20,000 PSI

Each functional clamp assembly shall have an appropriate number of half clamps and shall be fastened to mating parts with (2) 3/8" x 1 1/8" pinned button head cap screws (SST) and (2) stainless steel (SST) recessed "T" nuts. A 1/4" aluminum drive rivet w/stainless steel pin is used to ensure a secure fit to the post.

PlayBooster clamps have three functional applications and shall be named as follows:

- 1) Offset hanger clamp assembly.
- 2) Deck hanger clamp assembly.
- 3) Hanger clamp assembly.

**Cable:** Comprised of six-stranded and tempered Corocord cable with a polypropylene core. The galvanized steel wire cores of the six strands are inductively fused to polyamide coating, black in color.

**PlayOdyssey Structural Frame:** Post length of the double ladder/central column shall vary depending upon the deck height and shall be flush with the bottom of a deck infill or a minimum of 46" above the deck height. All posts shall be ProShield finished to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 60" bury line required for correct installation and the top of the loose fill protective surfacing. Post caps shall be aluminum die cast from 369.1 alloy and ProShield finished to match the post color. All caps shall be factory installed and secured in place with (3) self-sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the ladder posts to increase the footing area. Ladders are bolted together below grade to act as a single column for installation purposes. The deck support weldments/arms are comprised of 5/16" (.312") steel conforming to 1010 steel per ASTM A635 and welded to a 52" steel post. Arms are secured to each ladder post with (4) 5/8" x 1 1/2" pinned button head cap screws thru (2) 1/4" flanges.

**PlayOdyssey Optional Aluminum Roof Posts:** All formed aluminum PlayOdyssey roof posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness. Post sleeve shall have 4.675" outside diameter with a .150" wall thickness. Post cap shall be aluminum die cast from 369.1 alloy and ProShield finished to match the post color. All caps shall be factory installed and secured in place with (3) self-sealing rivets.

**2-2 PLAYBOOSTER 2 – 5 Tot Lot Play Structure shall be model no. 82868-1-2**

(2-5 Years Area), by Landscape Structures, Inc., or an approved equal, Coast Recreation, Inc. (714) 619-0100

**2-2.1 2-5 Play Structure Tot Lot Components.** Play structure shall include the following components:

### **114665A - Arch Bridge (42")**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Arch Bridge: Fabricated from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

Panel: One-color panel measures 35 5/8" wide x 41" high, color specified.

### **122914A - Loop Arch 48"Dk DB**

Loop Arch: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing, 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and 1/4" flat steel. Finish: ProShield, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Handhold Panel: Permalene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

### **128252A - Loop Ladder 48"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Handhold Panel: Permalene, color specified.

Loop Ladder: Weldment comprised of 1.125" O.D. x 11 GA (.120") black steel tubing. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

### **145839A - Critter Canyon DB**

Critter Canyon: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Support: Weldment comprised of 1.660" O.D. RS20 (.085"-.095") galvanized steel tubing and fabricated 11 GA. (.120") 304 stainless steel plate. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Clamps: Cast aluminum. Finish: ProShield, color specified.

Insect Panel: Two color panel measures 39 1/2" wide x 31 3/16" high, color specified.

### **152431A - ABC Climber 48"Dk DB**

Climber Plank: Flange formed from 11 GA (.120") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

Panels: Permalene, color specified.

Footer: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 3/16" x 2" HR flat steel. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Clamps: Cast aluminum. Finish: ProShield, color specified.

Climber Bracket: Fabricated from formed 3/16" x 2" HRPO steel sheet. Finish: ProShield, color specified.

### **111228A - Square Tenderdeck**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Square Deck: Flange formed from 12 GA (.105") (2.66 mm) sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" (7.92 mm) diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 47" x 47" (66.68 mm x 1194 mm x 1194 mm). Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **111229A - Square Deck Extension**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Square Deck Extension: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 42" x 47". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **119646A - Tri-Deck Extension**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Triangular Deck Extension: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size of two of the three sides measures 2 5/8" x 37 7/8" on the face of the deck and the other side measures 2 5/8" x 43 3/4". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **121948A - Kick Plate 8"Rise**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Kick Plate: Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff, color specified.

#### **152911A - Curved Transfer Module Left 32"Dk DB**

Panels: Permalene, color specified.

Railings: Weldment comprised of 1.125" O.D. x 11 GA. (.120") steel tubing with 203 or 303 stainless steel 3/8" threaded inserts. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Step Support: Weldment comprised of 1.660" O.D. RS-20 (.080" - .095") galvanized steel tubing and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.

Step Sections/Top Step Section: Formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Deck Support: Weldment comprised of 3 1/2" O.D. RS-20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long CRS rod. Finish: ProShield, color specified.

Deck: Flange formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 29" (737 mm) per (2) sides. Finish: TenderTuff, color specified.

#### **115230A - Tracing Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **115231A - Tic-Tac-Toe Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Shafts: Fabricated from 1/2" diameter 203 stainless steel with ends tapped 5/16" 18UNC-2B.

Tic-Tac-Toe Blocks: Rotationally molded from U.V. stabilized linear low density polyethylene, yellow in color with brown molded-in symbols.

Tic-Tac-Toe Bracket: Formed from .125" thick 5052 aluminum. Finish: ProShield, color specified.

Permalene Panel: One-color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **115235B - No Material Spec**

#### **115243A - Chimes Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Chimes: Fabricated from 6063-T832 aluminum. Finish: Anodized per Mil - A - 8625 type 2, class 1.

Permalene Panel: One-color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **115253A - Hole Panel**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Bracket: Formed 11 GA (.120") 5052 aluminum angle. Finish: ProShield, color matched to panel.

Hole Panel: One-color Permalene. Panel measures 35 1/2" wide x 37" high, color specified.



Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **115254A - Storefront Panel**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Bracket: Formed 11 GA (.120") 5052 aluminum angle. Finish: ProShield, color matched to panel.

Store Panel: One-color Permalene. Panel measures 35 1/2" wide x 37" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **130565A - Table Panel DB**

Access Clamp: Weldment comprised of 3/8" HRPO steel plate and 1/4" x 1 3/4" wide steel clamp. Finish: ProShield, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Support Leg: Weldment comprised of 2.375" O.D. RS-20 galvanized steel tubing and 1/4" x 2 1/2" x 9" flat plate. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Table End Panel: One-color Permalene panel measures 34" wide x 13 3/8" high, color specified.

Table Panel: One-color Permalene panel measures 19 1/2" wide x 34 3/4" long, color specified.

Frame: Weldment comprised of 3/16" x 2" x 1 1/4" HRS angle and 3/16" x 2" flat steel bar. Finish: ProShield, color matched to posts.

Table Top Bracket: Fabricated from 1/4" x 3 1/2" x 28 9/16" HRPO flat steel. Finish: ProShield, color matched to posts.

#### **159459A - Ring-A-Bell Panel Above Deck**

Bell: Fabricated from 10 GA. (.135") HRPO low carbon steel. Finish: ProShield, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Bell Striker: Recycled Permalene, color specified.

### **173563A - Fun Mirror Panel Ground Level**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Fun Mirror Panel Assy.: (Panels) Two color Permalene, color specified. (Brackets) Fabricated from 11 GA. sheet HRPO steel. Finish: ProShield, color specified. (Curved Mirror) Fabricated from 16 GA. (.060") stainless steel sheet.

Clamps: Cast aluminum. Finish: ProShield, color specified.

### **177712A - Color Splash Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

#### **Color Splash**

Panel Assy.: Assembly comprised of (Permalene Panels), color specified. (Lexan Panel) 1/4" thick x 26 3/4" diameter. (Acrylic Panel) 1/8" thick x 26 3/4" diameter clear. (Color Wheel) .1875" thick x 23 7/16" diameter aluminum sheet. Finish: ProShield, image is transferred into paint by the process of infusion. (Shaft) 300 Series stainless steel. (Thrust Oilite Bearing) .125" thick x 2.875" diameter. (Sleeve Oilite Bearing) 1.25" diameter x .750" long.

Panel: Permalene panel measures 35 5/8" wide x 41", color specified.

Panel: Permalene panel measures 35 5/8" wide x 41", color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **177718A - Rain Sound Wheel Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Panel: Permalene panel measures 35 5/8" wide x 41", color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Rain Sound

Wheel Panel Assy.: Assembly comprised of (Permalene Panels), color specified. (Shaft) 1" diameter x 4 3/4" long stainless steel. (Inner & Outer Rings) 16 GA. (.059") HRPO sheet steel. Finish: ProShield, color specified. (Brackets) 16 GA. (.059") HRPO sheet steel. Finish: Zinc plate with clear chromate finish. (Spacer) 3/4" diameter x 2 1/8" long stainless steel. (Flange Oilite Bearing) 1.625" diameter x 1.000" long.

Hub: Fabricated from 1/4" thick HRPO sheet steel. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **111357A - Chinning Bar Alum DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Post: See PlayBooster (PB) General Specifications.

Rail: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel 5/8" threaded inserts. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **120818A - Playstructure Seat**

Seat: Flange formed from 11 GA (.120") sheet steel. Seating surface is perforated with 1/4" diameter holes. Finish: TenderTuff, color specified.

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**166809A - E-Pod Seat**

E-Pod Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

**111403D - 158" Alum Post For Roof DB**

Post: See PlayBooster (PB) General Specifications.

**111403C - 166" Alum Post For Roof DB**

Post: See PlayBooster (PB) General Specifications.

**111404E - 116" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**111404D - 124" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**111404C - 132" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**118110A - Square Poly Roof Standard Logo Panels**

Poly Roof: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Roof Logo: Two color roof logo measures 41" wide x 5 1/8" high, color specified.

Roof Sleeve: Cast from A356 aluminum alloy.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **130102B - Super Square Shingle Roof Poly**

Poly Roof Cap: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Roof Sleeve: Cast from A356 aluminum alloy.

Roof: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **182503A - Welcome Sign (LSI Provided) Ages 2-5 years Direct Bury**

Border: Permalene, black in color.

Sign Panel: Panel is fabricated from 11 GA. (.120") steel sheet. Finish: ProShield®<sup>®</sup>, gray in color. (Sign) Digital image is transferred to a .120" thick ProShield coated steel plate, then infused into the ProShield.

Post: Weldment comprised 2.375" O.D. RS20 (.095-.105) wall galvanized tube, 1/4" HRPO steel sheet and aluminum post cap. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **122033D - SpyroSlide 56"w/Hanger Bracket DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Rail: 1 1/8" O.D. 6061-T6 aluminum extrusion with 5/16" walls. Finish: ProShield, color specified.

Barrier Plates: Fabricated from 1/4" x 1 1/2" zinc plated HRPO flat steel. Finish: ProShield, color specified.

Center Column: Fabricated from 3.500" (88.9 mm) O.D. RS-20 (.120" - .130") galvanized steel tubing. Finish: ProShield, color specified.

Entrance Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 31 3/4" wide x 36 27/32" long. Finish: TenderTuff, color specified.

Exit Support: Weldment comprised of 2.375" (60.33 mm) O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" thick zinc plated HRPO flat steel. Finish: ProShield, color specified.

Slide, Hood & Barriers: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

Handbar: Formed from 7/8" O.D. x 11 GA (.120") black steel tubing. Finish: TenderTuff, brown in color.

Hanger Bracket: Formed from 11 GA (.120") HRPO low carbon sheet steel. Finish: TenderTuff, color specified.

#### **130798A - Double Swirl Poly Slide 48"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Rail: Extruded from 1.125" O.D. x .312" wall. 6005-T5 aluminum. Finish: ProShield, color specified.

Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Mid-Support: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.

Rail Spacer: Fabricated from 1.312" O.D. x 16 GA (.065") steel tubing. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Slide: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.

2-3

#### **PLAYBOOSTER 5-12 Tot Lot Play Structure shall be model no. 82868-1-2**

(5-12 Area), by Landscape Structures, Inc., or an approved equal, Coast Recreation Inc. (714) 619-0100.

**2-3.1**

**5-12 Play Structure Tot Lot Components:** Play structure shall include the following components:

**111345A - Bridge/Ramp Transition Bracket**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Transition Bracket: Fabricated and formed from 11 GA (.120") HRPO low carbon sheet steel. Finish: TenderTuff, color specified.

**120211A - 90 Degree Curved Bridge 64"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Barrier: Weldment comprised of 5/8" solid steel vertical rails, 1 1/8" O.D. x 11 GA (.120") steel horizontal rails top and bottom with a 3 1/4" space between vertical members. Finish: TenderTuff, color specified.

Support: Fabricated from 2.375" O.D. RS-20 (.120" - .130") galvanized steel tubing. Finish: ProShield, color specified.

Bridge: Weldment comprised of 12 GA (.105") HRPO sheet steel conforming to ASTM A1011 and 3/16" HRPO sheet steel. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

**100037A - Humpty Climber Double DB Only**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Humpty Climber: Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and formed 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing. Finish: ProShield, color specified.

Support: Weldment comprised of 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and 1.125" O.D. x 11 GA (.120") galvanized steel tubing. Finish: ProShield, color specified.

### **111465A - Step Deck 12"Dk**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Step Deck: Flange formed from 11 GA (.120") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

Handrail: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel welded inserts with 5/8" internal threads. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **143199A - Conical Climber 72"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Belt: PVC belting, 5/16" thick, 300 PIW tension rating.

Center Loop: Weldment comprised of 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing, 1/4" x 1 1/4" HR flat steel and 1/4" x 2 3/4" HR flat steel. Finish: ProShield, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Footer: Fabricated from 1.125" O.D. x 11 GA (.120") galvanized steel tubing. Finish: ProShield, color specified.

Hand Grip: Made from Polyester Resin. Hand Grips measure 5 3/4" long x 2 1/2" wide x 1 3/4" high.

Mounting Plate: Fabricated from 1/8" HR flat steel. Finish: ProShield, green in color.

Rails: Weldment comprised of 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing, and 1/4" x 1 1/4" HR flat steel. Finish: ProShield, color specified.

Handhold Panel: Recycled Permalene, color specified.

### **145624B - Vertical Ascent 56"Dk**

Panels: Permalene, color specified.



Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Made from Polyester Resin. Handholds measure approx. 5 3/4" long x 2 1/4" wide x 1 3/4" high.

### **152907C - Deck Link w/Barriers Steel infill panel 3 Steps**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Barrier: Weldment comprised of 1.125" O.D. x 11 Ga. (.120") wall steel tubing, 5/8" O.D. steel bar with 203 or 303 stainless steel 3/8" threaded inserts. Finish: TenderTuff, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Step Section: Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is 24 1/4" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

SteelX Panels: Zinc plated 7 GA (.179") HRPO flat steel. Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

### **164078A - Ring Tangle 8" Difference Deck Heights**

RingTangle Climber: Weldment comprised of 1.900" O.D. RS40 (.120"-.130") wall galvanized steel tubing, 1.315" O.D. RS20 (.080"-.090") wall galvanized steel tubing and 3/16" HRPO flat steel. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Handhold Panel: Permalene, color specified.

#### **176079A - Sunbeam Climber**

Panels: Permalene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Barrier: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tube per ASTM A513 with 203 or 303 stainless steel welded inserts with 5/8" internal threads and 1/4" tabs. Finish: TenderTuff, color specified.

Sunbeam Climber: Weldment comprised of 1.315" O.D. RS20 (.080"-.090") wall galvanized steel tube, 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tube, and 1/4" HRPO steel sheet. Finish: ProShield, color specified.

Handloop: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

#### **111228A - Square Tenderdeck**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Square Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 47" x 47". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

#### **111229A - Square Deck Extension**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Square Deck Extension: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 42" x 47". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **111231A - Triangular Tenderdeck**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Triangular Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 37 3/4". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **119646A - Tri-Deck Extension**

Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Triangular Deck Extension: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size of two of the three sides measures 2 5/8" x 37 7/8" on the face of the deck and the other side measures 2 5/8" x 43 3/4". Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **121948A - Kick Plate 8" Rise**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Kick Plate: Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff, color specified.

### **152911C - Curved Transfer Module Left 48"Dk DB**

Panels: Permalene, color specified.

Railings: Weldment comprised of 1.125" O.D. x 11 GA. (.120") steel tubing with 203 or 303 stainless steel 3/8" threaded inserts. Finish: TenderTuff, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Step Support: Weldment comprised of 1.660" O.D. RS-20 (.080" - .095") galvanized steel tubing and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.

Step Sections/Top Step Section: Formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Deck Support: Weldment comprised of 3 1/2" O.D. RS-20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long CRS rod. Finish: ProShield, color specified.

Deck: Flange formed from 12 GA (.105") HRPO sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 29" (737 mm) per (2) sides. Finish: TenderTuff, color specified.

#### **115229A - Finger Maze Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" hick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **115231A - Tic-Tac-Toe Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Shafts: Fabricated from 1/2" diameter 203 stainless steel with ends tapped 5/16" 18UNC-2B.

Tic-Tac-Toe Blocks: Rotationally molded from U.V. stabilized linear low density polyethylene, yellow in color with brown molded-in symbols.

Tic-Tac-Toe Bracket: Formed from .125" thick 5052 aluminum. Finish: ProShield, color specified.

Permalene Panel: One-color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **115236A - Ball Maze Panel Ground Level Below 56"Dk or Higher**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Ball: 1/2" diameter, SST.

Cover: Made from .177" thick x 18 5/16" diameter clear polycarbonate.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **117957A - Periscope Panel Above Deck**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Mounting Plate: Fabricated from formed 11 GA (.120") HRS. Finish: ProShield, red in color.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Periscope Assembly: Fabricated from an octagon 14 GA (.075") steel tube ProShield red with (2) 18 GA (.048") 304 stainless steel bright annealed (reflective finishes). Periscope rotates vertically and horizontally. Permalene: Hand-grip and lense covers are black in color.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

**No Material Spec for 127678B**

**127681A - Image Panel - 176 Block Ground Level Under 48"Dk**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" (38.1 mm) long. Finish: ProShield, color specified.

Pivot Blocks: U.V. stabilized high-density polyethylene, tan on one side and brown on the other.

Rod Cover: One-color Permalene, color specified.

Steel Rod: 1/2" diameter CRS zinc plated rod.

Permalene Panel: One-color panel measures 35 5/8" wide x 41" high, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

**173564A - Optigear Panel Above Deck**

Optigear Panel Assy.: (Panels) Two color Permalene, color specified. (Poly Panel) .236" thick clear polycarbonate, 3/8" threaded rod and 3/16" SST plate.

Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

### **188835A - Sign Language Panel Above Deck**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color specified.

### **173591A - OmniSpin Spinner Surface Mount**

OmniSpin Spinner: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

OmniSpin Spinner Frame Assembly: (Frame) Weldment comprised of 2.375" O.D. RS20 (.095"-.105") wall galvanized steel tubing, 2.875" O.D. RS40 (.160"-.170") wall galvanized steel tubing, 1/4" HR flat steel and 3 1/2" O.D. CF steel bar. (Base) Weldment comprised of 3/8" HRPO sheet steel and 3/16" HRPO sheet steel. (Shock Covers) 16 GA (.060") HRPO sheet steel. (Crank Arms & Pins) Fabricated from stainless steel. (Shocks) Gas shocks with fixed bearings. Finish: ProShield, black in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

### **201545A - Blender Spinner DB**

Clamps: Cast aluminum. Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Support Arm: Weldment comprised of 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tube, 2.750" O.D. 1018 steel, and 1/4" HRPO flat steel. Finish: ProShield®, color specified.

Bushing: Oil-filled UHMW PE.

Footer: Weldment comprised of 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tube, 12 GA. (.105") HR flat steel and 1 7/8" steel ball. Finish: ProShield, color specified.

### **112465A - Track Ride (18' Connecting)**

Trolley Assembly: Steel body with a 7/8" O.D. x .120" wall steel tubing handle assembly. Four urethane roller skate wheels and tivar guide block. Completely assembled. Steel Body Finish: TenderTuff, brown in color.

Crossover: Weldment comprised of tee clamps and a 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Beam: Extruded from 6005-T5 aluminum alloy. Finish: ProShield, color specified.

#### **193170A - LoliLadder w/2 E-Pods**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

LoliLadder: Weldment comprised of 1/4" HRPO flat steel, 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tubing, and 1.315" O.D. RS20 (.080"-.090") wall galvanized tubing. Finish: ProShield®, color specified.. Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

E-Pod Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

Rung Cap: EPDM, black in color.

#### **111404O - 132" Steel Post DB**

Post: See PlayBooster (PB) General Specifications.

#### **111404H - 92" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

#### **111404G - 100" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

#### **111404F - 108" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.



**111404E - 116" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**111404D - 124" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**111404C - 132" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**111404A - 148" Alum Post DB**

Post: See PlayBooster (PB) General Specifications.

**No Material Spec for 136689C**

**136488A - CoolToppers Full Sail DB Only**

Center Tube: Weldment comprised of 5" O.D. x 11 GA (.120") galvanized steel tubing and 1/4" hanger brackets. Finish: ProShield, color specified.

Half Bracket: Cast from 535 almag. Finish: ProShield, color specified.

Post Cap: Cast from 369.1 aluminum alloy. Finish: ProShield, color specified.

Arm: Weldment comprised of 5" O.D. x 11 GA (.120") galvanized steel tubing and 4.690" O.D. sleeve. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Large/Small Sail: High-density polyethylene with ultra violet additives. All corners to be strengthened with 16 oz. non-tear vinyl material. Protective webbing is sewn into all areas where steel cable enters/exits cloth pockets. Live loads 20 psf. Wind design speed withstands up to 90 mph. Uplift 19 psf. Snow loads 5 psf. Tear strength warp 221 lb. and weft 463 lb. Burst strength 38 PSIA.

Clamps: Cast aluminum. Finish: ProShield, color specified.

**182503C - Welcome Sign (LSI Provided) Ages 5-12 years Direct Bury**

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Sign Panel: Panel is fabricated from 11 GA. (.120") steel sheet. Finish: ProShield®<sup>®</sup>, gray in color. (Sign) Digital image is transferred to a .120" thick ProShield coated steel plate, then infused into the ProShield.

Post: Weldment comprised 2.375" O.D. RS20 (.095-.105) wall galvanized tube, 1/4" HRPO steel sheet and aluminum post cap. Finish: ProShield, color specified.

#### **122033A - SpyroSlide 72"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Rail: 1 1/8" O.D. 6061-T6 aluminum extrusion with 5/16" walls. Finish: ProShield, color specified.

Barrier Plates: Fabricated from 1/4" x 1 1/2" zinc plated HRPO flat steel. Finish: ProShield, color specified.

Center Column: Fabricated from 3.500" O.D. RS-20 (.120" - .130") galvanized steel tubing. Finish: ProShield, color specified.

Entrance Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 31 3/4" wide x 36 27/32" long. Finish: TenderTuff, color specified.

Exit Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" thick zinc plated HRPO flat steel. Finish: ProShield, color specified.

Slide, Hood & Barriers: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

Handbar: Formed from 7/8" O.D. x 11 GA (.120") black steel tubing. Finish: TenderTuff, brown in color.

#### **123333B - Rollerslide 56"Dk DB**

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Rail Spacer: Fabricated from 1.312" O.D. x 16 GA (.065") steel tubing. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Rail: 1 1/8" O.D. 6061-T6 aluminum extrusion with 5/16" walls. Finish: ProShield, color specified.

Rollers: Fabricated from 1.900" O.D. x 16 GA (.060") galvanized steel tubing. Finish: TenderTuff, color specified.

Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Rails: Extruded from 6005-T1 aluminum. Finish: ProShield, color specified.

Roller Shafts: Fabricated from 1/2" diameter CRS zinc-plated with yellow chromate finish.

Support Leg: Fabricated from 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing. Finish: ProShield, color specified.

Top Plate: Formed from 10 GA (.135") 304-2B SST. Finish: TenderTuff, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

#### **183176A - Rush Slide DB Only**

Clamps: Cast aluminum. Finish: ProShield, color specified.

Crossover: Weldment comprised of 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tubing, and 1/4" HRPO flat steel. Finish: ProShield, color specified.

Handbar: Fabricated from A356 aluminum. Finish: ProShield, color specified.

Handhold: Weldment comprised of 1.315" O.D. RS20 (.080"-.090") wall galvanized steel tubing and 7 GA. HRPO steel sheet. Finish: ProShield, color specified.

Supports: Weldment comprised of 2.375" O.D. RS20 (.095"-.105") wall galvanized steel tubing and 7 GA. HRPO steel sheet. Finish: ProShield, color specified.

Slide: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Vertical Ladder: Weldment comprised of 2.375" O.D. RS40 (.130"-.140") wall galvanized steel tubing, and 1.315" O.D. RS20 (.080"-.090") wall galvanized steel tubing and 1/4" HRPO flat steel, Finish: ProShield®, color specified.

Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

**174018A - Belt Seat ProGuard Chains for 8' Beam Height**

Bolt Link: Stainless Steel

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Chain/ProGuard: Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.

Belt Seat: Molded from UV stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" (178 mm) wide x 26" long x .700" thick.

**177330A - 5" Arch Swing Frame 8' Beam Height Only**

Arch Posts: See PlayBooster (PB) General Specifications.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Swing Beam: Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" W. Finish: ProShield, color specified.

2-4

**WARRANTIES**

**100-YEAR LIMITED WARRANTY**

On all PlayBooster®, PlayShaper® and PlaySense® aluminum posts, stainless steel fasteners, clamps, beams and caps, against structural failure due to corrosion/natural deterioration or manufacturing defects, and on PlayBooster, Evos and Weevos steel posts and arches against structural failure due to material or manufacturing defects.

**15-YEAR LIMITED WARRANTY**

On all plastic components (including TuffTimbers edging), all steel components (except 100-year steel posts), Mobius® climbers, decks and TenderTuff coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects. TuffTurf® tiles against material or manufacturing defects.

## 10-YEAR LIMITED WARRANTY

On concrete products against structural failure due to natural deterioration or manufacturing defects. Does not cover minor chips, hairline cracks or efflorescence.

## 8-YEAR LIMITED WARRANTY

On Aeronet climbers and climbing cables against defects in materials or manufacturing defects. On CoolToppers® fabric against failure from significant fading, deterioration, breakdown, mildew, outdoor heat, cold or discoloration. This warranty is limited to the design loads as stated in the specifications found in the technical information.

## 3-YEAR LIMITED WARRANTY

On all other parts, i.e.: CableCore® products, swing seats and hangers, grills, Mobius climber handholds, Wiggle Ladders, Chain Ladders and Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun® gliders, PVC belting material, HealthBeat hydraulic cylinders, Seesaws, Wiggle Ring Bridge, etc., against failure due to corrosion/natural deterioration or manufacturing defects.

This warranty does not include any cosmetic issues or wear and tear from normal use. It is valid only if the playstructures and/or equipment are erected to conform with Landscape Structures™ installation instructions and maintained according to the maintenance procedures furnished by Landscape Structures Inc. For a full text of the warranty, contact your playground consultant.

- 2-4.1 Product Compliance Verification.** At time of ordering the equipment, the Contractor shall verify with the manufacturer that play equipment meets current safety and access guidelines and requirements. The playground components and design were designed to comply with the ADAAG Final Rule for Play Areas (<http://www.access-board.gov/play/finalrule.txt>, and <http://www.access-board.gov/play/guide/guide.pdf>). The contractor shall verify current compliance prior to ordering the equipment.

## 2-5 2-5 and 5-12 PLAY STRUCTURE INSTALLATION

Explicit installation instructions shall be provided by the manufacturer, which shall include detailed, scaled plan view, elevations footing drawings and details, as well as written instructions to assure proper installation of the playground equipment, structure or modular unit.

Playground equipment must be installed by a manufacturer certified installer and be installed in accordance with the manufacturer's installation specifications. Installation crew leader must be LSI (Landscape Structures, Inc.) certified. Contractor shall contact a minimum of 48 hours in advance to have a CPSI certified County Inspector to inspect the play equipment and rubber surfacing prior to acceptance. Any non-conforming items shall be repaired or replaced before acceptance.

Install all factory-fabricated landscape furnishings per manufacturer's specifications and recommendations. All components shall be firmly and permanently affixed to concrete base or footings to the satisfaction of the Resident Engineer and in conformance with the manufacturer's instructions. Anchor bolts cast into the concrete shall reinforce all attachments. Tamper-resistant connectors shall be used to prevent theft.

See construction plans and details for location/layout and model numbers of play equipment.

All equipment installations shall observe the manufacturer's recommended safety zones. Safety zones shall be completely contained in the resilient surfacing area.

Clean-up: the site shall be kept clean and free of tools, trash, debris and installation materials on a daily basis. Material may be stored on-site during installation with appropriate protective measures and approval by the resident engineer.

Close out: contractor shall provide the City with one copy of complete manufacturers installation instructions and maintenance kit. Each manufacturer sends at least two sets of installation manuals with each order. Additional sets of installation instructions should be purchased from the manufacturer if originals are lost or damaged. It is the contractor's responsibility to secure the installation instructions from the installer.

## 2-6 INDEPENDENT PLAY AUDIT

**2-6.1 General.** The Contractor shall be responsible for providing an Independent Audit of the playground area, resilient surfacing and all play equipment. The audit shall be conducted by a third-party Certified Playground Safety Inspector approved by the Park and Recreation Department. The audit shall confirm compliance with the most current versions of accessibility and safety standards, including, but not limited to, the following: Americans with Disabilities Act (ADA), Consumer Product Safety Commission's (CPSC) "Handbook for Public Playground Safety", and the American Society for Testing and Materials (ASTM) "Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment for Public Use," "Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment" and "Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment."

The Contractor shall be responsible for correcting any items found not to be in compliance with the above standards as a result of the Audit. The Contractor shall provide to the Park and Recreation Department, Landscape Architect, and Resident Engineer, written certification, signed by the certified playground safety inspector stating that the playground area, surfacing, and play equipment is in compliance with all current applicable accessibility and safety standards.

The cost of the play audit shall be included in the cost of the play equipment, and no additional payment shall be made.

**2.7 PAYMENT**

**2-7.1** Payment for Play Equipment shall be included in the lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all equipment, parts, attachments and incidentals as shown on the plans and as specified.

**2.7.2** Payment for Play Equipment Installation shall be included in the lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in assembling and installing the play equipment as shown on the plans and as specified and as directed by the Resident Engineer, including the removal and disposal of all the resulting materials.

**SECTION 3 - SITE FURNISHINGS**

**3-1 PRECAST CONCRETE PICNIC TABLE**

Precast Concrete picnic table shall be a round accessible picnic table with two 6' curved benches, or approved equal. The table tops and sides shall have a smooth finish, sides shall have a light sandblast finish.

Model No.: QR-QH48FC2, 48" diameter precast concrete round table with two 12"Wx72-7/8"L x3"TH radius benches, or approved equal.

Dimensions: 48" diameter x 3"thk table, mounted at 32-1/4" height; 12" wide B-1 style benches, mounted at 20" height

Color: C2-'Latte', integral colored concrete

Finish: T2-Light sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

No. of units: (3)

Attachment: Surface-mounted w/ stainless steel anchor bolts and masonry anchors and epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-1.1 Precast Concrete Picnic Table Installation.** Precast Concrete Picnic Tables shall be located where shown on the plans. Install tables in accordance with manufacturer's instructions and recommendations. Install tables accurately and in the correct

orientation and relationship with the concrete paving as shown on the drawings. Tables shall be affixed to the concrete paving with epoxy and masonry anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

### **3-2 PRECAST CONCRETE ACCESSIBLE GAME TABLE WITH BENCH SEATS**

Precast concrete accessible game tables with three bench seats – allow one open space for ADA access. Picnic table shall have a black and white checker board inset into the top surface.

Model No.: QS-QH3366FC3, Precast concrete square table with 2” square black and white checkered game table and bench seats, or approved equal.

Dimensions: 36”SQ x 3”TH table top, mounted at 32-1/4” ht.; 12”Wx36”L bench seats, mounted at 18” ht.

Color: C2-‘Latte’, integral colored concrete

Finish: T2-Light sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 ‘Paint and Protective Coatings’

No. of units: (1)

Attachment: Surface-mounted w/ stainless steel anchor bolts and masonry anchors and epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-2.1 Precast Concrete Accessible Game Table with Bench Seats Installation.** Precast Concrete Accessible Game Table with Bench Seats shall be located where shown on the plans. Install tables in accordance with manufacturer's instructions and recommendations. Install Accessible Game Table with Bench Seats accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Accessible Game Table with Bench Seats shall be affixed to the concrete paving with epoxy and masonry anchor bolts as indicated on the drawings and per these special provisions.



Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

### 3-3 **PRECAST CONCRETE GAME TABLE WITH BENCH SEATS**

Precast concrete game tables with four bench seats. Picnic table shall have a black and white checker board inset into the top surface.

Model No.: QS-QH3366FC4, Precast concrete square table with 2" square black and white checkered game table and four bench seats, or approved equal.

Dimensions: 36"SQ x 3"thk. table top, mounted at 32-1/4" ht.; 12"Wx36"Lx3"thk. bench seats, mounted at 18" ht.

Color: C2-'Latte', integral colored concrete

Finish: T2-Light sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

No. of units: (1)

Attachment: Surface-mounted w/ stainless steel anchor bolts and masonry anchors and epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-3.1 Precast Concrete Game Table with Bench Seats Installation.** Precast Concrete Game Table with Bench Seats shall be located where shown on the plans. Install tables in accordance with manufacturer's instructions and recommendations. Install Game Table with Bench Seats accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Game Table with Bench Seats shall be affixed to the concrete paving with epoxy and masonry anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

### 3-4 **PRECAST CONCRETE BENCH**

Precast concrete bench shall be a 7' long bench with concrete back and arm rest at center of bench.

Model No.: Q1-PS-84B w/ C Style arm rest, Palm Series precast concrete bench with back and modified style C arm rest (QCAR) centered on bench seat, or approved equal.

Dimensions: 84”L x 24-11/16”W x 36”T x 6-1/4”THK

Color: C11- ‘Adobe Taupe’, integral colored concrete

Finish: T2-Light sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 ‘Paint and Protective Coatings’

No. of units: (3)

Attachment: Surface-mounted w/ epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

Precast Concrete Bench. Precast concrete bench shall be a 7’ long bench with concrete back and arm rest at center of bench.

Model No.: Q1-PS-84B w/ C Style arm rest, Palm Series precast concrete bench with back and modified style C arm rest (QCAR) centered on bench seat, or approved equal.

Dimensions: 84”L x 24-11/16”W x 36”T x 6-1/4”THK

Color: C11- ‘Adobe Taupe’, integral colored concrete

Finish: T2-Light sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 ‘Paint and Protective Coatings’

No. of units: (4)

Attachment: Surface-mounted w/ stainless steel anchor bolts and masonry anchors and epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-4.1 Precast Concrete Bench Installation.** Precast Concrete Benches shall be located where shown on the plans. Install tables in accordance with manufacturer's instructions and recommendations. Install Benches accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Benches shall be affixed to the concrete paving with epoxy and masonry anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

**3-5 BARBEQUE AND FOOD PREP COUNTER**

Barbeque and food prep counter shall be a rectangular table top with table top barbeque grill. Top of barbeque grill and counter shall be mounted at 34" above grade in accordance with ADA counter height standards. Mounting shall be epoxy grout pocket type with minimum 1/2" diameter steel anchor bolts extending into concrete base a minimum of 6". Thickened concrete paving of 10" thick or footings shall be provided at the BBQ locations.

Model No.: QC-BBQ1824-FPC, Precast concrete rectangular table with pedestal posts (#QCBBQPOST) and barbeque grill (BBQGRILL18x24), or approved equal.

Dimensions: 18"W x 46"L Food Prep Table and 18"x24" BBQ Grill

Color: C2-'Latte', integral colored concrete

Finish: T2-Light Sandblast

Sealer: No manufacturer sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

Grill color: Black

No. of units: (2)

Attachment: Surface-mounted w/ stainless steel anchor bolts and masonry anchors and epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-5.1 Barbeque and Food Prep Counter Installation.** Precast Concrete Barbeque and Food Prep Counters shall be located where shown on the plans. Install units in accordance with manufacturer's instructions and recommendations. Install units accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Units shall be affixed to the concrete paving with epoxy and masonry anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

3-6

**TRASH RECEPTACLE WITH HOOD**

Trash receptacles with hoods shall be precast concrete units with concrete tops, and high-density 40-gallon plastic inner liners, or approved equivalent. Trash receptacles shall be made of 100% recycled materials and manufactured in the USA. Provide shop drawings and paint color for approval. Attachment shall comply with Manufacturer's recommendations. Installations shall be surface mounted and vandal-proof epoxy.

Model No.: QSSC2651SDW Santa Clara Series precast concrete Trash Receptacle with side door, or approved equal.

Dimensions: 26-5/8" SQ x 51" HT.

Color: C2-'Latte', integral colored concrete

Finish: T7-Acid Etch

Sealer: No Sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

Door /Color: #Q30SD/Gray

Liner: #QSPL28B, 40-Gallon Plastic Liner

No. of units: (4)

Attachment: Surface-mounted w/ epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

Model No.: QSSC2651SDW Santa Clara Series precast concrete Trash Receptacle with side door, or approved equal.

Dimensions: 26-5/8" SQ x 51" HT.

Color: C2-'Latte', integral colored concrete

Finish: T7-Acid Etch

Sealer: No Sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

Door /Color: #Q30SD/Gray

Liner: #QSPL28B, 40-Gallon Plastic Liner

No. of units: (5)  
Attachment: Surface-mounted w/ epoxy  
Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

**3-6.1 Precast Concrete Trash Receptacle Installation.** Precast Concrete Trash Receptacles shall be located where shown on the plans. Install units in accordance with manufacturer's instructions and recommendations. Install units accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Units shall be affixed to the concrete paving with epoxy as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

**3-7 HOT COAL RECEPTACLE**

The precast concrete Hot Coal Receptacle shall be a square unit, 42" tall and clearly labeled on all four sides with cast-in logos with the text "Hot Coals Only" painted in white letters on indented flame shaped red background. Unit shall be affixed to concrete pads with epoxy at locations shown on the plans.

Model No.: Q-PSHA-2842 Palm Series precast concrete square Hot Coal Receptacle with black grate at top and 'Hot Coals Only' inset in a flame shaped emblem, or approved equal.

Dimensions: 28" SQ x 42" HT.

Color: C2-'Latte', integral colored concrete

Finish: T7-Acid Etch

Sealer: No Sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

Grate: 23-1/8" SQ black steel grate with chain (#HG23SQ/BLK)

No. of units: (1)

Attachment: Surface-mounted w/ epoxy

Manufacturer: Quick Crete Products Corp., Inc. (951) 737-6240  
731 Parkridge Avenue  
Norco, CA 92860  
[www.quickcrete.com](http://www.quickcrete.com)

- 3-7.1 Precast Concrete Hot Coal Receptacle Installation.** Precast Concrete Hot Coal Receptacles shall be located where shown on the plans. Install units in accordance with manufacturer's instructions and recommendations. Install units accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings. Units shall be affixed to the concrete paving with epoxy as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the receptacles from damage throughout construction work.

**3-8 PRECAST CONCRETE DRINKING FOUNTAIN**

- 3-8.1 General.** Drinking Fountain: Haws Model 3150 FR, with sand trap (#6635), or an approved equal, is a "Hi-Lo", dual height, vandal-resistant, square vibracast-reinforced concrete pedestal drinking fountain with heavy sandblast finish and color #1266 – 'Cool Gray' by L.M. Scofield Company. This model shall contain the following features: 18 gauge type 304 SS bowls with No. 7 hi-polished finish, forged lead-free pcp brass bubblers with concrete bubbler guards, pcp brass waste strainers, freeze-resistant push button operated pneumatic valves, 60 micron in-line strainers, SS access plates with vandal-resistant screws, 1-1/2" PVC slip single waste outlet, ADA compliant, ANSI/NSF Std. 61/9 and CSA certified. The drinking fountain shall be treated with a manufacturer applied anti-graffiti coating or per Section 210-6 'Anti-Graffiti Coating'.

- 3-8.2 Drinking Fountain Concrete Valve Box.** Concrete Valve Box. Provide a 21"x15-1/2"x12" concrete valve box with locking lid for freeze-resistant apparatus for each drinking fountain. Valve box shall be installed in planting areas nearest the drinking fountain, square with the concrete edge, in location indicated on the plans. Lid shall be marked with 'WATER' on lid. Contractor may propose alternative location for valve box, but only upon written approval by the Resident Engineer. Install per manufacturer's recommendations.

- 3-8.3 Drinking Fountain Installation.** Provide and install drinking fountain as shown on the drawings, and as specified in this section.

The Contractor shall submit the manufacturer's product data (including finish data) and installation specifications and other data required to demonstrate compliance with the specified item.

Deliver, store, and handle all materials to prevent damage and deterioration.

Do not install drinking fountain before completion of final grading, and concrete paving.

Examine sub-grades, finished surfaces, and installation conditions. Do not start drinking fountain work until unsatisfactory conditions are corrected.

Remove loose material and debris from base surface before placing drinking fountain.

Locate and layout drinking fountain, boxes and sump and Obtain Engineer's acceptance of layout prior to installation.

Install drinking fountain per manufacturer's specifications and/or recommendations and comply with all local plumbing codes. Attach securely to grade as recommended by the manufacturer, using vandal resistant stainless steel anchor bolts appropriate for the installation. Installation shall be secure and stable.

Drinking fountain shall be set in place as indicated on the plans and as approved by the Engineer. Legs shall be fabricated, cut or ground to fit grade to provide a level installation at the specified height. Installed drinking fountain shall be true and square to paving design, installed level and shall not wobble.

Locate and connect to potable water source including trenching and waterline. Check for leaks.

Sump installation shall include the excavation and placement of crush rock materials wrapped in filter fabric to the dimensions as indicated on the SDM-107 detail. Layout of sump shall be provided with positive drainage away from the drinking fountain location. A consistent cover shall be provided over the perforated pipe and crushed rock layer.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from landscape furnishings work.

Protect drinking fountain from damage during construction.

### **3-9 REMOVABLE METAL BOLLARDS**

Bollards shall be galvanized steel, removable protection posts with locking hasp (demountable protection posts per Regional Standard Drawing SDRSD M-16).

**3-9.1 Removable Bollards Installation.** Bollards shall be located where shown on the plans. Install bollards in accordance with manufacturer's instructions and recommendations. Install bollards plumb, accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings.

Install bollards / sleeves within thickened concrete paving areas at a minimum of 10" depth and coordinate locations of grout pockets per bollard manufacturer template. Coordinate installation of bollards with Concrete Sidewalk Contractor and/or installers of adjacent materials. Protect bollards during construction of paving work by covering with plastic or other protection.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from landscape furnishings work.

Protect the bollards from damage throughout construction work.

### **3-10 PET WASTE STATION**

Pet Waste Station shall be 'Modern Dog Kit (Green)', by Pet Pick-Ups, or approved equivalent. Kit shall include a post-mounted dispenser unit with stainless steel door

lock, signage stating 'Thanks for picking up after your dog!', waste container with stainless door lock and galvanized steel liner. All unit locks shall be keyed to have same key and open all doors to all units on site. Dispenser units shall be mounted on 8"x2"SQ galvanized steel channel post per and installed per Manufacturer's recommendations. Installations shall be vandal-proof. Posts shall be embedment mounted into a cast in place concrete footings (520-C-2500), size: 12" diameter x 18" deep. Components shall be attached to the posts with galvanized bolts, nuts and washers. Posts shall be galvanized 12-gauge cold rolled structural steel tubing (1-3/4" x 1-3/4"). Pet waste stations shall be:

Model No.: 00005-MD-Kit, or approved equivalent.

Finish: Green powdercoat finish by manufacturer

No. of units: (3)

Bags: 2 rolls of 200 Biodegradable pick up litter bags.

Attachment: Pole-mounted w/ footing

Manufacturer: Pet Pick-Ups, Inc. (303) 443-8914  
P.O. Box 460547  
Denver, CO 80246  
[www.petpickups.com](http://www.petpickups.com)

**3-10.1 Pet Waste Station Installation.** Pet waste station shall be located as shown on the plans. Install pet waste station in accordance with manufacturer's instructions and recommendations. Install pet waste stations accurately and in the correct orientation and relationship with the concrete paving as shown on the drawings.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the pet waste stations from damage throughout construction work.

**3-11 ADA ALUMINUM BLEACHERS**

Aluminum bleachers shall be standard ADA bleachers consisting of two ADA companion seats in the front row. Bleachers shall be anchored to concrete pads with a minimum of 1/2" x 3-3/4" expansion anchors at locations shown on the plans. Bleachers shall be:

Model No.: K73118 Standard ADA Bleachers or approved equal.

Dimensions: 5 rows high x 21' long

Color: Bleacher - Aluminum Alloy

Hardware: Hot Dipped Galvanized

Sealer: No Sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'



No. of units: (4)  
Attachment: Surface-mounted w/ expansion anchors  
Manufacturer: Tomark Sports (800) 959-1844  
P.O. Box 1088  
Corona, CA 92878

**3-11.1 ADA Aluminum Bleachers Installation.** ADA aluminum bleachers shall be located where shown on the plans. Install bleachers in accordance with manufacturer's instructions and recommendations. Install bleachers accurately and in the correct orientation and relationship with the concrete paving and ball field as shown on the drawings. Bleachers shall be affixed to the concrete paving with expansion anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the bleachers from damage throughout construction work.

**3-12 ALUMINUM BLEACHERS**

Aluminum bleachers shall be non-elevated aluminum angle frame bleachers. Bleachers shall be anchored to concrete pads with a minimum of 1/2" x 3-3/4" expansion anchors at locations shown on the plans. Bleachers shall be:

Model No.: K12104 Non-elevated Aluminum Angle Frame Bleachers or approved equal.

Dimensions: 5 rows high x 27' long

Color: Bleacher - Aluminum Alloy

Hardware : Hot Dipped Galvanized

Sealer: No Sealer

Anti-Graffiti: Manufacturer applied, type per Section 210 'Paint and Protective Coatings'

No. of units: (3)

Attachment: Surface-mounted w/ expansion anchors

Manufacturer: Tomark Sports (800) 959-1844  
P.O. Box 1088  
Corona, CA 92878

**3-12.1 Aluminum Bleachers Installation.** Aluminum bleachers shall be located where shown on the plans. Install bleachers in accordance with manufacturer's instructions and recommendations. Install bleachers accurately and in the correct orientation and relationship with the concrete paving and ball field as shown on the drawings. Bleachers shall be affixed to the concrete paving with expansion anchor bolts as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the bleachers from damage throughout construction work.

**3-13**

**ALUMINUM PLAYERS BENCH**

Aluminum player's bench shall be an aluminum players bench without back. Benches shall be set in concrete footing per details and at locations shown on the plans. Benches shall be:

Model No.: 1119-21 Aluminum Players Bench without Back or approved equal.

Dimensions: 10" wide x 21' long

Color: Bench - Aluminum Alloy

Support Posts and Hardware - Hot Dipped Galvanized

Sealer: No Sealer

No. of units: (4)

Attachment: Concrete footing

Manufacturer: PW Athletic Mfg. Co. (800) 669-2585  
Dave Bang Associates, Inc.  
1885 North Main Street  
Orange, CA 92865

**3-13.1**

**Aluminum Players Bench.** Aluminum players bench shall be located where shown on the plans. Install bleachers in accordance with manufacturer's instructions and recommendations. Install bleachers accurately and in the correct orientation and relationship with the concrete paving and ball field as shown on the drawings. Bleachers shall be installed in concrete footing as indicated on the drawings and per these special provisions.

Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair damage resulting from installation work. Protect the benches from damage throughout construction work.

**3-14**

**GENERAL INSTALLATION REQUIREMENTS**

Install all factory-fabricated landscape furnishings per manufacturer's specifications and recommendations. All components shall be firmly and permanently affixed to concrete surfaces or footings to the satisfaction of the Resident Engineer and in conformance with the manufacturer's instructions. Tamper-resistant epoxies or connectors shall be used to prevent theft.

See construction plans and details for location and layout. See section 220 – Site Furnishings, of these Special Provisions for model numbers of furnishings.

Apply anti-graffiti coating as required prior to installation on site, and after the appropriate curing time for all materials to avoid discoloration.

Clean-up: The site shall be kept clean and free of tools, trash, debris and installation materials on a daily basis. Material may be stored on-site during installation with appropriate protective measures and approval by the resident engineer.

Close out: contractor shall provide the City with one copy of complete manufacturers installation instructions and maintenance kit.

**3.15 PAYMENT**

**3-15.1** Payment for Site Furnishings shall be included in the lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all equipment, parts, attachments and incidentals as shown on the plans and as specified.

**3-15.2** Payment for Site Furnishings Installation shall be included in the lump sum bid price for Construction of Park improvements and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in assembling and installing the play equipment as shown on the plans and as specified and as directed by the Resident Engineer, including the removal and disposal of all the resulting materials.

**APPENDIX H**  
**SAMPLE OF PUBLIC NOTICES**



# CONSTRUCTION NOTICE

## PROJECT NAME

### The work will consist of:

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

### How your neighborhood may be impacted:

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

### Anticipated Construction Schedule

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

### Hours and Days of Operation

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

For questions related to this work

Call: (619) 533-4207

Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)

Visit: [sandiego.gov/CIP](http://sandiego.gov/CIP)



This information is available in alternative formats upon request.



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- The entire neighborhood project started in \_\_\_\_ and is anticipated to be complete in \_\_\_\_.

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For questions related to this work

Call: (619) 533-4207

Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)

Visit: [sandiego.gov/CIP](http://sandiego.gov/CIP)



This information is available in alternative formats upon request.

**APPENDIX I**

**WATER QUALITY TECHNICAL REPORT, JANUARY 21, 2016 BY NASLAND  
ENGINEERING**

# Water Quality Technical Report

For  
**Larsen Field Community Park**  
455 Sycamore Road,  
San Diego, CA 92173

Prepared For  
**Estrada Land Planning**  
225 Broadway, Suite 1160  
San Diego, CA 92101  
(619) 236-0143

Prepared by  
**Nasland Engineering**  
4740 Ruffner Street  
San Diego, CA 92111  
(858) 292-7770  
N.E. Job No. 114-113.1



January 21, 2016

A handwritten signature consisting of a horizontal line with two diagonal strokes crossing it.

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Samuel Waisbord	R.C.E. 78071	01-21-2016
		Date

## Table of Contents

<b>Section</b>	<b>Description</b>	<b>Page</b>
Table of Contents		1
1	Water Quality Technical Report	3
2	Project Summary	3
	2.1 Vicinity Map	3
	2.2 Project Description	3
	2.3 Existing Drainage Pattern	4
	2.4 Proposed Drainage Pattern	4
	2.5 Proposed BMP Site Map	5
3	Determine Applicable Permanent Storm Water BMP Requirements	5
	3.1 Permanent Storm Water BMP Requirements	5
	3.2 Construction Storm Water BMP Requirements	5
4	Identify Pollutants of Concern	5
	4.1 Identify Pollutants from the Project Area	5
	4.2 Identify Pollutants of Concern in Receiving Waters	6
	4.3 Primary Pollutants of Concern	6
5	Identify Conditions of Concern	7
6	Establish Permanent Storm Water Best Management Practices	7
	6.1 Low Impact Development BMPs	7
	6.1.1 Optimize the Site Layout	7
	6.1.2 Minimize Impervious Footprint	7
	6.1.3 Disperse Runoff to Adjacent Landscaping BMPs	8
	6.1.4 Construction Considerations	8
	6.1.5 Additional Considerations	8
	6.2 Source Control Best Management Practices	8
	6.2.1 Maintenance Bays	9
	6.2.2 Vehicle & Equipment Wash Areas	9
	6.2.3 Outdoor Processing Areas	9
	6.2.4 Retail & Non-Retail Fueling Areas	9
	6.2.5 Steep Hillside Landscaping	9
	6.2.6 Use Efficient Irrigation Systems & Landscape Design	9
	6.2.7 Design Trash Storage Areas to Reduce Pollution Contribution	9
	6.2.8 Design Outdoor Material Storage Areas to Reduce Pollution Contributions	9
	6.2.9 Design Loading Docks to Reduce Pollution Contribution	9
	6.2.10 Employ Integrated Pest Management Principles	10
	6.2.11 Provide Storm Water Conveyance System Stenciling & Signage	10
	6.2.12 Manage Fire Sprinkler System Discharges	10
	6.2.13 Manage Air Conditioning Condensate	10
	6.2.14 Use Non-Toxic Roofing Material Where Feasible	10
	6.2.15 Other Source Control Requirements	10
7	Treatment Control BMPs	10
	7.1 Self-Retaining Areas	10
	7.2 Catch Basin Inserts	11
	7.2.1 Sizing Criteria	11
8	Implementation and Maintenance Requirements	11
	8.1 Implementation of Proposed BMPs	11
	8.2 Permanent BMP Maintenance Agreement Requirements	11
9	Operation and Maintenance Schedule	12
	9.1 Storm Drain Stenciling	12
	9.2 Self-Retaining Areas	12
	9.3 Catch Basin Inserts	12
10	Engineer of Work	12
11	References	12



## *Appendices*

Appendix A: 2010 303(d) Waters

Appendix B: Region 9 Water Quality Basin Map

Appendix C: Storm Water Requirement Applicability Checklist

Appendix D: City of San Diego Storm Water Standards Manual Excerpts & BMP Sizing Calculations

Appendix E: BMP Site Map

Appendix F: Treatment Control BMPs

Appendix G: Permanent BMP Construction Form DS-563

Appendix H: Hydromodification Discussion

## 1 WATER QUALITY TECHNICAL REPORT

This Water Quality Technical Report (WQTR) has been written to comply with standards set forth in the 2007 MS-4 Permit and the City of San Diego Storm Water Standards Manual dated January 20, 2012. A “Storm Water Requirements Applicability Checklist” has been completed and it was determined that the Larsen Field Community Park Project is subject to Priority Development Project Permanent Storm Water BMP Requirements. As such, this report identifies information such as the project location, project description and pollutants of concern then describes how Permanent Storm Water BMPs, Treatment Control BMPs, Low Impact Development (LID) BMPs and Source Control BMPs will be implemented to meet the storm water requirements. As the project drainage is to an exempt Watershed system (Tijuana River), the project is exempt from Hydromodification.

## 2 PROJECT SUMMARY

The project summary section includes general information pertaining to the project such as a vicinity map, project description, descriptions of the existing and proposed drainage patterns, and a BMP Site Map.

### 2.1 VICINITY MAP:



Source: Google Earth

### 2.2 PROJECT DESCRIPTION

The Larsen Field Community Park project will be confined to an area encompassing approximately 15.75 acres. The proposed project disturbance area is 0.71 acres. The project proposes the construction of Larsen Field’s picnic and children’s play area, sidewalk improvements, and grind and overlay of the existing parking lot pavement for maintenance purposes. The scope of work includes demolition, grading, paving, installation of play area structures and safety surfacing, concrete player’s dugout, baseball fencing, benches, picnic tables, drinking fountain, planting, irrigation systems, drainage and other park amenities. In order to provide adequate site drainage, as well as meet the City of San Diego Storm Water Standard requirements, improvements such as self-retaining areas are incorporated into the design.

### **2.3 EXISTING DRAINAGE PATTERN**

The existing site encompasses approximately 15.75 acres of multi-purpose fields, landscaped areas, asphalt concrete parking lots, Portland cement concrete walkways, resilient surface/sand play areas and the Cesar Chavez Community Center. The existing site consists of approximately 20% impervious surfaces and 80% pervious surfaces; the majority of the pervious surfaces are sodded multi-purpose fields. The Larsen Field Community Park is self-retaining in that most of the site drains to the surrounding multi-purpose fields and landscape areas and is contained onsite. The Cesar Chavez Community Center and adjacent sidewalks currently drain to the northern parking lot and sheet flows downhill towards an existing cross gutter along the northerly edge of the property. The cross gutter collects the storm water and directs it east to the adjacent property, Rancho Del Rio Estates, where another cross gutter carries and discharges the storm water into the Tijuana River.

The southeast portion of the project contains a baseball field, landscaped areas, asphalt concrete walkways and an asphalt concrete parking lot. The existing asphalt concrete walkways behind the baseball field currently allows storm water to sheet flow onto the baseball infield where it ponds. The westerly parking lot that abuts the asphalt concrete walkways and landscaped areas are bounded by asphalt curbs that direct water into existing grated inlets where storm drain laterals direct storm water underneath to nearby public storm drain mains that discharge into the Tijuana River.

### **2.4 PROPOSED DRAINAGE PATTERN**

The Larsen Field Community Park Project proposes the replacement and construction of concrete walkways, resilient surface children's play areas, concrete player's dugouts, small picnic areas, parking lot maintenance resurfacing, and landscape and irrigation improvements. The proposed site design consist of approximately 20% impervious surfaces and 80% pervious surfaces. Although the project will be confined to an area encompassing approximately 31,000 SF (0.71 acres), the design of the drainage systems should incorporate Priority Development Project Permanent Storm Water BMP Requirements. All existing paving that is to remain and be protected in place will continue to drain into landscaped areas and into the northern parking lot where it will enter the cross gutter and discharges offsite. In areas where pavement is being replaced or constructed storm water will be directed into surrounding landscaped areas. It was the intent to grade the sidewalks in the same direction as current flow patterns to limit any disturbances in drainage patterns while also allowing water to flow to existing and proposed landscaped areas. The proposed resilient surface children's play areas will also drain towards landscaped areas by installing underdrains. All newly proposed and replaced concrete surfaces will direct storm water towards multi-purpose fields and landscape areas where it will be retained onsite.

The southern portion of the project proposes the replacement of existing asphalt walkway and construction of concrete walkway, concrete player's dugouts, and parking lot maintenance resurfacing. Although this portion of the project is confined to approximately 5,000 SF it is still a part of the Larsen Field Community Park Project meaning that the design of the drainage system should incorporate Priority Development Project Permanent Storm Water BMP Requirements. All existing paving that is to remain and be protected in place will continue to drain towards the grated inlets and into the storm drain laterals.

Refer to the "Hydrology Study for Larsen Field Community Park" prepared by Nasland Engineering dated January 15, 2016 for a map of proposed hydrologic conditions.

## **2.5 PROPOSED BMP SITE MAP**

See the **Proposed BMP Site Map** exhibit located in Appendix E.

## **3 DETERMINE APPLICABLE STORM WATER BMP REQUIREMENTS**

Storm water BMP requirements for the project have been determined by completing the City of San Diego Storm Water Requirements Applicability Checklist, form DS-560, located in Appendix C of this report. Section 1 of the checklist identifies the Larsen Field Community Park project as a Priority Project due to the fact that the existing site is a commercial development greater than 1 acre and the project is a significant redevelopment that installs and replaces 5,000 square feet or more of impervious surface. The actual project disturbance area is only 0.71 acres. Section 2 of the checklist indicates that this is a “low priority” project and a WPCP will be required prior to the commencement of construction activities in order to mitigate potential storm water pollution and erosion.

### **3.1 PERMANENT STORM WATER BMP REQUIREMENTS**

Per the City of San Diego Storm Water Standards Manual, projects subject to Priority Development Project Requirements must incorporate all applicable requirements in Section 4 of the manual, “Required Permanent Best Management Practices for Priority Development Projects” into the project design. This includes the Low Impact Development (LID) BMPs, Source Control BMPs, BMPs applicable to individual Priority Development Project categories, and Treatment Control BMPs.

- Low Impact Development (LID) BMPs – *Required*
- Source Control BMPs – *Required*
- BMPs Applicable to Individual Priority Development Project Categories – *Required*
- Treatment Control BMPs – *Required*

### **3.2 CONSTRUCTION STORM WATER BMP REQUIREMENTS**

The project will disturb an area of approximately 0.71 acres, and must provide a Water Pollution Control Plan (WPCP), which identifies all construction BMP requirements required. A WPCP for the project shall be prepared by the Site Contractor.

## **4 IDENTIFY POLLUTANTS OF CONCERN**

This report shall identify the San Diego Regional Water Quality Control Board Watershed Basin, determine the impaired 303(d) receiving waters, and compare the impaired receiving waters to the anticipated project site pollutants.

### **4.1 IDENTIFY POLLUTANTS FROM THE PROJECT AREA**

The project will generate anticipated and potential pollutants characteristic of a commercial development as identified in Table 4-1 of the City of San Diego Storm Water Standards Manual.

Anticipated pollutants for the project include:

- Heavy Metals
- Trash & Debris

- Oil & Grease

Potential pollutants for the project include:

- Sediments
- Nutrients
- Organic Compounds
- Oxygen Demanding Substances
- Bacteria and Viruses
- Pesticides

#### **4.2 IDENTIFY POLLUTANTS OF CONCERN IN RECEIVING WATERS**

According to the *San Diego Region 9 Water Quality Plan* located in Appendix B, the project has receiving waters located within the Tijuana Valley Hydrologic Area as indicated below:

- Tijuana Hydrologic Unit (HU 911.00)
  - Hydrologic Area - Tijuana Valley
  - Hydrologic Sub-Area - San Ysidro (HA 911.11)

The downstream bodies of water associated with this project are the Tijuana River, Tijuana River Estuary, and Pacific Ocean Shoreline that is located approximately 0.3 miles south of the site. These waters are listed in Section 303(d) as a contaminated or stressed by the following:

The Tijuana River (911.11) is polluted/stressed by the following contaminants:

- Eutrophic
- Indicator Bacteria
- Low Dissolved Oxygen
- Pesticides
- Phosphorus
- Sediments
- Selenium
- Solids
- Synthetic Organics
- Total Nitrogen
- Toxicity
- Trace Elements
- Trash

As a reference, the “2010 CWA Section 303(d) List of Water Quality Limited Segments”, approved by USEPA October 11, 2011, has been attached in Appendix A.

#### **4.3 PRIMARY POLLUTANTS OF CONCERN**

The primary pollutants of concern are pollutants that are anticipated/potential for the project and present in downstream impaired waterbodies. The primary pollutants of concern for this project are sediments, pesticides, and trash & debris.

Anticipated/Potential Pollutants Generated by Project	Pollutants in Receiving Waters 303(d)	Primary Pollutants of Concern
Sediment Nutrients Heavy Metals Organic Compounds Trash and Debris Oxygen Demanding Substances Oil and Grease Bacteria and Viruses Pesticides	Eutrophic Indicator Bacteria Low Dissolved Oxygen Pesticides Phosphorus Sediment Selenium Solids Surfactants Synthetic Organics Total Nitrogen Toxicity Trace Elements Trash	Sediment Trash and Debris Pesticides

## **5 IDENTIFY CONDITIONS OF CONCERN**

The existing site encompasses approximately 15.75 acres and primarily consists of a previously graded park area with a majority of the site covered by grass, along with an existing structure and parking lot on site. There are no natural habitats, creeks or streams on the project site. The project site elevation ranges from approximately 45' to 50'. No conditions of concern are anticipated for the proposed project.

## **6 ESTABLISH PERMANENT STORM WATER BEST MANAGEMENT PRACTICES**

The project must meet Standard and Priority Project Permanent Storm Water BMP Requirements, which include Low Impact Development (LID) BMPs, Source Control BMPs and Treatment Control BMPs.

### **6.1 LOW IMPACT DEVELOPMENT (LID BMPS)**

This project will incorporate applicable Low Impact Development principles into the site design to the Maximum Extent Practical. These LID features attempt to mimic predevelopment hydrologic conditions for the water quality design storm.

#### **6.1.1 OPTIMIZE THE SITE LAYOUT**

The project does not propose significant grade changes and will closely match the existing topography. The amount of grading proposed is limited to what is necessary to provide a park area while allowing for adequate site drainage. The proposed site design consist of approximately 20% impervious surfaces and 80% pervious surfaces. The proposed resilient surface children's play areas will also drain towards landscaped areas by installing underdrains. All newly proposed and replaced concrete surfaces with direct storm water towards multi-purpose fields and landscape areas where it will be retained onsite.

#### **6.1.2 MINIMIZE IMPERVIOUS FOOTPRINT**

The project minimizes the proposed impervious footprint through incorporation of landscaping, and self-retaining areas into the site design. The concrete walkways will be constructed to minimize width. These areas are very small with respect to the overall size of the project site and they have been designed such that they sheet flow to adjacent pervious landscaping and will not have a significant impact on the site's water quality.

### **6.1.3 DISPERSE RUNOFF TO ADJACENT LANDSCAPING BMPS**

All impervious surfaces such as parking areas, playground areas, and concrete hardscape improvements will surface drain into adjacent pervious landscaping or be routed to the self-retaining areas.

### **6.1.4 CONSTRUCTION CONSIDERATIONS**

Prior to final landscape installation in areas disturbed due to construction and where landscaping will be placed, the subsoils below the topsoil layer shall be scarified at least 6 inches. If an upper layer of topsoil exists or is imported, incorporate the upper or topsoil material to avoid stratified layers. Landscape topsoil improvements play a significant role in maintaining plant and lawn health and improve the soil's capacity to retain moisture, which will reduce runoff from the water quality design storm and improve water quality. The City of San Diego Landscape regulations should be adhered to for landscape areas.

### **6.1.5 ADDITIONAL CONSIDERATIONS**

This project does not propose creation of or modifications to slopes, therefore no additional slope stabilization measures are proposed. The project does not propose discharges to unlined channels.

## **6.2 SOURCE CONTROL BEST MANAGEMENT PRACTICES**

Source control best management practices aim to minimize pollutants generated by everyday activities such as trash recycling and disposal and the washing of vehicles and equipment. These practices specify required design features for proposed site elements that can potentially contaminate storm water run-off. The City of San Diego Storm Water Standards Manual requires that the following features utilize specific designs to reduce pollution:

- Maintenance Bays
- Vehicle & Equipment Wash Areas
- Outdoor Processing Areas
- Retail and Non-Retail Fueling Areas
- Steep Hillside Landscaping
- Use Efficient Irrigation Systems & Landscape Design
- Design Trash Storage Areas to Reduce Pollution Contribution
- Design Outdoor Material Storage Areas to Reduce Pollution Contribution
- Design Loading Docks to Reduce Pollution Contribution
- Employ Integrated Pest Management Principles
- Provide Storm Water Conveyance System Stamping & Signage
- Manage Fire Sprinkler System Discharges
- Manage Air Conditioning Condensate

- Use Non-Toxic Roofing Materials Where Feasible
- Other Source Control Requirements

#### **6.2.1 MAINTENANCE BAYS**

The project does not propose maintenance bays.

#### **6.2.2 VEHICLE & EQUIPMENT WASH AREAS**

The project does not propose vehicle & equipment wash areas.

#### **6.2.3 OUTDOOR PROCESSING AREAS**

The project does not propose outdoor processing areas.

#### **6.2.4 RETAIL & NON-RETAIL FUELING AREAS**

The project does not propose any fueling areas.

#### **6.2.5 STEEP HILLSIDE LANDSCAPING**

The project does not propose any steep hillside landscaping areas.

#### **6.2.6 USE EFFICIENT IRRIGATION SYSTEMS & LANDSCAPE DESIGN**

Irrigation and landscape design has been performed by a Landscape Architect. Additionally, irrigation systems will be designed and constructed by professionals to match the specific water requirements of each individual landscape area. Plants with similar watering requirements will be grouped together in order to reduce excess irrigation runoff. Design timing and application methods of irrigation water will be practiced to minimize the runoff of excess irrigation water into the storm water drainage system. Rainfall sensors will be installed to monitor and prevent the use of the irrigation system during or after precipitation events. Shutoff valves shall be installed to stop irrigation flows after a pressure drop caused by a potential broken line. For additional information on efficient irrigation and landscape design areas see Fact Sheets SD-10 and SD-12 located in Appendix F of this report.

#### **6.2.7 DESIGN TRASH STORAGE AREAS TO REDUCE POLLUTION CONTRIBUTION**

Trash receptacles and enclosures shall be covered.

#### **6.2.8 DESIGN OUTDOOR MATERIAL STORAGE AREAS TO REDUCE POLLUTION CONTRIBUTION**

The project does not propose outdoor material storage areas.

#### **6.2.9 DESIGN LOADING DOCKS TO REDUCE POLLUTION CONTRIBUTION**

The project does not propose any loading dock areas.



#### **6.2.10 EMPLOY INTEGRATED PEST MANAGEMENT PRINCIPLES**

Integrated Pest Management (IPM) shall be utilized for long term prevention of pests. An effort to reduce the need for pesticide use shall be made by using pest-resistant plantings where practical including native plants. Pesticides should only be used after monitoring indicates that they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Plant selections have been made through consideration of the current available information on plant maintenance, including responsible selections of pest-resistant plantings.

#### **6.2.11 PROVIDE STORM WATER CONVEYANCE SYSTEM STENCILING AND SIGNAGE**

All proposed storm drain system catch basins shall be labeled or stamped with prohibitive storm water dumping language such as, "No Dumping Drains to Ocean". Where practical, signage with prohibitive storm water dumping language shall also be posted near storm drain system catch basins.

#### **6.2.12 MANAGE FIRE SPRINKLER SYSTEM DISCHARGES**

The project does not propose fire sprinkler systems.

#### **6.2.13 MANAGE AIR CONDITIONING CONDENSATE**

The project does not propose air conditioning units.

#### **6.2.14 USE NON-TOXIC ROOFING MATERIAL WHERE FEASIBLE**

The project utilizes non-toxic roofing materials. No composite roofing materials or galvanized steel or copper roofs, gutters or downspouts are proposed.

#### **6.2.15 OTHER SOURCE CONTROL REQUIREMENTS**

All proposed surfaces will be stabilized with landscaping, decomposed granite, asphalt or concrete so no additional soil stabilization practices are anticipated. Pet waste collection dispensers are applicable to the project.

### **7 TREATMENT CONTROL BMPS**

Treatment control BMPs are designed to remove pollutants contained in storm water runoff. The primary pollutants of concern for this project are trash & debris, nutrients and oxygen demanding substances; therefore, the proposed treatment control BMPs will be designed to provide pollutant removal efficiencies as designated in Table 4-3 of the Storm Water Standards Manual. Proposed treatment control BMPs for this project include self-retaining areas and catch basin insert filters.

#### **7.1 SELF-RETAINING AREAS**

Self-retaining areas are pervious surfaces such as landscaping areas that will hold all runoff without discharge into the storm drain system. The majority of the northern portion of the project site will be

self-retaining. The City of San Diego Stormwater Standards Manual, Section 4.5.6., states that a self-retaining is sufficiently sized if the ratio of impervious to pervious area does not exceed 2:1.

## **7.2 CATCH BASIN INSERTS**

Catch basin insert filters are proposed for DMA 7, since the impervious area to pervious area cannot meet the required 2:1 for a self-retaining area. Filters are proposed in the drop inlets prior to the flow discharging into the downstream storm drain system. DMA 7 had no opportunity for any LID BMP's, therefore catch basin inserts are proposed to provide filtration prior to entering the storm drain system.

For more information, refer to the Triton Catch Basin Documents located in Appendix F of this report.

### **7.2.1 SIZING CRITERIA**

Drainage Area	BMP Designation	Total Pervious Area (SF)	Total Impervious Area (SF)	Ratio of Tributary to Self-Retaining Area (Imperv./Perv.)	Impervious to Pervious Ratio (2:1 MAX)	Treatment Flow Rate for Catch Basin Inserts (cfs)
DMA 1-A	Self-Retaining Area	483	267	0.6	YES	N/A
DMA 1-B	Self-Retaining Area	1,088	962	0.9	YES	N/A
DMA 1-C	Self-Retaining Area	1,130	870	0.8	YES	N/A
DMA 1-D	Self-Retaining Area	820	880	1.1	YES	N/A
DMA 1-E	Self-Retaining Area	1,473	1,097	0.7	YES	N/A
DMA 2-A	Self-Retaining Area	151,735	12,210	0.1	YES	N/A
DMA 3-A	Catch Basin Insert	0	1,000	0	N/A	0.004
DMA 3-B	Catch Basin Insert	0	475	0	N/A	0.002
DMA 3-C	Catch Basin Insert	0	1,320	0	N/A	0.005
DMA 3-D	Undisturbed Drainage	0	870	0	N/A	N/A
DMA 3-E	Self-Retaining Area (2-A)	500	390	0.8	YES	N/A
DMA 3-F	Undisturbed Drainage	0	430	0	N/A	N/A

- Impervious to Pervious Ratio = (Impervious Area / Pervious Area)

- City of San Diego Stormwater Standards Manual, Section 4.5.6., states a maximum ratio of 2:1

- Treatment Flow Rate = (Drainage Area)\*(0.2 in/hr)\*(0.85) =  $Q_{Treatment}$

- Appendix F provides treatment capacity of a 18"x18" Triton Drop Inlet of 142 gpm

(142 gallons/min)\*(0.1337 cubic feet/1 gallon)\*(1 min/60sec) = 0.316 cubic feet/sec

## **8 IMPLEMENTATION AND MAINTENANCE REQUIREMENTS**

### **8.1 IMPLEMENTATION OF PROPOSED BMPS**

The project will be built in a single phase of construction all proposed BMPS shall be installed as soon as project construction makes their installation possible.

### **8.2 PERMANENT BMP MAINTENANCE AGREEMENT REQUIREMENTS**

All permanent BMPs proposed by the project shall be privately maintained by the Parks and Recreation Department of the City of San Diego.

## **9 OPERATION AND MAINTENANCE SCHEDULE**

### **9.1 STORM DRAIN STENCILING**

Legibility of markers and signs should be maintained as needed.

### **9.2 SELF-RETAINING AREA**

Soils and plantings must be maintained, including routine pruning, replenishment of mulch, and weeding. The self-retaining areas should be inspected regularly and after storms. Erosion at inflow points must be repaired. The Parks and Recreation Department of City of San Diego shall be responsible for maintenance of all proposed self-retaining areas.

### **9.3 CATCH BASIN INSERTS**

The Parks and Recreation Department of City of San Diego shall be responsible for the maintenance of the catch basin inserts. Acceptance of catch basin inserts will be by City of San Diego Transportation and Stormwater.  
Refer to Appendix F for further information.

## **10 ENGINEER OF WORK**

This report was prepared under the supervision of Samuel Waisbord, PE, Project Manager for Nasland Engineering.



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Samuel Waisbord • RCE 78071 • Expires 09-30-17

## **11 REFERENCES**

The City of San Diego Storm Water Standards Manual, January 20, 2012.

Countywide Model SUSMP, January 08, 2011, Revised August 01, 2012.

CASQA Stormwater Best Management Practice Handbook, New Development and Redevelopment, January, 2003.

Water Quality Control Plan for the San Diego Basin

# **APPENDIX A**

## **2010 303(d) Waters**

2010 CALIFORNIA 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS\*

Category 5 criteria: 1) A water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.

\* USGS HUC= US Geological Survey Hydrologic Unit Code. Calwater = State Water Resources Control Board hydrological subunit area or even smaller planning watershed.

\*\* TMDL requirement status definitions for listed pollutants are: A= TMDL still required, B= being addressed by USEPA approved TMDL, C= being addressed by action other than a TMDL

\*\*\* Dates relate to the TMDL requirement status, so a date for A= TMDL scheduled completion date, B= Date USEPA approved TMDL, and C= Completion date for action other than a TMDL

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	POLLUTANT o POTENTIAL SOURCES Relevant Notes	ESTIMATED AREA ASSESSED	FIRST YEAR LISTED	TMDL REQUIREMENT STATUS**	DATE***
1	<u>Bodega HU, Bodega Harbor HA</u>	Bay & Harbor	11522000 / 18010111	<ul style="list-style-type: none"> <li><u>Invasive Species</u> <ul style="list-style-type: none"> <li>Source Unknown</li> </ul> </li> </ul>	810 Acres	2006	5A	2019
1	<u>Bodega HU, Estero Americano HA, Americano Creek</u>	River & Stream	11530000 / 18010111	<ul style="list-style-type: none"> <li><u>Nutrients</u> <ul style="list-style-type: none"> <li>Dairies</li> <li>Intensive Animal Feeding Operations</li> <li>Manure Lagoons</li> <li>Pasture Grazing-Riparian</li> <li>Range Grazing-Riparian</li> <li>Range Grazing-Upland</li> </ul> </li> </ul> <p>The Bodega HU, Estero Americano HA, Americano Creek includes the following Calwater Super Planning Watersheds (SPWs): 115.30010 and 115.30011. A Water Quality Attainment Strategy is attempting to increase voluntary measures for attainment of standards &amp; objectives, as was done in the Estero de San Antonio/Stemple Creek TMDL Water Quality Attainment Strategy, adopted by North Coast RWQCB in December 1997.</p>	38 Miles	1996	5A	2019
1	<u>Bodega HU, Estero Americano HA, estuary</u>	Estuary	11530012 / 18010111	<ul style="list-style-type: none"> <li><u>Nutrients</u> <ul style="list-style-type: none"> <li>Manure Lagoons</li> <li>Range Grazing-Riparian and/or Upland</li> </ul> </li> </ul> <p>The Bodega HU, Estero Americano HA, Americano Creek includes the following Calwater Super Planning Watersheds (SPWs): 115.30010 and 115.30011. A Water Quality Attainment Strategy is attempting to increase voluntary measures for attainment of standards &amp; objectives, as was done in the Estero de San Antonio/Stemple Creek TMDL Water Quality Attainment Strategy, adopted by North Coast RWQCB in December 1997.</p>	199 Acres	1996	5A	2019
				<ul style="list-style-type: none"> <li><u>Sedimentation/Siltation</u> <ul style="list-style-type: none"> <li>Erosion/Siltation</li> <li>Hydromodification</li> <li>Nonpoint Source</li> <li>Range Grazing-Riparian</li> <li>Removal of Riparian Vegetation</li> <li>Streambank Modification/Destabilization</li> </ul> </li> </ul> <p>A Water Quality Attainment Strategy is attempting to increase voluntary measures for attainment of standards &amp; objectives, as was done in the Estero de San Antonio/Stemple Creek TMDL Water Quality Attainment Strategy, adopted by North Coast RWQCB in December 1997.</p>	199 Acres	1992	5A	2019
1	<u>Campbell Cove</u>	Coastal & Bay Shoreline	11522000 / 18010111	<ul style="list-style-type: none"> <li><u>Indicator Bacteria</u> <ul style="list-style-type: none"> <li>Source Unknown</li> </ul> </li> </ul>	0.22 Miles	2006	5A	2019
1	<u>Clam Beach</u>	Coastal & Bay Shoreline	10820012 / 18010102	<ul style="list-style-type: none"> <li><u>Indicator Bacteria</u> <ul style="list-style-type: none"> <li>Source Unknown</li> </ul> </li> </ul>	1.3 Miles	2006	5A	2019
1	<u>Copco Lake</u>	Lake & Reservoir	10538021 / 18010206	<ul style="list-style-type: none"> <li><u>Cyanobacteria hepatotoxic microcystins</u> <ul style="list-style-type: none"> <li>Agriculture</li> <li>Dam Construction</li> <li>Drainage/Filling Of Wetlands</li> <li>Flow Regulation/Modification</li> <li>Habitat Modification</li> <li>Hydromodification</li> <li>Internal Nutrient Cycling (primarily lakes)</li> <li>Source Unknown</li> </ul> </li> </ul>	776 Acres	2006	5A	2019

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	POLLUTANT o POTENTIAL SOURCES Relevant Notes	ESTIMATED AREA ASSESSED	FIRST YEAR LISTED	TMDL REQUIREMENT STATUS**	DATE***
				<ul style="list-style-type: none"> <li>• <u>Lead</u> <ul style="list-style-type: none"> <li>o Nonpoint Source</li> <li>o Point Source</li> </ul> </li> </ul>	6.6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Nitrogen</u> <ul style="list-style-type: none"> <li>o Nonpoint Source</li> <li>o Point Source</li> <li>o Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6.6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Phosphorus</u> <ul style="list-style-type: none"> <li>o Source Unknown</li> </ul> </li> </ul>	6.6 Miles	2006	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Selenium</u> <ul style="list-style-type: none"> <li>o Natural Sources</li> <li>o Source Unknown</li> </ul> </li> </ul>	6.6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Toxicity</u> <ul style="list-style-type: none"> <li>o Nonpoint Source</li> <li>o Point Source</li> </ul> </li> </ul>	6.6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Turbidity</u> <ul style="list-style-type: none"> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6.6 Miles	2006	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Zinc</u> <ul style="list-style-type: none"> <li>o Nonpoint Source</li> <li>o Point Source</li> </ul> </li> </ul>	6.6 Miles	1996	5A	2019
9	<u>Telegraph Canyon Creek</u>	River & Stream	90911000 / 18070304	<ul style="list-style-type: none"> <li>• <u>Selenium</u> <ul style="list-style-type: none"> <li>o Natural Sources</li> <li>o Nonpoint Source</li> <li>o Point Source</li> </ul> </li> </ul>	10 Miles	2010	5A	2021
9	<u>Temecula Creek</u>	River & Stream	90251000 / 18070302	<ul style="list-style-type: none"> <li>• <u>Chlorpyrifos</u> <ul style="list-style-type: none"> <li>o Source Unknown</li> </ul> </li> <li>• <u>Copper</u> <ul style="list-style-type: none"> <li>o Source Unknown</li> <li>o Urban Runoff/Storm Sewers</li> </ul> </li> <li>• <u>Phosphorus</u> <ul style="list-style-type: none"> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff/Storm Sewers</li> </ul> </li> <li>• <u>Total Dissolved Solids</u> <ul style="list-style-type: none"> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff/Storm Sewers</li> </ul> </li> <li>• <u>Toxicity</u> <ul style="list-style-type: none"> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff-Industrial Permitted</li> </ul> </li> </ul>	44 Miles	2010	5A	2021
9	<u>Tijuana River</u>	River & Stream	91111000 / 18070305	<ul style="list-style-type: none"> <li>• <u>Eutrophic</u> <ul style="list-style-type: none"> <li>o Agriculture-animal</li> <li>o Onsite Wastewater Systems (Septic Tanks)</li> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff/Storm Sewers</li> <li>o Wastewater</li> </ul> </li> <li>• <u>Indicator Bacteria</u> <ul style="list-style-type: none"> <li>o Agriculture-animal</li> <li>o Onsite Wastewater Systems (Septic Tanks)</li> <li>o Unknown Nonpoint Source</li> <li>o Unknown Point Source</li> <li>o Urban Runoff/Storm Sewers</li> <li>o Wastewater</li> </ul> </li> </ul>	6 Miles	1996	5A	2019
					6 Miles	1992	5A	2010

REGION	WATER BODY NAME	WATER TYPE	WATERSHED* CALWATER / USGS HUC	POLLUTANT • POTENTIAL SOURCES <i>Relevant Notes</i>	ESTIMATED AREA ASSESSED	FIRST YEAR LISTED	TMDL REQUIREMENT STATUS**	DATE***
				<ul style="list-style-type: none"> <li>• <u>Low Dissolved Oxygen</u> <ul style="list-style-type: none"> <li>◦ Agriculture-animal</li> <li>◦ Unknown Nonpoint Source</li> <li>◦ Unknown Point Source</li> <li>◦ Urban Runoff/Storm Sewers</li> <li>◦ Wastewater</li> </ul> </li> </ul>	6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Pesticides</u> <ul style="list-style-type: none"> <li>◦ Agriculture</li> <li>◦ Unknown Nonpoint Source</li> <li>◦ Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Phosphorus</u> <ul style="list-style-type: none"> <li>◦ Agriculture-animal</li> <li>◦ Municipal Point Sources</li> <li>◦ Nonpoint Source</li> <li>◦ Out-of-state source</li> <li>◦ Point Source</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Sedimentation/Siltation</u> <ul style="list-style-type: none"> <li>◦ Channel Erosion</li> <li>◦ Erosion From Derelict Land</li> <li>◦ Erosion/Siltation</li> <li>◦ Natural Sources</li> <li>◦ Streambank Modification/Destabilization</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Selenium</u> <ul style="list-style-type: none"> <li>◦ Natural Sources</li> <li>◦ Source Unknown</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Solids</u> <ul style="list-style-type: none"> <li>◦ Unknown Nonpoint Source</li> <li>◦ Unknown Point Source</li> <li>◦ Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Surfactants (MBAS)</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Synthetic Organics</u> <ul style="list-style-type: none"> <li>◦ Major Industrial Point Source</li> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> <li>◦ Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6 Miles	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Total Nitrogen as N</u> <ul style="list-style-type: none"> <li>◦ Natural Sources</li> <li>◦ Source Unknown</li> <li>◦ Unknown Nonpoint Source</li> <li>◦ Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Toxicity</u> <ul style="list-style-type: none"> <li>◦ Unknown Nonpoint Source</li> <li>◦ Unknown Point Source</li> <li>◦ Urban Runoff/Storm Sewers</li> </ul> </li> </ul>	6 Miles	2010	5A	2021
				<ul style="list-style-type: none"> <li>• <u>Trace Elements</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul>	6 Miles	1998	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Trash</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul>	6 Miles	1998	5A	2019
9	<u>Tijuana River Estuary</u>	Estuary	91111000 / 18070305	<ul style="list-style-type: none"> <li>• <u>Eutrophic</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul> <p><i>Estimated size of impairment is 1 acre.</i></p> <ul style="list-style-type: none"> <li>• <u>Indicator Bacteria</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul> <p><i>Estimated size of impairment is 150 acres.</i></p>	1319 Acres	1996	5A	2019
				<ul style="list-style-type: none"> <li>• <u>Indicator Bacteria</u> <ul style="list-style-type: none"> <li>◦ Nonpoint Source</li> <li>◦ Point Source</li> </ul> </li> </ul> <p><i>Estimated size of impairment is 150 acres.</i></p>	1319 Acres	1988	5A	2010

# Final California 2010 Integrated Report( 303(d) List/305(b) Report)

## Supporting Information

### Regional Board 9 - San Diego Region

Water Body Name: Tijuana River  
Water Body ID: CAR9111100019990208133940  
Water Body Type: River & Stream

DECISION ID 17916 Region 9  
Tijuana River

Pollutant: **Benthic Community Effects**  
Final Listing Decision: **Do Not List on 303(d) list (TMDL required list)**  
Last Listing Cycle's Final Listing Decision: **New Decision**  
Revision Status: **Revised**  
Impairment from Pollutant or Pollution: **Pollutant**

**Conclusion:** Benthic Community Effects is being considered for placement on the section 303(d) list under sections 3.9 and 3.2 of the Listing Policy. Under section 3.9, an additional line of evidence associating the Benthic Community Effects with a water or sediment concentration of pollutants is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this indicator. 4 of 4 samples exceeded the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing Benthic Community Effects in this water segment on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. 4 of 4 samples exceeded the Index of Biological Integrity (IBI) value of "poor" water quality for this area and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of 5 samples is needed for application of Table 3.2.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):**

### Line of Evidence (LOE) for Decision ID 17916, Benthic Community Effects Tijuana River Region 9

LOE ID: 27032

Pollutant: **Benthic Community Effects**  
LOE Subgroup: **Adverse Biological Responses**  
Matrix: **Water**  
Fraction: **None**

Beneficial Use: **Warm Freshwater Habitat**

Number of Samples: 4  
Number of Exceedances: 4

Data and Information Type: **Benthic macroinvertebrate surveys**  
Data Used to Assess Water Quality: **Four samples of IBI data were taken from May 2003 to May 2007 at one sampling site. Of the total number of samples, all four of the samples exceeded the IBI impairment threshold.**  
Data Reference: **Stream Bioassessment Data, Co-permittee Data, Collected 2002-2007**

Water Quality Objective/Criterion: **From the San Diego Basin Plan the objective is: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.**

Objective/Criterion Reference: **Water Quality Control Plan for the San Diego Basin**

Evaluation Guideline: **The Index of Biological Integrity (IBI) is an analytical tool that can be used to assess the biological and physical condition of streams and rivers within a zero to one hundred scoring range: Very Poor 0-19, Poor 20-39, Fair 40-59, Good 60-79, Very Good 80-100. The IBI score of 39 was set as an impairment threshold because it is a statistical criterion of two standard deviations below the mean reference site score which defines the boundary between 'fair' and 'poor' IBI creek conditions. (Ode, p. 9)**

Guideline Reference: **"A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams". Environmental Management, Volume 35, number 1 (2005): 1-13.**

Spatial Representation: **Samples were collected at one site: TJ-DM&BF on Tijuana River.**



Temporal Representation:  
 Environmental Conditions:  
 QAPP Information:  
 QAPP Information Reference(s):

Sampling occurred during May from 2003 to 2007.  
 Quality Control for collection and identification was conducted in accordance with the Quality Assurance Manual for Freshwater Bioassessment.  
[Quality Assurance Manual for Freshwater Bioassessment Revision 0](#)

**DECISION ID** 16536 **Region 9**  
**Tijuana River**

**Pollutant:** Phosphorus  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** New Decision  
**Revision Status:** Revised  
**Sources:** Agriculture-animal | Municipal Point Sources | Nonpoint Source | Out-of-state source | Point Source  
**Expected TMDL Completion Date:** 2021  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of 17 of the samples exceed the Basin Plan water quality objective for Phosphorus.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of 17 of the samples exceed the Basin Plan water quality objective for Phosphorus and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 16536, Phosphorus** **Region 9**  
**Tijuana River**

**LOE ID:** 7382

**Pollutant:** Phosphorus  
**LOE Subgroup:** Pollutant-Water  
**Matrix:** Water  
**Fraction:** None

**Beneficial Use:** Warm Freshwater Habitat

**Number of Samples:** 2  
**Number of Exceedances:** 2

**Data and Information Type:** Fixed station physical/chemical monitoring (conventional pollutants only)  
**Data Used to Assess Water Quality:** Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

**Data Reference:** [Monitoring data for Region 9](#)

**Water Quality Objective/Criterion:** Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)  
 Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)

**Objective/Criterion Reference:** [Water Quality Control Plan for the San Diego Basin](#)

**Evaluation Guideline:**  
**Guideline Reference:** [Water Quality Control Plan for the San Diego Basin](#)

**Spatial Representation:** Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.

**Temporal Representation:** The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.  
**Environmental Conditions:** The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.

**QAPP Information:** Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

**QAPP Information Reference(s):** [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

## Tijuana River

LOE ID:	7381
Pollutant:	Phosphorus
LOE Subgroup:	Pollutant-Water
Matrix:	Water
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	15
Number of Exceedances:	15
Data and Information Type:	Fixed station physical/chemical monitoring (conventional pollutants only)
Data Used to Assess Water Quality:	All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006.
Data Reference:	<u>Urban Runoff Monitoring, Volume 1- Final Report</u>
Water Quality Objective/Criterion:	Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007) Water Quality Control Plan for the San Diego Basin Goal of 0.1 mg/L for total phosphorus in streams and other flowing waters. (RWQCB, 2007)
Objective/Criterion Reference:	<u>Water Quality Control Plan for the San Diego Basin</u>
Evaluation Guideline:	
Guideline Reference:	<u>Water Quality Control Plan for the San Diego Basin</u>
Spatial Representation:	Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.
Temporal Representation:	Samples were collected two to four times a year from 2001-2006.
Environmental Conditions:	Samples were collected during wet weather.
QAPP Information:	QA/QC conducted according to Weston Solutions QA Plan.
QAPP Information Reference(s):	<u>Weston Solutions, 2004. Quality Management Manual, March 2004 (Revised December 2009).</u>

## DECISION ID

16916

Region 9

## Tijuana River

Pollutant:	<b>Total Nitrogen as N</b>
Final Listing Decision:	<b>List on 303(d) list (TMDL required list)</b>
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status:	Revised
Sources:	Natural Sources   Source Unknown   Unknown Nonpoint Source   Urban Runoff/Storm Sewers
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 17 samples exceed the Basin Plan water quality objective for total nitrogen as N.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li> <li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li> <li>3. Seventeen of the 17 samples exceed the Basin Plan water quality objective for total nitrogen as N and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.</li> <li>4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li> </ol>
RWQCB Board Staff Decision:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
SWRCB Board Staff Decision:	After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.
USEPA Action (if applicable):	USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

## Line of Evidence (LOE) for Decision ID 16916, Total Nitrogen as N

Region 9

## Tijuana River

LOE ID: 7384

Pollutant: Total Nitrogen as N  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2  
 Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)  
 Data Used to Assess Water Quality: Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

Data Reference: [Monitoring data for Region 9](#)

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)  
 A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:  
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.

Temporal Representation: The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.  
 Environmental Conditions: The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

**Line of Evidence (LOE) for Decision ID 16916, Total Nitrogen as N** **Region 9**  
**Tijuana River**

LOE ID: 7383

Pollutant: Total Nitrogen as N  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 15  
 Number of Exceedances: 15

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)  
 Data Used to Assess Water Quality: All fifteen samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermitees Annual Progress Report, 2007. Samples were collected two to four times a year from 2001-2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

Water Quality Objective/Criterion: Water bodies shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. (RWQCB, 2007)  
 A desired goal in order to prevent plant nuisance in streams and other flowing waters appears to be 0.1 mg/L total phosphorus, P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1, on a weight to weight basis shall be used. (RWQCB, 2007)

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline:  
 Guideline Reference: [Water Quality Control Plan for the San Diego Basin](#)

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.

Temporal Representation: Samples were collected two to four times a year from 2001-2006.  
 Environmental Conditions: Samples were collected during wet weather.  
 QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.  
 QAPP Information Reference(s):

**Pollutant:** Toxicity  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** New Decision  
**Revision Status:** Revised  
**Sources:** Unknown Nonpoint Source | Unknown Point Source | Urban Runoff/Storm Sewers  
**Expected TMDL Completion Date:** 2021  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.6 of the Listing Policy. Under section 3.6 a single line of evidence is necessary to assess listing status.  
 Two lines of evidence are available in the administrative record to assess this pollutant. Seventeen of the 17 samples exceed the toxicity water quality objective for toxicity.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Seventeen of the 17 samples exceed the toxicity water quality objective for toxicity and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 16671, Toxicity** **Region 9**  
**Tijuana River**

**LOE ID:** 7507  
**Pollutant:** Toxicity  
**LOE Subgroup:** Toxicity  
**Matrix:** Water  
**Fraction:** None  
**Beneficial Use:** Warm Freshwater Habitat  
**Number of Samples:** 15  
**Number of Exceedances:** 15  
**Data and Information Type:** Ambient toxicity testing (chronic)  
**Data Used to Assess Water Quality:** Toxicity was observed in the following tests:  
 Hyalella azteca growth and survival test- Five of 15 samples collected were found to be toxic.  
 (Ceriodaphnia dubia test -15 of 15 samples were found to be toxic.)  
 Ceriodaphnia dubia; All 15 samples were toxic according to results in the San Diego County Municipal Copermitees Annual Progress Report, 2007.  
**Data Reference:** Samples from the river were collected from January 2002 through February 2006.  
Urban Runoff Monitoring, Volume 1- Final Report  
**Water Quality Objective/Criterion:** From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.  
**Objective/Criterion Reference:** Water Quality Control Plan for the San Diego Basin  
**Evaluation Guideline:** Samples were found to exhibit toxicity when the No Observed Effect Concentration (NOEC) or median lethal concentration (LC50) for any given species was estimated to be less than 100% of the test sample concentration.  
**Guideline Reference:** Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport. Order No. R9-2007-0001  
**Spatial Representation:** Samples were collected from the from the mass loading station on the Tijuana River and Hollister Street Bridge.  
**Temporal Representation:** Samples from the river were collected from January 2002 through February 2006.  
**Environmental Conditions:**  
**QAPP Information:** Quality control for the chemical analysis portion of this study was conducted in accordance Weston Solutions  
**QAPP Information Reference(s):** Weston Solutions, 2004, Quality Management Manual, March 2004 (Revised December 2009).

**Line of Evidence (LOE) for Decision ID 16671, Toxicity** **Region 9**  
**Tijuana River**

**LOE ID:** 25808  
**Pollutant:** Toxicity  
**LOE Subgroup:** Toxicity  
 e-Bidding Larsen Field ADA Improvements Phase II

Matrix: Sediment  
 Fraction: None

Beneficial Use: Warm Freshwater Habitat  
 Aquatic Life Use: Warm Freshwater Habitat

Number of Samples: 2  
 Number of Exceedances: 2

Data and Information Type: Ambient toxicity testing (chronic)  
 Data Used to Assess Water Quality: toxicity was observed in the Hyalella azteca survival and growth test-  
 Two samples were collected and both show significant toxicity levels according to results in the Surface Water Ambient Monitoring Program Report, 2007. The Tijuana River was sampled on May 31, 2005 and April 10, 2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

Water Quality Objective/Criterion: From the Basin Plan, all waters shall be free of toxic substances that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: According to SWAMP, waters are considered toxic when samples show significant toxicity levels (SWAMP code ? SL?) when compared to a negative control. Significant toxicity is determined when statistical tests result in an alpha of less than 5% and percent control values less than the evaluation threshold.

Guideline Reference: [Monitoring data for Region 9](#)

Spatial Representation: Samples were collected from the monitoring station Tijuana River 5 (station id: 911TTJR05 lat/long: 32.55132/-117.08439), located on the main stem of the Tijuana River.

Temporal Representation: The Tijuana River 5 monitoring station was sampled on May 31, 2005 and April 10, 2006.

Environmental Conditions:  
 QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002 Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, California Department of Fish and Game, Monterey, CA](#)

<b>DECISION ID</b>	<b>16649</b>	<b>Region 9</b>
<b>Tijuana River</b>		

**Pollutant:** Ammonia as Nitrogen  
**Final Listing Decision:** Do Not List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** New Decision  
**Revision Status:** Original  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.

Two lines of evidence are available in the administrative record to assess this pollutant. An unknown number of the 14 of the samples exceed the water quality objective for unionized ammonia as N. The wrong methodology was used to assess the data. The data will be assessed in the next listing cycle.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. An unknown number of the 14 of the samples exceed the water quality objective for unionized ammonia as N. The wrong methodology was used to assess the data.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded. The wrong methodology was used to assess the data. The data will be re-assessed during the next listing cycle.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):**

<b>Line of Evidence (LOE) for Decision ID 16649, Ammonia as Nitrogen</b>	<b>Region 9</b>
<b>Tijuana River</b>	

LOE ID: 7380

Pollutant: Ammonia as Nitrogen  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 2

Number of Exceedances: 2

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Two of two samples exceed the water quality objective according to results in the Surface Water Ambient Monitoring Program Report, 2007. Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005.

Data Reference: [Monitoring data for Region 9](#)

Water Quality Objective/Criterion: From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Guideline Reference:

Spatial Representation: Samples were collected at the monitoring station Tijuana River 5 on the main stem of the Tijuana River. (Station ID: 911TTJR05; lat/long: 32.55132/-117.08439)

Temporal Representation: Tijuana River 5 monitoring station was sampled on April 10, 2006 and May 31, 2005.

Environmental Conditions: The sampling event in April occurred during high base flow. The May sampling event occurred during declining base flow.

QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.

QAPP Information Reference(s): [2002 Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program, California Department of Fish and Game, Monterey, CA](#)

**Line of Evidence (LOE) for Decision ID 16649, Ammonia as Nitrogen** **Region 9**  
**Tijuana River**

LOE ID: 7193

Pollutant: Ammonia as Nitrogen

LOE Subgroup: Pollutant-Water

Matrix: Water

Fraction: None

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 12

Number of Exceedances: 10

Data and Information Type: Fixed station physical/chemical monitoring (conventional pollutants only)

Data Used to Assess Water Quality: Ten of twelve samples collected exceed the water quality objective according to results in the San Diego County Municipal Copermittes Annual Progress Report, 2007. Samples were collected two to four times a year from 2002-2006.

Data Reference: [Urban Runoff Monitoring, Volume 1- Final Report](#)

Water Quality Objective/Criterion: From the Basin Plan the WQO for un-ionized ammonia (NH3) for inland surface waters is 0.025mg/L (as N) (RWQCB, 2007).

Objective/Criterion Reference: [Water Quality Control Plan for the San Diego Basin](#)

Evaluation Guideline: Guideline Reference:

Spatial Representation: Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission's diversion structure and treatment plant.

Temporal Representation: Samples were collected two to four times a year from 2002-2006.

Environmental Conditions: Samples were collected during wet weather.

QAPP Information: QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.

QAPP Information Reference(s):

**DECISION ID** 4715 **Region 9**  
**Tijuana River**

**Pollutant:** Lead

**Final Listing Decision:** Do Not List on 303(d) list (TMDL required list)

**Last Listing Cycle's Final Listing Decision:** Do Not List on 303(d) list (TMDL required list)(2006)

**Revision Status:** Original

**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, oneline(s) of evidence is necessary to assess listing status.

One lines of evidence are available in the administrative record to assess this pollutant. Zero of zero samples exceeded the California Toxics Rule water quality objective for lead.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the California Toxics Rule water quality objective for lead and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met, EXCEPT that the information that is provided is based on visual observations and not supported by numerical data. Visual observation information alone is insufficient to place a water body segment pollutant combination on the section 303(d) list because it cannot be quantitatively determined if applicable water quality standards are met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):**

**Line of Evidence (LOE) for Decision ID 4715, Lead Tijuana River Region 9**

LOE ID:	3367
Pollutant:	Lead
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper written 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Water Quality Objective/Criterion:	Objectives are numeric, taken from CTR and Freshwater Sediment (Policy).
Objective/Criterion Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Evaluation Guideline:	From the CTR: Freshwater acute standard for lead is 64.58 ppb. Freshwater chronic standard is 2.52 ppb. The probable effects concentration for freshwater sediment is 128 ppm.
Guideline Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Spatial Representation:	The area with possible impairment is reported as the Tijuana River. Exact location was not reported.
Temporal Representation:	The letter suggesting impairment was written on 06/14/2004. Specific sample or study dates were not reported.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**DECISION ID 4714 Region 9**  
**Tijuana River**

<b>Pollutant:</b>	<b>Nickel</b>
<b>Final Listing Decision:</b>	<b>Do Not List on 303(d) list (TMDL required list)</b>
<b>Last Listing Cycle's Final Listing Decision:</b>	Do Not List on 303(d) list (TMDL required list)(2006)
<b>Revision Status</b>	Original
<b>Impairment from Pollutant or Pollution:</b>	Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero of the samples exceed the Basin Plan water quality objective for Nickel (observations were visual, not quantitative).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero of the samples exceed the Basin Plan water quality objective for Nickel and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to [SECTION 3.11/4.11] of the Listing Policy, no additional data and information are available indicating that standards are not met; EXCEPT that visual observation information was submitted for nickel, which alone is insufficient to place a water body segment pollutant combination on the section 303(d) list because it cannot be quantitatively determined if applicable water quality standards are met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):**

**Line of Evidence (LOE) for Decision ID 4714, Nickel** **Region 9**  
**Tijuana River**

LOE ID:	3368
Pollutant:	Nickel
LOE Subgroup:	Testimonial Evidence
Matrix:	Not Specified
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	0
Number of Exceedances:	0
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING
Data Used to Assess Water Quality:	From the letter from the San Diego Baykeeper written on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.
Data Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Water Quality Objective/Criterion:	The objectives are numeric.
Objective/Criterion Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Evaluation Guideline:	From the CTR: The freshwater acute criteria for nickel (when the water hardness is 100) is 468.24 ppb and the freshwater chronic criteria (hardness= 100) is 52.06 ppb. Human Health Criteria for water and organisms is 610 ppb. Freshwater sediment criteria is 48.6 ppm.
Guideline Reference:	<a href="#">Placeholder reference 2006 303(d)</a>
Spatial Representation:	The waterbody with a possible impairment is the Tijuana River. Exact location was not reported.
Temporal Representation:	The letter documenting a possible impairment was written on 06/14/2004. Temporal representation for samples or studies was not reported.
Environmental Conditions:	
QAPP Information:	QA Info Missing
QAPP Information Reference(s):	

**DECISION ID** **4712** **Region 9**  
**Tijuana River**

<b>Pollutant:</b>	<b>Thallium</b>
<b>Final Listing Decision:</b>	<b>Do Not List on 303(d) list (TMDL required list)</b>
<b>Last Listing Cycle's Final Listing Decision:</b>	Do Not List on 303(d) list (TMDL required list)(2006)
<b>Revision Status</b>	Original
<b>Impairment from Pollutant or Pollution:</b>	Pollutant



**Conclusion:** Thallium is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1, one line(s) of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Zero of zero of the samples exceed the California Toxics Rule water quality objective for Thallium.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Zero of zero samples exceeded the California Toxics Rule for thallium and this sample size is insufficient to determine with the power and confidence of the Listing Policy if standards are not met. A minimum of two samples is needed for application of table 3.1.
4. Pursuant to SECTION 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met; EXCEPT that the information that is provided is based on visual observations and not supported by numerical data. Visual observation information alone is insufficient to place a water body segment pollutant combination on the section 303(d) list because it cannot be quantitatively determined if applicable water quality standards are met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are not being exceeded.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):**

Line of Evidence (LOE) for Decision ID 4712, Thallium		Region 9
Tijuana River		
LOE ID:	3369	
Pollutant:	Thallium	
LOE Subgroup:	Testimonial Evidence	
Matrix:	Not Specified	
Fraction:	None	
Beneficial Use:	Municipal & Domestic Supply	
Number of Samples:	0	
Number of Exceedances:	0	
Data and Information Type:	PHYSICAL/CHEMICAL MONITORING	
Data Used to Assess Water Quality:	From the letter written by the San Diego Baykeeper on 06/14/2004: We recommend continued listing of this area for impairment by bacteria, low dissolved oxygen, eutrophication, pesticides, solids, synthetic organics, lead, nickel, thallium, and trash.	
Data Reference:	<a href="#">Placeholder reference 2006 303(d)</a>	
Water Quality Objective/Criterion:	The objective is numeric.	
Objective/Criterion Reference:	<a href="#">Placeholder reference 2006 303(d)</a>	
Evaluation Guideline:	From the CTR, the human health freshwater criteria for water and organisms is 1.7 ppb.	
Guideline Reference:	<a href="#">Placeholder reference 2006 303(d)</a>	
Spatial Representation:	The letter suggesting impairment describes the waterbody as the Tijuana River. Exact location of samples or studies was not reported.	
Temporal Representation:	Time of possible impairment was not reported. The letter suggesting impairment was written on 06/14/2004.	
Environmental Conditions:		
QAPP Information:	QA Info Missing	
QAPP Information Reference(s):		

DECISION ID 6298		Region 9
Tijuana River		
<b>Pollutant:</b>	Eutrophic	
<b>Final Listing Decision:</b>	List on 303(d) list (TMDL required list)	
<b>Last Listing Cycle's Final Listing Decision:</b>	List on 303(d) list (TMDL required list)(2006)	
<b>Revision Status</b>	Original	
<b>Sources:</b>	Agriculture-animal   Onsite Wastewater Systems (Septic Tanks)   Unknown Nonpoint Source   Unknown Point Source   Urban Runoff/Storm Sewers   Wastewater	
<b>Expected TMDL Completion Date:</b>	2019	
<b>Impairment from Pollutant or Pollution:</b>	Pollutant	
<b>Conclusion:</b>	303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.	

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 6298, Eutrophic** **Region 9**  
**Tijuana River**

LOE ID: 4740

Pollutant: Eutrophic  
LOE Subgroup: Pollutant-Water  
Matrix: Water  
Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0  
Number of Exceedances: 0

Data and Information Type: Not Specified  
Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified  
Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified  
Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified  
Temporal Representation: Unspecified  
Environmental Conditions: Unspecified  
QAPP Information: Unspecified  
QAPP Information Reference(s):

**DECISION ID 6299** **Region 9**  
**Tijuana River**

**Pollutant:** Indicator Bacteria  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** List on 303(d) list (TMDL required list)(2006)

**Revision Status:** Original  
**Sources:** Agriculture-animal | Onsite Wastewater Systems (Septic Tanks) | Unknown Nonpoint Source | Unknown Point Source | Urban Runoff/Storm Sewers | Wastewater

**Expected TMDL Completion Date:** 2010  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** N/A

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 6299, Indicator Bacteria** **Region 9**  
**Tijuana River**

LOE ID: 4741

Pollutant: Indicator Bacteria  
LOE Subgroup: Pollutant-Water  
Matrix: Water  
Fraction: Not Recorded

Beneficial Use: Water Contact Recreation

Number of Samples: 0  
Number of Exceedances: 0

Data and Information Type: PATHOGEN MONITORING  
Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified  
e-Bidding Larsen Field ADA Improvements Phase II  
Appendix I - Water Quality Technical Report, January 21, 2016 by Nasland Engineering

Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)  
 Evaluation Guideline: Unspecified  
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)  
 Spatial Representation: Unspecified  
 Temporal Representation: Unspecified  
 Environmental Conditions: Unspecified  
 QAPP Information: Unspecified  
 QAPP Information Reference(s):

DECISION ID	6301	Region 9
<b>Tijuana River</b>		
<b>Pollutant:</b>	<b>Low Dissolved Oxygen</b>	
<b>Final Listing Decision:</b>	<b>List on 303(d) list (TMDL required list)</b>	
<b>Last Listing Cycle's Final Listing Decision:</b>	List on 303(d) list (TMDL required list)(2006)	
<b>Revision Status</b>	Original	
<b>Sources:</b>	Agriculture-animal   Unknown Nonpoint Source   Unknown Point Source   Urban Runoff/Storm Sewers   Wastewater	
<b>Expected TMDL Completion Date:</b>	2019	
<b>Impairment from Pollutant or Pollution:</b>	Pollutant	
<b>Conclusion:</b>	303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.	
<b>RWQCB Board Staff Decision:</b>	No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.	
<b>SWRCB Board Staff Decision:</b>	After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.	
<b>USEPA Action (if applicable):</b>	USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.	

Line of Evidence (LOE) for Decision ID 6301, Low Dissolved Oxygen	Region 9
<b>Tijuana River</b>	
<b>LOE ID:</b>	4742
<b>Pollutant:</b>	Low Dissolved Oxygen
<b>LOE Subgroup:</b>	Pollutant-Water
<b>Matrix:</b>	Water
<b>Fraction:</b>	Not Recorded
<b>Beneficial Use:</b>	Warm Freshwater Habitat
<b>Number of Samples:</b>	0
<b>Number of Exceedances:</b>	0
<b>Data and Information Type:</b>	Not Specified
<b>Data Used to Assess Water Quality:</b>	Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.
<b>Data Reference:</b>	<a href="#">Placeholder reference pre-2006 303(d)</a>
<b>Water Quality Objective/Criterion:</b>	Unspecified
<b>Objective/Criterion Reference:</b>	<a href="#">Placeholder reference pre-2006 303(d)</a>
<b>Evaluation Guideline:</b>	Unspecified
<b>Guideline Reference:</b>	<a href="#">Placeholder reference pre-2006 303(d)</a>
<b>Spatial Representation:</b>	Unspecified
<b>Temporal Representation:</b>	Unspecified
<b>Environmental Conditions:</b>	Unspecified
<b>QAPP Information:</b>	Unspecified
<b>QAPP Information Reference(s):</b>	

DECISION ID	6302	Region 9
<b>Tijuana River</b>		
<b>Pollutant:</b>	<b>Pesticides</b>	
<b>Final Listing Decision:</b>	<b>List on 303(d) list (TMDL required list)</b>	
<b>Last Listing Cycle's Final Listing Decision:</b>	List on 303(d) list (TMDL required list)(2006)	
<b>Revision Status</b>	Original	
<b>Sources:</b>	Agriculture   Unknown Nonpoint Source   Urban Runoff/Storm Sewers	
<b>Expected TMDL Completion Date:</b>	2019	
<b>Impairment from Pollutant or Pollution:</b>	Pollutant	

**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 6302, Pesticides** **Region 9**  
**Tijuana River**

LOE ID: 4743

Pollutant: Pesticides  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0  
 Number of Exceedances: 0

Data and Information Type: Not Specified  
 Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified  
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified  
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified  
 Temporal Representation: Unspecified  
 Environmental Conditions: Unspecified  
 QAPP Information: Unspecified  
 QAPP Information Reference(s):

**DECISION ID** 16915 **Region 9**  
**Tijuana River**

**Pollutant:** Sedimentation/Siltation  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** New Decision

**Revision Status:** Original  
**Sources:** Channel Erosion | Erosion From Derelict Land | Erosion/Siltation | Natural Sources | Streambank Modification/Destabilization  
**Expected TMDL Completion Date:** 2021  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.7.2 of the Listing Policy. Under section 3.7.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Photos were collected by the Tijuana River National Estuarine Research Reserve. The photos were reviewed to assess sedimentation problem in the Tijuana River valley and estuary. Photos from February 13, 2008 Powerpoint presentation exhibit the sedimentation problem within the watershed. Aerial and ground level photographs show the changes that have occurred due to large storm events and over time. The occurrence of conditions judged to cause impairment and therefore exceed the water quality objective.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. The occurrence of conditions judged to cause impairment and therefore this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

## Tijuana River

LOE ID:	27012
Pollutant:	Sedimentation/Siltation
LOE Subgroup:	Pollutant-Nuisance
Matrix:	Sediment
Fraction:	None
Beneficial Use:	Warm Freshwater Habitat
Number of Samples:	
Number of Exceedances:	
Data and Information Type:	Occurrence of conditions judged to cause impairment
Data Used to Assess Water Quality:	Photos were collected by the Tijuana River National Estuarine Research Reserve. The photos were reviewed to assess sedimentation problem in the Tijuana River valley and estuary
Data Reference:	Photos from February 13, 2008 Powerpoint presentation exhibit the sedimentation problem within the watershed. Aerial and ground level photographs show the changes that have occurred due to large storm events and over time. <a href="#">Photographs of the sedimentation problem in the Tijuana River valley and estuary</a>
Water Quality Objective/Criterion:	Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.
Objective/Criterion Reference:	<a href="#">Water Quality Control Plan for the San Diego Basin</a>
Evaluation Guideline:	
Guideline Reference:	
Spatial Representation:	Information and photographs were collected at various locations in the Tijuana River watershed.
Temporal Representation:	Information and photographs were collected at various locations in the Tijuana River watershed all predating February 2008. One set of photos were before and after photographs dated May 10, 2003 and January 30, 2005.
Environmental Conditions:	
QAPP Information:	None
QAPP Information Reference(s):	

## DECISION ID

16650

## Tijuana River

Pollutant:	<b>Selenium</b>
Final Listing Decision:	<b>List on 303(d) list (TMDL required list)</b>
Last Listing Cycle's Final Listing Decision:	New Decision
Revision Status:	Original
Sources:	Natural Sources   Source Unknown
Expected TMDL Completion Date:	2021
Impairment from Pollutant or Pollution:	Pollutant
Conclusion:	<p>This pollutant is being considered for placement on the section 303(d) list under section 3.1 of the Listing Policy. Under section 3.1 a single line of evidence is necessary to assess listing status.</p> <p>Two lines of evidence are available in the administrative record to assess this pollutant. Two of two of the samples exceed the California Toxics Rule water quality objective for Selenium.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.</p> <p>This conclusion is based on the staff findings that:</p> <ol style="list-style-type: none"> <li>1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.</li> <li>2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.</li> <li>3. Two of two of the samples exceed the California Toxics Rule water quality objective for Selenium and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.</li> <li>4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.</li> </ol>
RWQCB Board Staff Decision:	After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.
SWRCB Board Staff Decision:	After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.
USEPA Action (if applicable):	USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

## Line of Evidence (LOE) for Decision ID 16650, Selenium

## Tijuana River

LOE ID:	21201
Pollutant:	Selenium
	e-Bidding Larsen Field ADA Improvements Phase II
	Appendix I - Water Quality Technical Report, January 21, 2016 by Nasland Engineering

LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: Dissolved  
 Beneficial Use: Warm Freshwater Habitat  
 Number of Samples: 2  
 Number of Exceedances: 2  
 Data and Information Type: Fixed station physical/chemical (conventional plus toxic pollutants)  
 Data Used to Assess Water Quality: Two water samples were collected at Tijuana River station 911TTJR05 on May 2004, September 2004, February 2005, and April 2005.  
 Data Reference: [Monitoring data for Region 9](#)  
 Water Quality Objective/Criterion: CTR Freshwater Chronic (CCC) 5 ug/L. (U.S. EPA, 2000).  
 All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life (RWQCB, 2007).  
 Objective/Criterion Reference: [Water Quality Standards 2000. Establishment of numeric criteria for priority toxic pollutants for the State of California. Rules and regulations. Federal Register Vol. 65, No. 97. Washington, D.C.: Environmental Protection Agency](#)  
[Water Quality Control Plan for the San Diego Basin](#)  
 Evaluation Guideline:  
 Guideline Reference:  
 Spatial Representation: Water samples were collected at Tijuana River station (911TTJR05).  
 Temporal Representation: Samples were collected on May 2004, September 2004, February 2005, and April 2005.  
 Environmental Conditions:  
 QAPP Information: Quality control for the chemical analysis portion of this study was conducted in accordance with the California's Surface Water Ambient Monitoring Program.  
 QAPP Information Reference(s): [2002. Quality Assurance Management Plan for the State of California's Surface Water Ambient Monitoring Program. California Department of Fish and Game, Monterey, CA](#)

**DECISION ID 6304 Region 9**  
**Tijuana River**

**Pollutant:** Solids  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** List on 303(d) list (TMDL required list)(2006)  
**Revision Status:** Original  
**Sources:** Unknown Nonpoint Source | Unknown Point Source | Urban Runoff/Storm Sewers  
**Expected TMDL Completion Date:** 2019  
**Impairment from Pollutant or Pollution:** Pollutant  
**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.  
**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.  
**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.  
**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 6304, Solids Region 9**  
**Tijuana River**

LOE ID: 4744  
 Pollutant: Solids  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: Not Recorded  
 Beneficial Use: Warm Freshwater Habitat  
 Number of Samples: 0  
 Number of Exceedances: 0  
 Data and Information Type: Not Specified  
 Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)  
 Water Quality Objective/Criterion: Unspecified  
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)  
 Evaluation Guideline: Unspecified  
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified  
 Temporal Representation: Unspecified  
 Environmental Conditions: Unspecified  
 QAPP Information: Unspecified  
 QAPP Information Reference(s): Unspecified

**DECISION ID** 16652 **Region 9**  
**Tijuana River**

**Pollutant:** Surfactants (MBAS)  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** New Decision  
**Revision Status:** Original  
**Sources:** Nonpoint Source | Point Source  
**Expected TMDL Completion Date:** 2021  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** This pollutant is being considered for placement on the section 303(d) list under section 3.2 of the Listing Policy. Under section 3.2 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess this pollutant. Six of 15 of the samples exceed the Basin Plan water quality objective for surfactants (MBAS).

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:

1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Six of 15 of the samples exceed the Basin Plan water quality objective for surfactants (MBAS) and this exceeds the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

**RWQCB Board Staff Decision:** After review of the available data and information, RWQCB staff concludes that the water body-pollutant combination should be placed on the section 303(d) list because applicable water quality standards are exceeded and a pollutant contributes to or causes the problem.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

**Line of Evidence (LOE) for Decision ID 16652, Surfactants (MBAS)** **Region 9**  
**Tijuana River**

**LOE ID:** 7512

**Pollutant:** Surfactants (MBAS)  
**LOE Subgroup:** Pollutant-Water  
**Matrix:** Water  
**Fraction:** None

**Beneficial Use:** Water Contact Recreation

**Number of Samples:** 15  
**Number of Exceedances:** 6

**Data and Information Type:** Fixed station physical/chemical monitoring (conventional pollutants only)  
**Data Used to Assess Water Quality:** Six of fifteen samples collected exceed the water quality objective. Since only four samples were collected at most in a one year period, any exceedance results in an annual exceedance frequency greater than 10%. All five years in which this water body was monitored found exceedances more than 10% of the time according to results in the San Diego County Municipal Copemitees Annual Progress Report, 2007. Samples were collected three times a year from 2001-2006.

**Data Reference:** [Urban Runoff Monitoring, Volume 1- Final Report](#)

**Water Quality Objective/Criterion:** From the Basin Plan the WQO for methylene blue ? activated substances (MBAS) for inland surface waters is 0.5mg/L. This concentration is not to be exceeded more than 10% of the time (RWQCB, 2007).

**Objective/Criterion Reference:** [Water Quality Control Plan for the San Diego Basin](#)

**Evaluation Guideline:**  
**Guideline Reference:**

**Spatial Representation:** Samples were collected at the mass loading station located near the lower boundary of the watershed under the Hollister Street Bridge in San Diego, downstream from the International Boundary and Water Commission?s diversion structure and treatment plant.

**Temporal Representation:** Samples were collected three times a year from 2001-2006.  
**Environmental Conditions:** Samples were collected during wet weather.  
**QAPP Information:** QA/QC conducted according to Federal Regulations under requirements of a NPDES permit.  
**QAPP Information Reference(s):**

**Pollutant:** Synthetic Organics  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** List on 303(d) list (TMDL required list)(2006)  
**Revision Status:** Original  
**Sources:** Major Industrial Point Source | Nonpoint Source | Point Source | Urban Runoff/Storm Sewers  
**Expected TMDL Completion Date:** 2019  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

<b>Line of Evidence (LOE) for Decision ID 6306, Synthetic Organics</b>	<b>Region 9</b>
<b>Tijuana River</b>	

**LOE ID:** 4745

**Pollutant:** Synthetic Organics  
**LOE Subgroup:** Pollutant-Water  
**Matrix:** Not Specified  
**Fraction:** Not Recorded

**Beneficial Use:** Municipal & Domestic Supply

**Number of Samples:** 0  
**Number of Exceedances:** 0

**Data and Information Type:** Not Specified  
**Data Used to Assess Water Quality:** Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
**Data Reference:** [Placeholder reference pre-2006 303\(d\)](#)

**Water Quality Objective/Criterion:** Unspecified  
**Objective/Criterion Reference:** [Placeholder reference pre-2006 303\(d\)](#)

**Evaluation Guideline:** Unspecified  
**Guideline Reference:** [Placeholder reference pre-2006 303\(d\)](#)

**Spatial Representation:** Unspecified  
**Temporal Representation:** Unspecified  
**Environmental Conditions:** Unspecified  
**QAPP Information:** Unspecified  
**QAPP Information Reference(s):**

<b>DECISION ID</b>	<b>6639</b>	<b>Region 9</b>
<b>Tijuana River</b>		

**Pollutant:** Trace Elements  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** List on 303(d) list (TMDL required list)(2006)  
**Revision Status:** Original  
**Sources:** Nonpoint Source | Point Source  
**Expected TMDL Completion Date:** 2019  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.



## Tijuana River

LOE ID: 4667

Pollutant: Trace Elements  
 LOE Subgroup: Pollutant-Water  
 Matrix: Water  
 Fraction: Not Recorded

Beneficial Use: Warm Freshwater Habitat

Number of Samples: 0  
 Number of Exceedances: 0

Data and Information Type: Not Specified  
 Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified  
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified  
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified  
 Temporal Representation: Unspecified  
 Environmental Conditions: Unspecified  
 QAPP Information: Unspecified  
 QAPP Information Reference(s):

## DECISION ID

6641

Region 9

## Tijuana River

**Pollutant:** Trash  
**Final Listing Decision:** List on 303(d) list (TMDL required list)  
**Last Listing Cycle's Final Listing Decision:** List on 303(d) list (TMDL required list)(2006)  
**Revision Status:** Original  
**Sources:** Nonpoint Source | Point Source  
**Expected TMDL Completion Date:** 2019  
**Impairment from Pollutant or Pollution:** Pollutant

**Conclusion:** 303(d) listing decisions made prior to 2006 were not held in an assessment database. This is a placeholder decision for a 303(d) listing made in a previous assessment cycle. The Regional Boards will update this decision when new data and information become available and are assessed.

**RWQCB Board Staff Decision:** No new data were assessed for 2008. The Regional Board will update this decision when new data and information become available and are assessed.

**SWRCB Board Staff Decision:** After review of this Regional Board decision, SWRCB staff recommend the decision be approved by the State Board.

**USEPA Action (if applicable):** USEPA approved the listing of this water body as a water quality limited segment requiring a TMDL for this pollutant.

## Line of Evidence (LOE) for Decision ID 6641, Trash

Region 9

## Tijuana River

LOE ID: 4668

Pollutant: Trash  
 LOE Subgroup: Visual  
 Matrix: Not Specified  
 Fraction: Not Recorded

Beneficial Use: Non-Contact Recreation

Number of Samples: 0  
 Number of Exceedances: 0

Data and Information Type: Not Specified  
 Data Used to Assess Water Quality: Unspecified—This LOE is a placeholder to support a 303(d) listing decision made prior to 2006.  
 Data Reference: [Placeholder reference pre-2006 303\(d\)](#)

Water Quality Objective/Criterion: Unspecified  
 Objective/Criterion Reference: [Placeholder reference pre-2006 303\(d\)](#)

Evaluation Guideline: Unspecified  
 Guideline Reference: [Placeholder reference pre-2006 303\(d\)](#)

Spatial Representation: Unspecified  
 Temporal Representation: Unspecified

Environmental Conditions:  
QAPP Information:  
QAPP Information Reference(s):

Unspecified  
Unspecified

2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide

2010 Integrated Report | 303(d) List | Admin. Record | Data Download | Past Reports | Contact Us

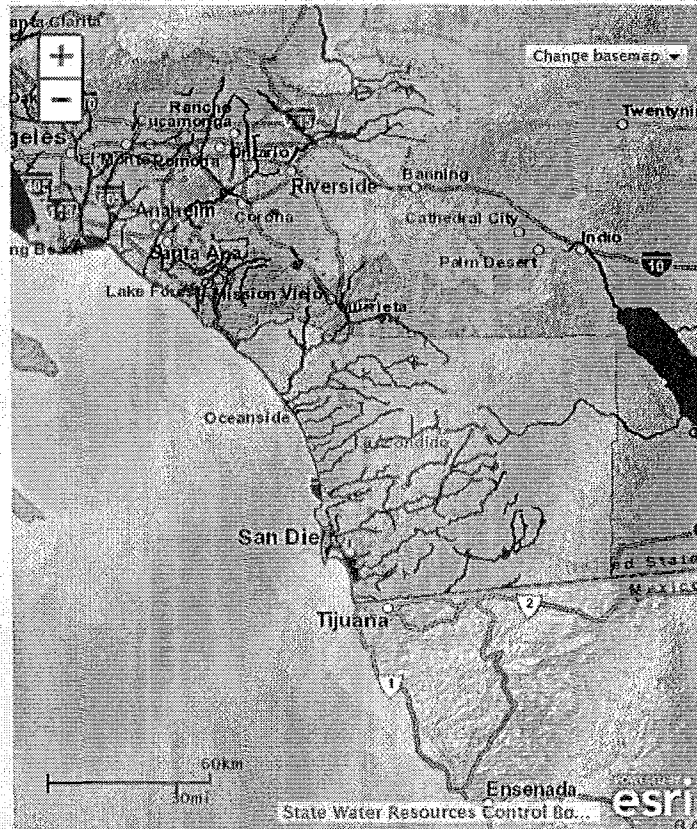
2010 INTEGRATED REPORT — ALL ASSESSED WATERS

Zoom to county: San Diego | Zoom to Regional Board: San Diego (9)

Show county |  Show Regional Board

Map Help

Zoom to water body: (Filter: All) | Filter list by: | Reset list



Show all assessed waters  
 Show only impaired ("303(d)-listed") waters

Show water bodies by pollutant:

Pollutant category: All

Pollutant: All

Reset filters

This [Webinar](#) walks the user through the Integrated Report and its geospatial information system (GIS) map.

- **Geographical Information Systems (GIS) Files**  
 Update 12/23/11: The information presented on this map reflects the final USEPA-approved 2010 303(d) list. If you have any questions regarding the Integrated Report data and information, please email [Lisa Holmes](#) or call 916-341-5557. For any GIS-related questions, please email [Stephanie Bucknam](#) or call 916-558-1708.

2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide

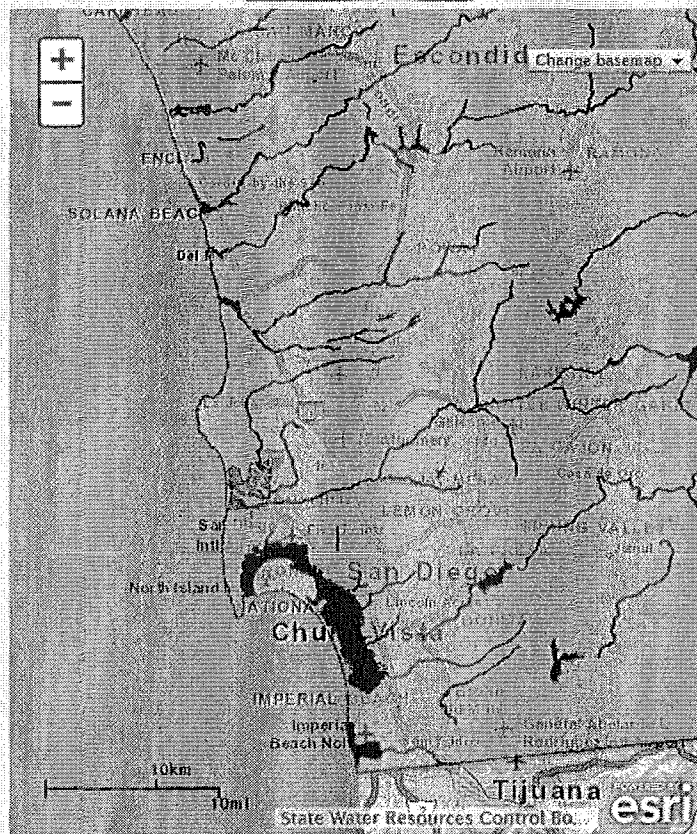
2010 Integrated Report | 303(d) List | Admin. Record | Data Download | Past Reports | Contact Us

2010 INTEGRATED REPORT — ALL ASSESSED WATERS

Zoom to county: San Diego | Zoom to Regional Board: San Diego (9)  
 Show county |  Show Regional Board

Map Help

Zoom to water body: (Filter: All)  
Tijuana River | Filter list by: | Reset list



Show all assessed waters  
 Show only impaired ("303(d)-listed") waters

Show water bodies by pollutant:

Pollutant category:  
All

Pollutant:  
All

Reset filters

This Webinar walks the user through the Integrated Report and its geospatial information system (GIS) map.

- Geographical Information Systems (GIS) Files  
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2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report) — Statewide

2010 Integrated Report | 303(d) List | Admin. Record | Data Download | Past Reports | Contact Us

2010 INTEGRATED REPORT — ALL ASSESSED WATERS

Zoom to county:  
San Diego

Zoom to Regional Board:  
San Diego (9)

Map Help

Show county

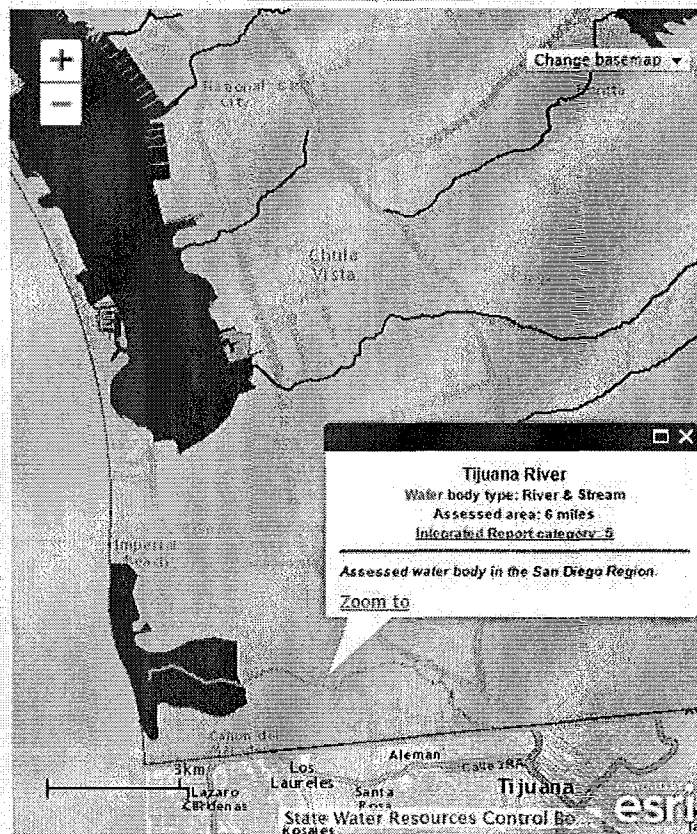
Show Regional Board

Zoom to water body: (Filter: All)

Tijuana River

Filter list by:

Reset list



Tijuana River Pollutant assessments	
Pollutants	<a href="#">Listing Decision</a> <a href="#">Report Link</a> <a href="#">Potential Sources</a> <a href="#">Schedule</a> <a href="#">Comments</a>
Ammonia as Nitrogen	Do Not List on 303(d) list (TMDL required list) 28612 n/a
Benthic Community Effects	Do Not List on 303(d) list (TMDL required list) 29585 n/a
Eutrophis	List on 303(d) list (TMDL required list) 20157 n/a Est. TMDL completion: 2019
Indicator Bacteria	List on 303(d) list (TMDL required list) 20468 n/a Est. TMDL completion: 2010

This Webinar walks the user through the Integrated Report and its geospatial information system

• Geographical Information Systems (GIS) Files

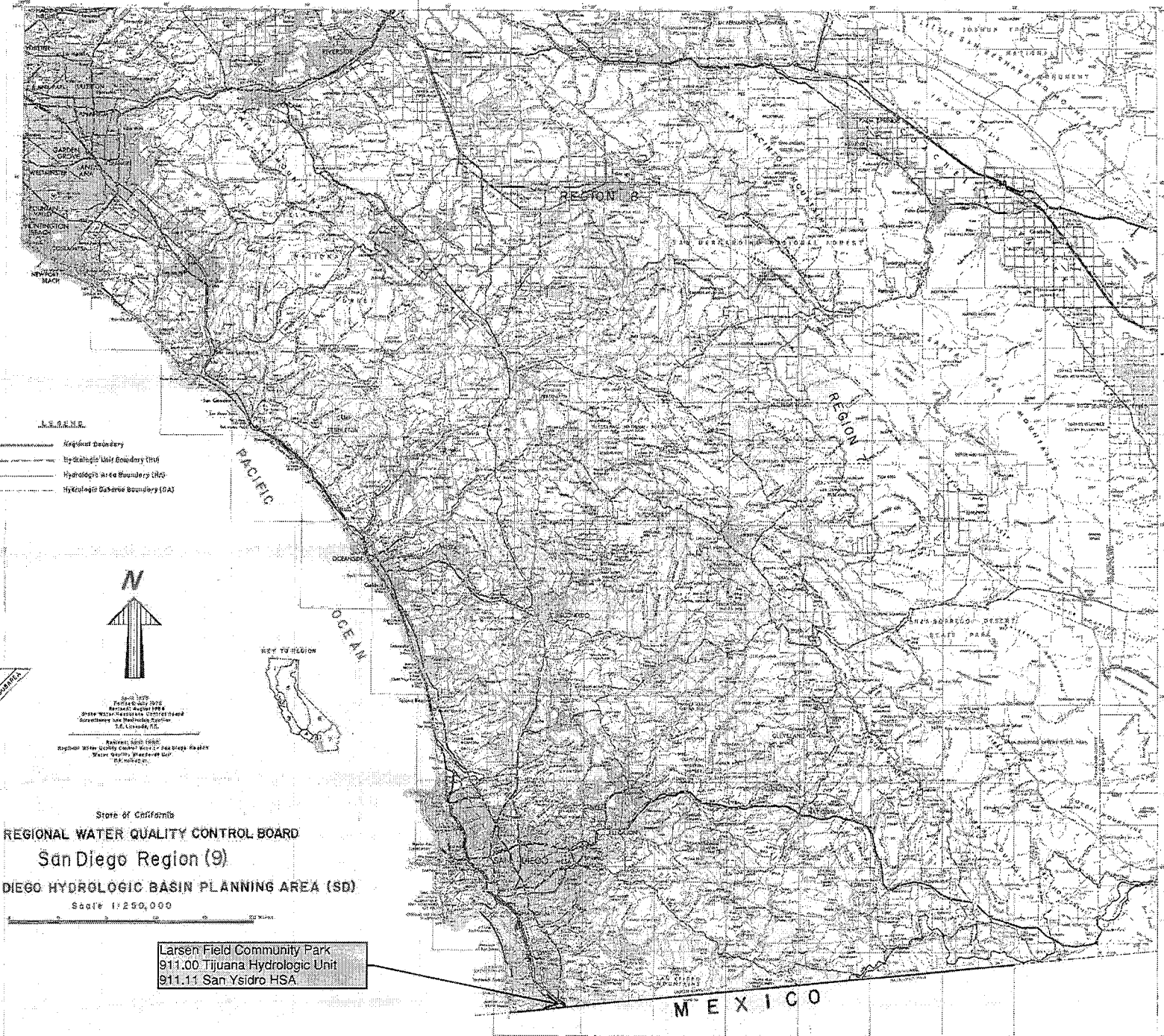
Update 12/23/11: The information presented on this map reflects the final USEPA-approved 2010 303(d) list. If you have any questions regarding the Integrated Report data and information, please email [Lisa Holmes](mailto:Lisa.Holmes) or call 916-341-5557. For any GIS-related questions, please email [Stephanie Bucknam](mailto:Stephanie.Bucknam) or call 916-558-1708.

## **APPENDIX B**

### **Region 9 Water Quality Basin Map**



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- 1. The results and boundaries on this map are based on the data as of the date of the map.
- 2. The results and boundaries on this map are based on the data as of the date of the map.
- 3. The results and boundaries on this map are based on the data as of the date of the map.
- 4. The results and boundaries on this map are based on the data as of the date of the map.
- 5. The results and boundaries on this map are based on the data as of the date of the map.
- 6. The results and boundaries on this map are based on the data as of the date of the map.
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- 10. The results and boundaries on this map are based on the data as of the date of the map.



State of California  
**REGIONAL WATER QUALITY CONTROL BOARD**  
**San Diego Region (9)**  
**SAN DIEGO HYDROLOGIC BASIN PLANNING AREA (SD)**  
 Scale: 1:250,000

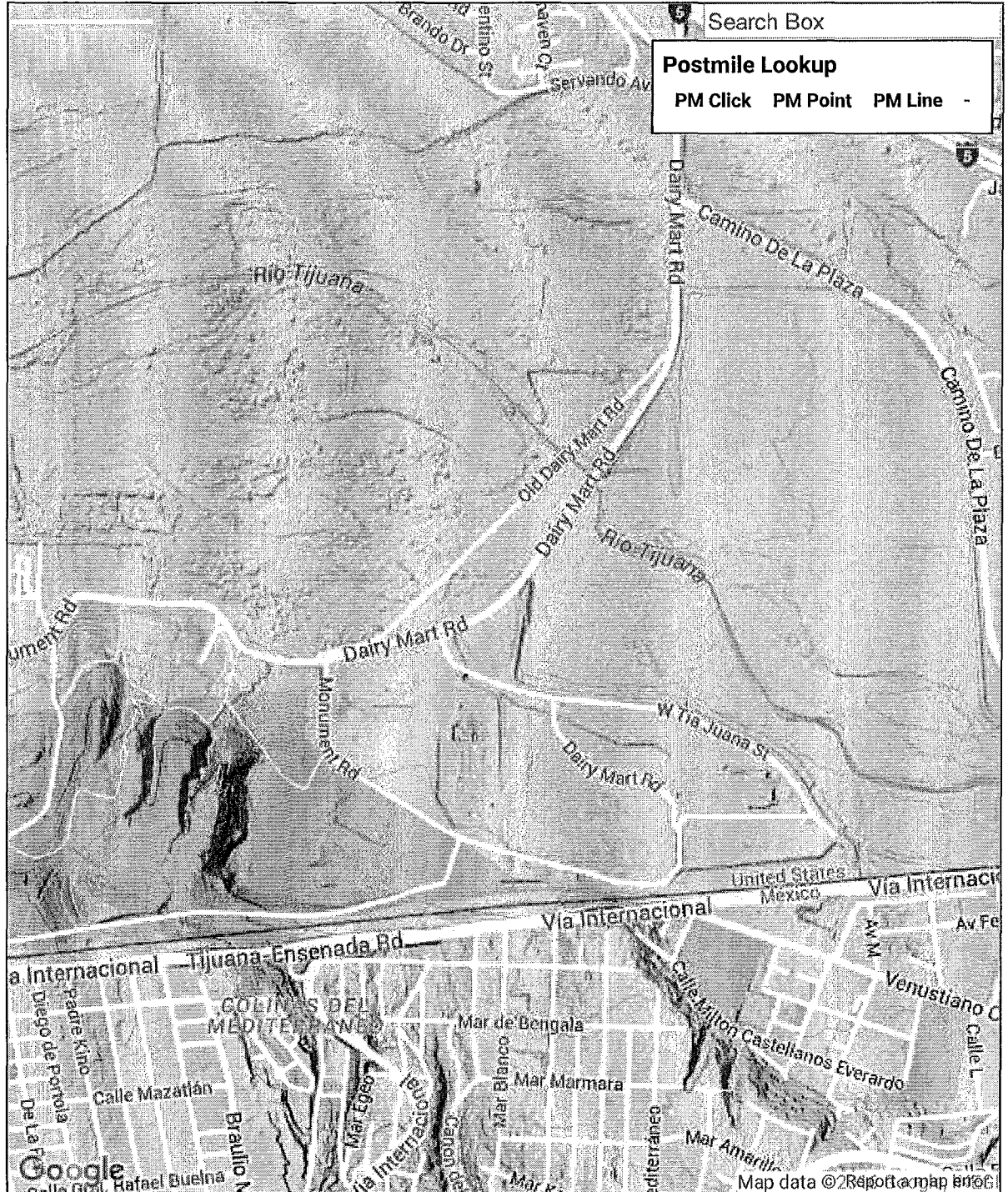
Larsen Field Community Park  
 911.00 Tijuana Hydrologic Unit  
 911.11 San Ysidro HSA

# CALIFORNIA DEPARTMENT OF TRANSPORTATION

Caltrans > DEA > Stormwater > Water Quality Planning Tool

## Layers

- 303(d) List and TMDL 2012(Legends)
- Areas of Special Biological Significance
- Arid and Semi-Arid Regions
- Caltrans Districts
- Caltrans Facilities (Legend)
- Caltrans T11 Monitor Sites
- Calwater Watershed
- Coastal Zones
- Counties
- Geologic Map (Legend)
- High Risk Receiving Watershed
- Monthly Precipitation



## Information

Hover over a layer name for a description. Additional information, tables, coordinates, and links are below the map.

[Help](#)

## Watershed Information

### CALWATER WATERSHED

Hydrologic Unit	TIJUANA	Hydrologic Area	Tijuana Valley	Hydrologic Sub-Area #	911.11
-----------------	---------	-----------------	----------------	-----------------------	--------

e-Bidding Larsen Field ADA Improvements Phase II



Hydrologic Sub-Area Name	San Ysidro	Planning Watershed	4911110000	HSA Area (acres)	10183
Latitude, Longitude	32.546, -117.0456				

**WATERSHED BOUNDARY DATASET**

Watershed	Tijuana River-Frontal Pacific Ocean	Subwatershed	Tijuana River-Frontal Pacific Ocean	Hydrologic Unit Code	180703050602
Average Annual Precipitation (Inches)	11.32				

**TMDLs & 303(d) Listed Water Bodies (2012 List)**

**Key:** Water body on 303(d) list Water body with a TMDL

Name	Pollutant	Size	Status
<u>Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River</u>	Enterococcus	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River</u>	Fecal Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River</u>	Total Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive</u>	Enterococcus	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive</u>	Fecal Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive</u>	Total Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at Monument Road</u>	Fecal Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at Monument Road</u>	Total Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at the US Border</u>	Enterococcus	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at the US Border</u>	Fecal Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at the US Border</u>	Total Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth</u>	Enterococcus	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth</u>	Fecal Coliform	0.03 Miles	TMDL required
<u>Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth</u>	Total Coliform	0.03 Miles	TMDL required
<u>Tijuana River</u>	Eutrophic	6 Miles	TMDL required
<u>Tijuana River</u>	Indicator Bacteria	6 Miles	TMDL required
<u>Tijuana River</u>	Low Dissolved Oxygen	6 Miles	TMDL required
<u>Tijuana River</u>	Pesticides	6 Miles	TMDL required

<a href="#">Tijuana River</a>	Phosphorus	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Sedimentation/Siltation	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Selenium	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Solids	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Surfactants (MBAS)	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Synthetic Organics	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Total Nitrogen as N	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Toxicity	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Trace Elements	6 Miles	TMDL required
<a href="#">Tijuana River</a>	Trash	6 Miles	TMDL required
<a href="#">Tijuana River Estuary</a>	Eutrophic	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Indicator Bacteria	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Lead	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Low Dissolved Oxygen	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Nickel	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Pesticides	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Thallium	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Trash	1319.46 Acres	TMDL required
<a href="#">Tijuana River Estuary</a>	Turbidity	1319.46 Acres	TMDL required

## Water Quality Objectives

The following waterbodies are in or near HSA 911.11. Click on the waterbody to get information on water quality objectives and beneficial uses

Waterbody Name	Beneficial Uses	Sediment-Sensitive Waterbody
<a href="#">Dana Point Harbor</a>	COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD	False
<a href="#">Del Mar Boat Basin</a>	COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD	False
<a href="#">Dennery Canyon</a>	AGR, IND, REC1, REC2, WARM, WILD	False
<a href="#">Dillon Canyon</a>	AGR, IND, REC1, REC2, WARM, WILD	False
<a href="#">Finger Canyon</a>	AGR, IND, REC2, WARM, WILD	False
<a href="#">Goat Canyon</a>	IND, REC1, REC2, WARM, WILD	False

<u>Johnson Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>Mission Bay</u>	COMM, EST, IND, MAR, MIGR, RARE, REC1, REC2, SHELL, WILD	False
<u>Moody Canyon</u>	IND, REC1, REC2, WARM, WILD	False
<u>Oceanside Harbor</u>	COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD	False
<u>O'Neal Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>Otay River</u>	AGR, IND, RARE, REC1, REC2, WARM, WILD	False
<u>Pacific Ocean</u>	AQUA, BIOL, COMM, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, SPWN, WILD	False
<u>Pogi Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>Salt Creek</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>San Diego Bay</u>	BIOL, COMM, EST, IND, MAR, MIGR, NAV, RARE, REC1, REC2, SHELL, WILD	False
<u>Smugglers Gulch</u>	IND, REC1, REC2, WARM, WILD	False
<u>Spring Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>Tijuana River</u>	IND, RARE, REC1, REC2, WARM, WILD	False
<u>Tijuana River Estuary</u>	COMM, EST, IND, MAR, MIGR, RARE, REC1, REC2, SHELL, WILD	False
<u>Unnamed intermittent coastal streams</u>	REC1, WARM	False
<u>Unnamed intermittent streams</u>	AGR, IND, REC1, REC2, WILD	False
<u>Wolf Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False
<u>Wruck Canyon</u>	AGR, IND, REC1, REC2, WARM, WILD	False

## Caltrans Facilities

.....

### MAINTENANCE STATIONS

### FREEWAYS AND HIGHWAYS

Name	Address	Route	Length (miles)
Otay	3310 Beyer Blvd	5	3.2
		805	3.2
		905	4.5

### PARK & RIDE LOTS

### REST AREAS

Name District County Route Post Mile    Name District County Route Post Mile

## Additional Information

.....

[Help](#) for the Water Quality Planning Tool

[TMDL](#) information from the SWRCB

[Construction General Permit](#) information from the SWRCB

[Groundwater Depth](#) information from the California Department of Water Resources

[R Factor erosivity calculations](#)

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## **APPENDIX C**

### **Storm Water Requirements Applicability Checklist**



City of San Diego  
 Development Services  
 1222 First Ave., MS-302  
 San Diego, CA 92101  
 (619) 446-5000

# Storm Water Requirements Applicability Checklist

FORM  
**DS-560**  
 JANUARY 2011

Project Address: 455 Sycamore Road, San Ysidro, CA 92173	Project Number (for City Use Only):
---	-------------------------------------

**SECTION 1. Permanent Storm Water BMP Requirements:**  
 Additional information for determining the requirements is found in the Storm Water Standards Manual.

**Part A: Determine if Exempt from Permanent Storm Water BMP Requirements.**  
 Projects that are considered maintenance, or are otherwise not categorized as "development projects" or "redevelopment projects" according to the Storm Water Standards manual are not required to install permanent storm water BMPs. **If "Yes" is checked for any line in Part A, proceed to Part C and check the box labeled "Exempt Project." If "No" is checked for all of the lines, continue to Part B.**

1. The project is not a Development Project as defined in the Storm Water Standards Manual: for example habitat restoration projects, and construction inside an existing building.  Yes  No
2. The project is only the construction of underground or overhead linear utilities.  Yes  No
3. The project qualifies as routine maintenance (replaces or renews existing surface materials because of failed or deteriorating condition). This includes roof replacement, pavement spot repairs and resurfacing treatments such as asphalt overlay or slurry seal, and replacement of damaged pavement.  Yes  No
4. The project only installs sidewalks, bike lanes, or pedestrian ramps on an existing road, and does not change sheet flow condition to a concentrated flow condition.  Yes  No

**Part B: Determine if Subject to Priority Development Project Requirements.**  
 Projects that match one of the definitions below are subject to additional requirements including preparation of a Water Quality Technical Report. **If "Yes" is checked for any line in Part B, proceed to Part C and check the box labeled "Priority Development Project." If "No" is checked for all of the lines, continue to Part C and check the box labeled "Standard Development Project."**

1. **Residential development of 10 or more units.**  Yes  No
2. **Commercial development and similar non-residential development greater than one acre.** Hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; and other light industrial facilities.  Yes  No
3. **Heavy industrial development greater than one acre.** Manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas.  Yes  No
4. **Automotive repair shop.** Facilities categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.  Yes  No
5. **Restaurant.** Facilities that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), and where the land area for development is greater than 5,000 square feet.  Yes  No
6. **Hillside development greater than 5,000 square feet.** Development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions and where the development will grade on any natural slope that is twenty-five percent or greater.  Yes  No
7. **Water Quality Sensitive Area.** Development located within, directly adjacent to, or discharging directly to a Water Quality Sensitive Area (as depicted in Appendix C) in which the project either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" is defined as being situated within 200 feet of the Water Quality Sensitive Area. "Discharging directly to" is defined as outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.  Yes  No
8. **Parking lot with a minimum area of 5,000 square feet or a minimum of 15 parking spaces** and potential exposure to urban runoff (unless it meets the exclusion for parking lot reconfiguration on line 11).  Yes  No

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 Upon request, this information is available in alternative formats for persons with disabilities.

DS-560 (01-25-11)

9. **Street, road, highway, or freeway.** New paved surface in excess of 5,000 square feet used for the transportation of automobiles, trucks, motorcycles, and other vehicles (unless it meets the exclusion for road reconfiguration on line 11).  Yes  No
10. **Retail Gasoline Outlet (RGO)** that is: (a) 5,000 square feet or more or (b) has a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.  Yes  No
11. **Significant Redevelopment;** project installs and/or replaces 5,000 square feet or more of impervious surface and the existing site meets at least one of the categories above. The project is not considered Significant Redevelopment if reconfiguring an existing road or parking lot without a change to the footprint of an existing developed road or parking lot. The existing footprint is defined as the outside curb or the outside edge of pavement when there is no curb.  Yes  No
12. **Other Pollutant Generating Project.** Any other project not covered in the categories above, that disturbs one acre or more and is not excluded by the criteria below.  Yes  No
- Projects creating less than 5,000 sf of impervious surface and where added landscaping does not require regular use of pesticides and fertilizers, such as slope stabilization using native plants. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as emergency maintenance access or bicycle pedestrian use, if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.*

**Part C: Select the appropriate category based on the outcome of Parts A & B.**

1. If "Yes" is checked for any line in Part A, then check this box. Continue to Section 2.  Exempt Project
2. If "No" is checked for all lines in Part A, and Part B, then check this box. Continue to Section 2.  Standard Development Project
3. If "No" is checked for all lines in Part A, and "Yes" is checked for at least one of the lines in Part B, then check this box. Continue to Section 2. See the Storm Water Standards Manual for guidance on determining if Hydromodification Management Plan requirements apply.  Priority Development Project

**SECTION 2. Construction Storm Water BMP Requirements:**

For all projects, complete Part D. If "Yes" is checked for any line in Part D, then continue to Part E.

**Part D: Determine Construction Phase Storm Water Requirements.**

1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities? (See State Water Resources Control Board Order No. 2009-0009-DWQ for rules on enrollment)  Yes  No
2. Does the project propose grading or soil disturbance?  Yes  No
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?  Yes  No
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?  Yes  No
5. Check this box if "Yes" is checked for line 1. Continue to Part E.  SWPPP Required
6. Check this box if "No" is checked for line 1, and "Yes" is checked for any line 2-4. Continue to Part E.  WPCP Required
7. Check this box if "No" is checked for all lines 1-4. Part E does not apply.  No Document Required

**Part E: Determine Construction Site Priority**

This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or WPCP. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; rather, it determines the frequency of inspections that will be conducted by City staff.]

- 1. High Priority**
- a) Projects where the site is 50 acres or more and grading will occur during the wet season
  - b) Projects 1 acre or more and tributary to an impaired water body for sediment (e.g., Peñasquitos watershed)
  - c) Projects 1 acre or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within a Water Quality Sensitive Area.
  - d) Projects subject to phased grading or advanced treatment requirements.
- 2 Medium Priority.** Projects 1 acre or more but not subject to a high priority designation.
- 3 Low Priority.** Projects requiring a Water Pollution Control Plan but not subject to a medium or high priority designation.

Name of Owner or Agent (Please Print): City of San Diego Park and Recreation Department Title:

Signature: Date:

# **APPENDIX D**

## **City of San Diego Storm Water Standards Manual Excerpts**



**Table 4-1. Anticipated and Potential Pollutants Generated by Land Use Type.**

General Project Categories	General Pollutant Categories								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Housing Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P <sup>(1)</sup>	P <sup>(2)</sup>	P	X
Commercial Development	P <sup>(1)</sup>	P <sup>(1)</sup>	X	P <sup>(2)</sup>	X	P <sup>(5)</sup>	X	P <sup>(3)</sup>	P <sup>(5)</sup>
Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X <sup>(4)(5)</sup>	X		X		
Restaurants					X	X	X	X	P <sup>(1)</sup>
Steep Hillside Developments	X	X			X	X	X		X
Parking Lots	P <sup>(1)</sup>	P <sup>(1)</sup>	X		X	P <sup>(1)</sup>	X		P <sup>(1)</sup>
Streets, Highways & Freeways	X	P <sup>(1)</sup>	X	X <sup>(4)</sup>	X	P <sup>(5)</sup>	X	X	P <sup>(1)</sup>
Retail Gasoline Outlets (RGO)			X	X	X	X	X		

X = anticipated

P = potential

(1) A potential pollutant if landscaping exists on-site.

(2) A potential pollutant if the project includes uncovered parking areas.

(3) A potential pollutant if land use involves food or animal waste products.

(4) Including petroleum hydrocarbons.

(5) Including solvents.

#### 4.1.6 Identification of Pollutants of Concern for the Receiving Water

For PDPs, the following analysis shall be conducted and reported in the project's Water Quality Technical Report:

- For each of the proposed project discharge points, identify the receiving waters (including hydrologic unit basin numbers) as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*<sup>2</sup>, prepared by the RWQCB (see Suggested Resources in Appendix A).

<sup>2</sup> To view a copy of the Basin Plan, go to: <http://www.swrcb.ca.gov/rwqcb9/programs/basinplan.html>

**Table 4-3. Structural BMP Treatment Control Selection Matrix**

BMP	LID	HMP Control	Sediment	Nutrients	Trash	Metals	Bacteria	Oils and Grease	Organics
Infiltration Basin	Y	Y	H	H	H	H	H	H	H
Bioretention Basin	Y	Y	H	M	H	H	H	H	H
Cistern Plus Bioretention	Y	Y	H	M	H	H	H	H	H
Vault plus Bioretention	Y	Y	H	M	H	H	H	H	H
Self-retaining Area	Y	Y	H	H	H	H	H	H	H
Dry Wells	Y	Y	H	H	H	H	H	H	H
Constructed Wetlands	Y	Y	H	M	H	H	H	H	H
Extended Detention Basin	Y	Y	M	L	H	M	M	M	M
Vegetated Swale	Y	N	M	L	L	M	L	M	M
Vegetated Buffer Strips	Y	N	H	L	M	H	L	H	M
Flow-Through Planter Boxes	Y	Y	H	M	H	H	H	H	H
Vortex Separator or Wet Vault	N	N	M	L	M	L	L	L	L
Media Filter	N	N	H	L	H	H	M	H	H

H High removal efficiency  
M Medium removal efficiency  
L Low removal efficiency

#### 4.4.2 Restrictions on the Use of Infiltration Treatment BMPs

Treatment control BMPs that are designed to function as infiltration devices shall meet the following conditions (these conditions do not apply to treatment BMPs which allow incidental infiltration and are not designed to function primarily as infiltration devices, such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.):

- Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants prior to infiltration.
- All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1):
  - Diverted stream flows
  - Rising ground waters

# **APPENDIX E**

## **BMP Site Map**



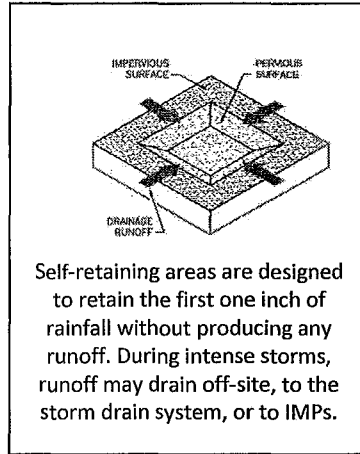
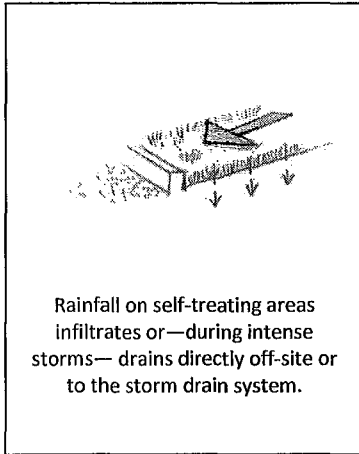
## **APPENDIX F**

### **Treatment Control BMPs:**

- Self-Retaining Area (Excerpt from City of San Diego  
Storm Water Standards Manual)**
- Catch Basin Inserts**

## 4.5 Self-Treating and Self-Retaining Areas

### 4.5.1 Criteria



#### Best Uses

- Heavily landscaped sites

#### Advantages

- No maintenance verification requirement
- Complements site landscaping

#### Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

**Self-treating areas** are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

**Areas draining to self retaining areas.** Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable area sizing ratio is:

2 parts impervious: 1 part pervious (treatment control)

1 part impervious: 1 part pervious (hydromodification control)

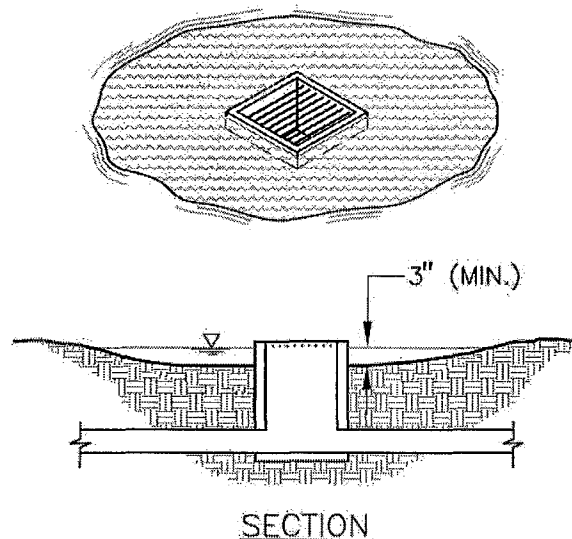
The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

## 4.5.2 Details

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.



Set overflows and area drain inlets high enough to ensure ponding (3" deep) over the surface of the self-retaining area.

Self-retaining areas should be designed to promote even distribution of ponded runoff over the area.

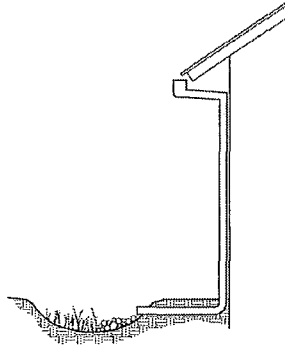
Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

## 4.5.3 Applications

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

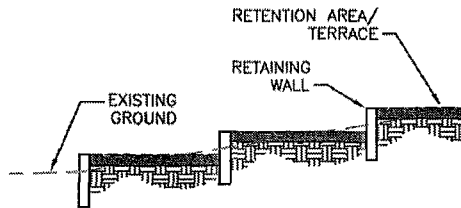
Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.



Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a “bubble-up” can be used.

Self-retaining areas can be created by terracing mild slopes. The elevation difference promotes subsurface drainage.



Mild slopes can be terraced to create self-retaining areas.

#### 4.5.4 Design Checklist for Self-Treating Areas

- The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

#### 4.5.5 Design Checklist for Self-Retaining Areas

- Area is bermed all the way around or graded concave.
- Slopes do not exceed 4%.
- Entire area is lawn, landscaping, or pervious pavement (see criteria in latter part of this appendix).
- Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- Any area drain inlets are at least 3 inches above surrounding grade.

#### 4.5.6 Design Checklist for Areas draining to Self-Retaining Areas

- Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- Roof leaders collect runoff and route it to the self-retaining area.
- Paved areas are sloped so drainage is routed to the self-retaining area.
- Inlets are designed to protect against erosion and distribute runoff across the area.



## **Triton Drop-In Model Specification**

### **PART 1.00 GENERAL**

#### **1.1 DESCRIPTION**

- A. Work included:  
The Contractor, and/or a manufacturer selected by the Contractor and approved by the Engineer, shall furnish all labor, materials, equipment and incidentals required and install all catch basin inserts in accordance with the drawings and these specifications.
  
- B. The Triton Drop Inlet system is designed for use in stormdrains that experience oil and grease pollution accompanied by sediment, trash and debris. Trash, debris and sediment accumulate in the outer housing with oil and grease and fine particulates being trapped in the media cartridge. The system is a low cost best management practice (BMP) that helps meet National Pollutant Discharge Elimination System (NPDES) requirements with effective treatment, efficient installation and moderate maintenance.

#### **1.2 QUALITY CONTROL INSPECTION**

- A. The quality of materials, the process of manufacture, and the finished sections shall be subject to inspection by the Engineer. Such inspection may be made at the place of manufacture, or on the work site after delivery, or at both places, and the sections shall be subject to rejection at any time if material conditions fail to meet any of the specification requirements, even though sample sections may have been accepted as satisfactory at the place of manufacture. Sections rejected after delivery to the site shall be marked for identification and shall be removed from the site at once. All sections that have been damaged beyond repair during delivery will be rejected and, if already installed, shall be repaired to the Engineer's acceptance level, if permitted, or removed and replaced, entirely at the Contractor's expense.

### **PART 2.00 PRODUCTS**

#### **2.1 MATERIALS AND DESIGN**

- A. Insert Trough/Housing
  - 1. Inserts are available to fit most industry standard catch basins. Custom sizes are available to fit most applications.
  - 2. Standard insert troughs or housings shall be constructed of non-reactive high density polyethylene (HDPE) plastic with U.V. inhibitors. Larger units requiring greater structural support shall be constructed using fiberglass with Isophthalic polyester resin, which provides corrosion resistance needed for wet applications.

B. Exterior Cartridge Cage

1. The exterior cage of the cartridges shall be made of stainless steel Type 304, having 0.063 gauge welded 1" square openings.

C. Media-Pak Cartridges

1. Disposable media-pak cartridges shall be constructed of durable geo-textile polyethylene fabric.
2. Media-pak cartridges shall be easily removed from housing for maintenance.

D. Media and Media-Pak Combinations

1. A number of combinations can be set in place to obtain the most appropriate treatment level for the site.

Option A – Standard: Includes media-pak (a durable geotextile polypropylene fabric) charged with XSORB® media for capture of hydrocarbons, oils and grease and sediment.

Option B – Standard setup with cartridge pre-screen: Includes exterior cartridge housing fitted with a woven polypropylene geo-textile that is designed to capture smaller sediment (e.g., 850 microns).

Option C – Dual stage media-pak charged with XSORB® media: Includes two media-pak staggered within a cartridge cage designed to target heavy hydrocarbon runoff areas.

Option D – Dual stage media-pak with activated carbon: A standard media-pak is fitted on the outer interior of the cartridge housing with a second media-pak (charged with activated carbon) fitted behind the standard media-pak. The second media-pak is designed as a polishing media to remove pollutants found in runoff.

2. The media shall be non-biodegradable and non-hazardous per the Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA).
3. Media shall be a treated perlite having hydrophobic properties.

E. Diverter Panels

1. If required, diverter panels or flow block material shall be ultra violet resistant high density polyethylene.

## 2.2 PERFORMANCE

Each standard Triton Drop Inlet model shall adhere to the following performance specifications.

Drop Inlet Model No.	Flange Outside Dimension (OD)	Trash and Debris Capacity (ft <sup>3</sup> )	Treatment Capacity <sup>1</sup> (gpm)	Bypass Capacity* (gpm)
TR12RD	13"	0.193	70	830
TR1212	13"X13"	0.193	70	830
TR 16RD	18"	0.673	142	1,660
TR1616	18"X18"	0.673	142	1,660
TR18RD	20"	0.936	151	1,660
TR1818	20"X20"	0.936	151	3,103
TR1824	19"X25"	0.936	157	3,103
TR2024	21"X25"	0.936	157	3,103
TR24RD	26"	1.070	299	4,261
TR24SR	26"X26"	1.070	299	4,261
TR2436	26"X40"	1.570	345	6,206
TR2448	26"X52"	2.140	572	8,522
TR3030	33"X33"	1.570	345	6,206
TR3636	40"X40"	8.430	690	12,412
TR36RD	40"	8.430	690	12,412
TR4848	52"X52"	15.500	1,196	17,044

\* Bypass capacity is estimated as circular weir flow and is a function of the available head (inside top of structure to the overflow crest of the cartridge) and crest length. Typically, the bypass capacity should be less restrictive than the inlet grate of the catch basin.

<sup>1</sup> – Treatment capacity based on standard media-pak configuration (Option A).

## 2.3 MANUFACTURER

The manufacturer of said system shall have been regularly engaged in the engineering design and production of systems for the physical treatment of stormwater runoff for 10 years minimum. Each catch basin insert shall be supplied by CONTECH Stormwater Solutions Inc., 9025 Centre Pointe Drive, Suite 400, West Chester, OH 45069, phone 1-866-551-8325.

## PART 3.00 EXECUTION

### 3.1 INSTALLATION

- A. Each stormwater treatment system shall be constructed according to The dimensions shown on the Drawings and as specified herein. Install at elevations and locations shown on the Drawings or as otherwise directed by the Engineer.
- B. If required in most cases, the housing flange can be cut in the field using a skill-saw or other saw blade to fit the grate frame.

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## Maintenance

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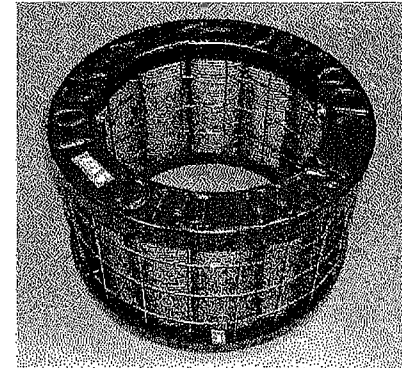
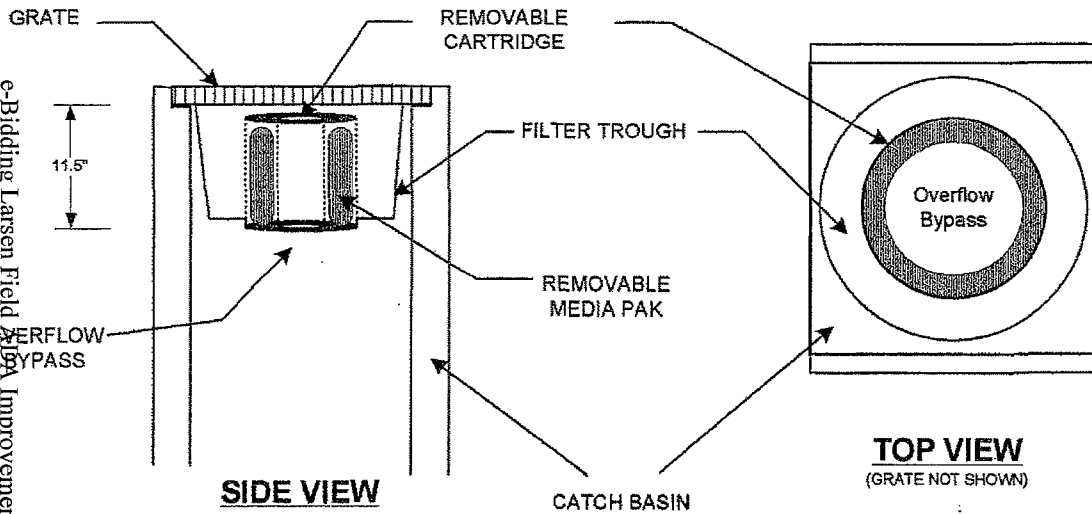
The Triton catch basin inserts should be inspected at regular intervals and maintained when necessary to ensure optimum performance.

The useful life of the media-pak is based on the quantity of pollutants it collects. The media-pak with XSORB® media has the ability to repel water and absorb up to 500 percent of its own weight in oil when fully saturated. A typical TR24SR cartridge has the ability to absorb between 1 and 2 quarts of contaminants when fully saturated. On average we suggest three cleanouts of the cartridge basin and one change out or replacement of the media-pak per year. For Triton catch basin inserts placed in areas of greater pollutant loading the maintenance and change out frequency will be increase.

Life expectancy of the Triton catch basin inserts is anticipated to be excellent because of the materials of construction. The non-reactive high density polystyrene plastic with U.V. inhibitors and fiberglass housings provide excellent protection against damp and corrosive environments. The cartridge components including the stainless steel wire cage, geotextile polypropylene fabric are all considered durable and have good longevity in the environment.

### On-site Procedures for Inspection and Maintenance

- Secure traffic and pedestrian traffic with cones, barrels, etc.
- Clean surface area immediate around each catch basin
- Remove grates and set aside
- Clean grates, remove litter and debris that may be trapped within the grate
- Inspect perimeter gasket system of the cartridge making sure no flows are bypassing the cartridge, repair as needed.
- Remove by vactor hose the debris that has been trapped in the trough area. Dispose of in accordance with local, state and federal regulatory agency requirements. Most debris that is captured in the trough or sump area will fall into the non-hazardous waste category.
- Visually inspect and check the condition of the trough area.
- Inspect the media-pak condition in the wire mesh cartridge. When the normally white colored media turns black, the media should be changed. When service requires replacement of the cartridge media-pak please contact your local CONTECH Stormwater Solutions office.
- Replace grate and lockdown as needed.
- Secure and date weatherproof lock out tags.
- Report any concerns or improvements regarding the Triton insert on a service report.
- Un-secure traffic control area.
- Complete service report and submit to facility owner.

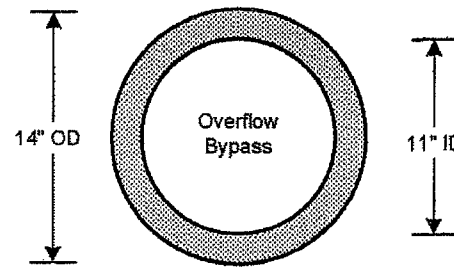


**SIDE VIEW**  
(Removable Cartridge)

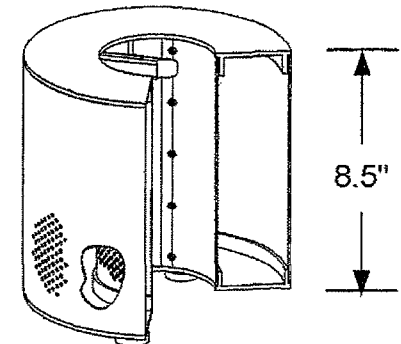
**APPLICATION CHART**

MODEL NO.	Filter (Flange O.D.)	Inlet I.D.	Grate O.D.
TR24SR	24" X 27"	22" X 22"	24" X 27"

The TR24SR can be customized in the field to be adapted to the many different types of 24" X 24" catch basins available today.



**TOP VIEW**  
(Removable Cartridge)



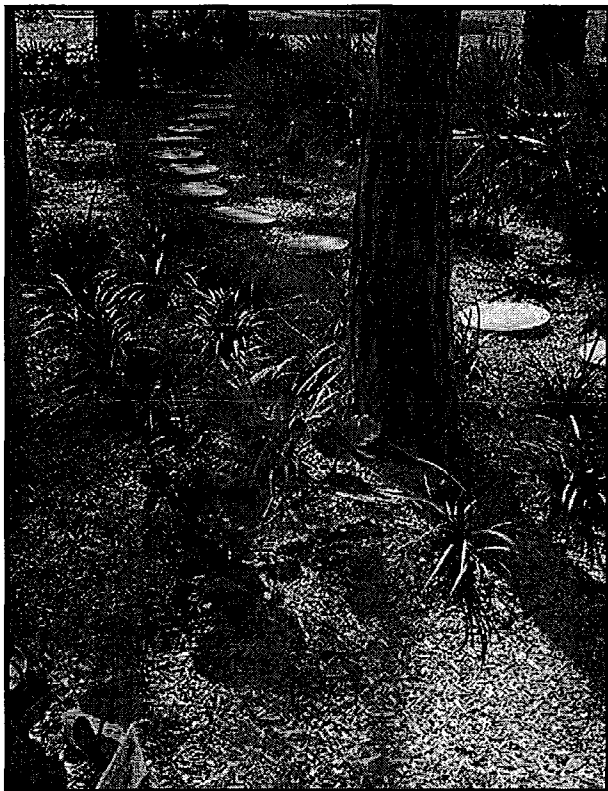
**Side View**

**Notes:**

- Inserts are available in sizes to fit most industry standard catch basins. Custom sizes are available to fit most applications.
- Inserts are constructed using Non-reactive High Density Polyethylene plastic with U.V. inhibitors.
- Filter Cartridges are designed to capture Hydrocarbons and other fine pollutants.
- Filter media cartridges are easily removed from units for easy maintenance.
- Filter design requires storm events to be filtered through Media Pak. This prevents flows from bypassing Media Pak, which filters out hydrocarbons and other pollutants.
- Disposable Cartridge Media Pak's are constructed from durable geo-textile polypropylene fabric.
- The exterior cage of the cartridges shall be made of stainless steel Type 304, having .063 gauge welded 1" square openings.
- Media is non-hazardous, per EPA and OSHA standards.
- Please refer to manufacturer's recommendations for an approved maintenance program.

THE DESIGN AND DETAIL OF THIS DRAWING IS THE PROPERTY OF REM INC. AND IS NOT TO BE USED EXCEPT IN CONNECTION WITH OUR WORK, DESIGN AND INVENTION RIGHTS ARE RESERVED.	<b>REM Inc.</b>			
	<b>TRITON Model# TR24SR</b> (Designed for 24" X 24" Catch Basins)			
PH: (888) 526-4736	SIZE	DRAWN BY:	FOR:	REV
	SCALE	C.F.	Catch Basin Size: 24" X 24"	
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.	1/4 : 1	DATE: 7/22/2003	SHEET	OF 1

# Site Design & Landscape Planning SD-10



## Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

## Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

## Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

## Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.



# **SD-10 Site Design & Landscape Planning**

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## ***Designing New Installations***

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.
- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

## ***Conserve Natural Areas during Landscape Planning***

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- Promote natural vegetation by using parking lot islands and other landscaped areas.
- Preserve riparian areas and wetlands.

## ***Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit***

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.
- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

# Site Design & Landscape Planning SD-10

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regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

## *Protection of Slopes and Channels during Landscape Design*

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface, since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

## ***Redeveloping Existing Installations***

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.



# **SD-10 Site Design & Landscape Planning**

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

## **Other Resources**

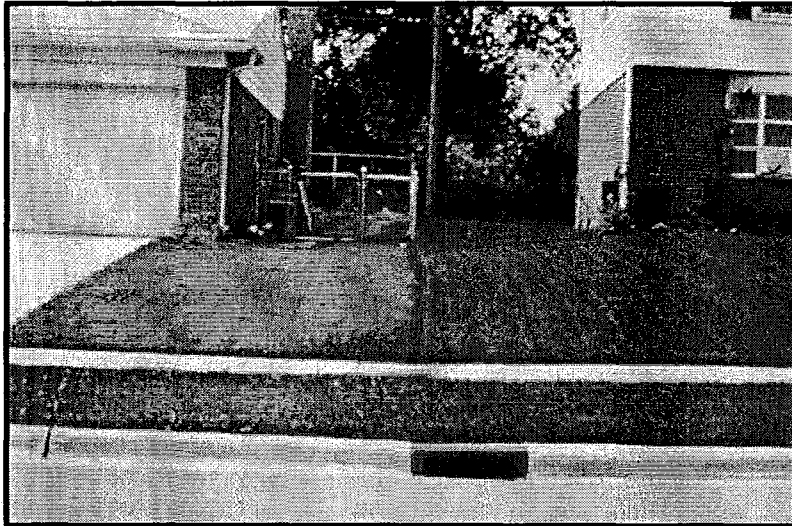
A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.



## Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

## Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

## Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

## Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

## Design Considerations

### *Designing New Installations*

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.



- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:
  - Using mulches (such as wood chips or bark) in planter areas without ground cover to minimize sediment in runoff
  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect
  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible
  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth
- Employ other comparable, equally effective methods to reduce irrigation water runoff.

### ***Redeveloping Existing Installations***

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

### **Other Resources**

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

## **APPENDIX G**

### **Permanent BMP Construction DS-563**



City of San Diego  
**Development Services**  
 1222 First Ave., MS-501  
 San Diego, CA 92101  
 (619) 236-5500

THE CITY OF SAN DIEGO

# Permanent BMP Construction

Self Certification Form

FORM  
**DS-563**  
 FEBRUARY 2013

Date Prepared:	Project No.:
Project Applicant:	Phone:
Project Address:	
Project Engineer:	Phone:

The purpose of this form is to verify that the site improvements for the project, identified above, have been constructed in conformance with the approved Standard Urban Storm Water Mitigation Plan (SUSMP) documents and drawings.

This form must be completed by the engineer and submitted prior to final inspection of the construction permit. Completion and submittal of this form is required for all new development and redevelopment projects in order to comply with the City's Storm Water ordinances and NDPES Permit Order No. R9-2007-0001. Final inspection for occupancy and/or release of grading or public improvement bonds may be delayed if this form is not submitted and approved by the City of San Diego.

**CERTIFICATION:**

As the professional in responsible charge for the design of the above project, I certify that I have inspected all constructed Low Impact Development (LID) site design, source control and treatment control BMP's required per the approved SUSMP and Construction Permit No. \_\_\_\_\_; and that said BMP's have been constructed in compliance with the approved plans and all applicable specifications, permits, ordinances and Order No. R9-2007-0001 of the San Diego Regional Water Quality Control Board.

I understand that this BMP certification statement does not constitute an operation and maintenance verification.

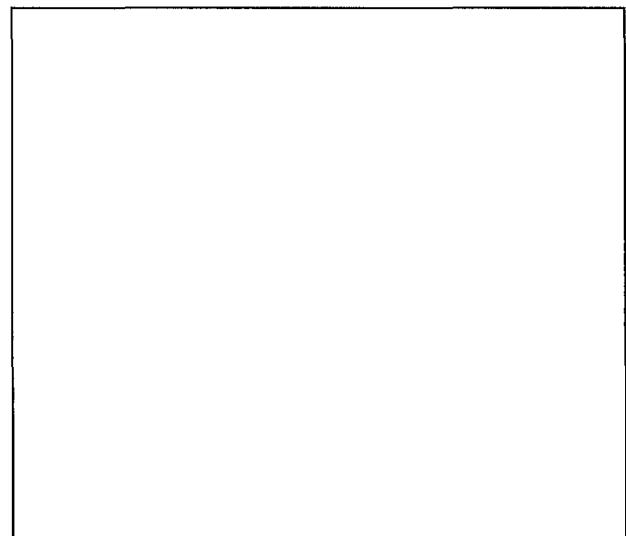
Signature: \_\_\_\_\_

Date of Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone No. \_\_\_\_\_



Engineer's Stamp

Printed on recycled paper. Visit our web site at [www.sandiego.gov/development-services](http://www.sandiego.gov/development-services).  
 Upon request, this information is available in alternative formats for persons with disabilities.

DS-563 (02-13)

## **APPENDIX H**

### **Hydromodification Discussion**

## **APPENDIX H – HYDROMODIFICATION MANAGEMENT PLAN (HMP)**

Per the City of San Diego Stormwater Standards Manual, the Larsen Field Park project is considered to be a “priority” development project. Per section 4.5 Hydromodification Management Requirements, Figure 4-1 HMP Applicability Determination, the project qualifies for an exemption since the Tijuana River is included in Table 4-3 Summary of Exempt Reservoirs in San Diego County as an exempt Watershed.

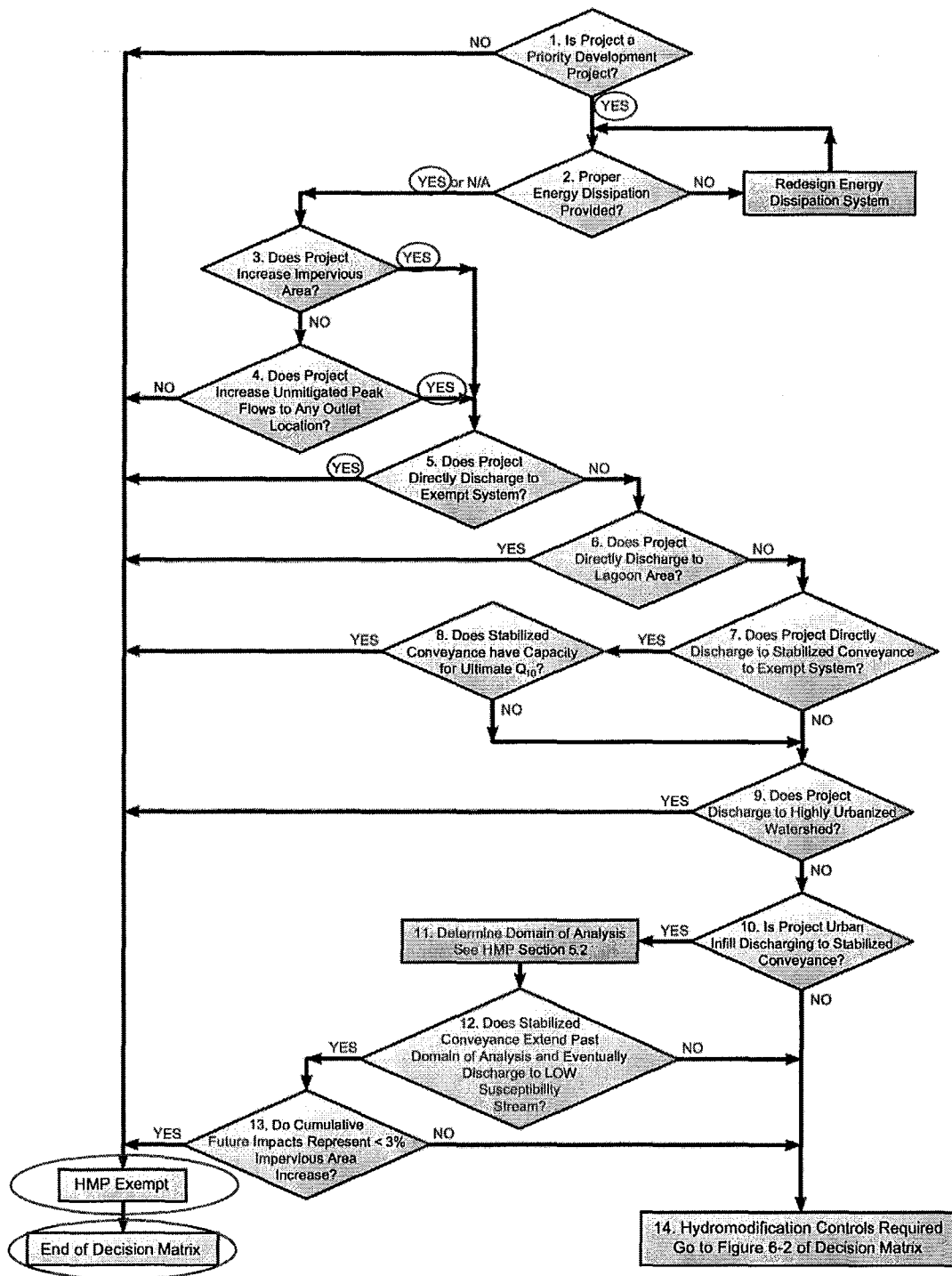


Figure 4-1. HMP Applicability Determination



**APPENDIX J**

**HYDROLOGY STUDY, JANUARY 21, 2016 BY NASLAND ENGINEERING**

# Hydrology Study

For  
**Larsen Field Community Park**  
**455 Sycamore Road**  
**San Diego, CA 92173**

Prepared For  
**Estrada Land Planning**  
225 Broadway, Suite 1160  
San Diego, CA 92101

Prepared by  
**Nasland Engineering**  
4740 Ruffner Street  
San Diego, CA 92111  
(858) 292-7770  
N.E. Job No. 114-113.1



January 21, 2016

A handwritten signature consisting of several overlapping, slanted lines.

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Samuel Waisbord

R.C.E. 78071

1/21/2016

Date

*Table of Contents*

<b>Description</b>	<b>Page</b>
Table of Contents	1
Purpose	2
Project Description	2
Existing Drainage	2
Proposed Drainage	3
Hydrology Methodology/Design Criteria	3
Calculations	4
On-Site Hydraulic Calculations	5
Conclusion	5
Engineer of Work	5
Appendices	6
Appendix A – Existing Hydrologic Conditions Exhibit	
Appendix B – Proposed Hydrologic Conditions Exhibit	
Appendix C – Hydrology Reference	
Appendix D – Hydraulic Calculations	

## PURPOSE

The purpose of this hydrology study is to assess the potential impacts of the proposed project. This report will calculate and analyze storm water runoff for the proposed site conditions in order to determine what stormwater mitigation features would be required as a part of the park construction. Please also refer to the Water Quality Technical Report (WQTR) for information related to the potential pollutants from the project and treatment methods proposed.

## PROJECT DESCRIPTION

The Larsen Field Community Park project will be confined to an area encompassing approximately 15.75 acres. The project proposes the construction of Larsen Field's picnic and children's play area, multi-purpose fields, accessibility upgrade work, and asphalt concrete pavement maintenance. The scope of work includes demolition, grading, paving, installation of play area structures and safety surfacing, concrete player's dugout, baseball fencing, benches, picnic tables, drinking fountain, planting, irrigation systems, drainage and other park amenities. In order to provide adequate site drainage, as well as meet the City of San Diego Storm Water Standard requirements, improvements such as concrete drainage structures, storm drain laterals, and self-retaining areas are incorporated into the design.



Source: Google Earth

## EXISTING DRAINAGE

The existing site encompasses approximately 15.75 acres of multi-purpose fields, landscaped areas, asphalt concrete parking lots, Portland cement concrete walkways, resilient surface/sand play areas and the Cesar Chavez Community Center. The existing site consists of approximately 20% impervious surfaces and 80% pervious surfaces; the majority of the pervious surfaces are sodded multi-purpose fields. The Larsen Field Community Park is self-retaining in that most of the site drains to the surrounding multi-purpose fields and landscape areas and is contained onsite. The Cesar Chavez Community Center and adjacent sidewalks currently drain to the northern parking lot and sheet flows

downhill towards an existing cross gutter along the northerly edge of the property. The cross gutter collects the storm water and directs it east to the adjacent property, Rancho Del Rio Estates, where another cross gutter carries and discharges the storm water into the Tijuana River.

The southeast portion of the project contains a baseball field, landscaped areas, asphalt concrete walkways and an asphalt concrete parking lot. The existing asphalt concrete walkways behind the baseball field currently allows storm water to sheet flow onto the baseball infield where it ponds. The westerly parking lot that abuts the asphalt concrete walkways and landscaped areas are bounded by asphalt curbs that direct water into existing grated inlets where storm drain laterals direct storm water underneath to nearby public storm drain mains that discharge into the Tijuana River.

See **Appendix A - Existing Hydrologic Conditions Exhibit**, for further information.

## **PROPOSED DRAINAGE**

The Larsen Field Community Park Project proposes the replacement and construction of concrete walkways, resilient surface children's play areas, concrete player's dugouts, small picnic areas, parking lot maintenance resurfacing, and landscape and irrigation improvements. The proposed site design consist of approximately 20% impervious surfaces and 80% pervious surfaces. Although the project will be confined to an area encompassing approximately 31,000 SF (0.71 acres), the design of the drainage systems should incorporate Priority Development Project Permanent Storm Water BMP Requirements. All existing paving that is to remain and be protected in place will continue to drain into landscaped areas and into the northern parking lot where it will enter the cross gutter and discharges offsite. In areas where pavement is being replaced or constructed storm water will be directed into surrounding landscaped areas. It was the intent to grade the sidewalks in the same direction as current flow patterns to limit any disturbances in drainage patterns while also allowing water to flow to existing and proposed landscaped areas. The proposed resilient surface children's play areas will also drain towards landscaped areas by installing underdrains. All newly proposed and replaced concrete surfaces will direct storm water towards multi-purpose fields and landscape areas where it will be retained onsite.

The southern portion of the project proposes the replacement of existing asphalt walkway and construction of concrete walkway, concrete player's dugouts, and parking lot maintenance resurfacing. Although this portion of the project is confined to approximately 5,000 SF it is still a part of the Larsen Field Community Park Project meaning that the design of the drainage system should incorporate Priority Development Project Permanent Storm Water BMP Requirements. All existing paving that is to remain and be protected in place will continue to drain towards the grated inlets and into the storm drain laterals or drain towards the grass field.

See **Appendix B - Proposed Hydrologic Conditions Exhibit**, for further information.

## **HYDROLOGY METHODOLOGY/DESIGN CRITERIA:**

Storm water runoff for the proposed site conditions is calculated and analyzed in order to ensure that the proposed conditions do not negatively affect the existing hydrologic regime. Runoff is calculated by utilizing methods outlined in the City of San Diego Drainage Design Manual. Topographical information has been obtained from City of San Diego. Hydrologic basin boundaries, landscape areas, and flow path characteristics such as change in elevation and length of flow are obtained from the

Proposed Hydrologic Conditions Maps which are drafted in AutoCAD Civil 3D 2013 software. This information is utilized to determine the basin area, runoff coefficient and inlet time for each basin.

**CALCULATIONS:**

Calculations have been performed per Rational Method guidelines set forth in Appendix I of the City of San Diego Drainage Design Manual.

- Runoff Coefficients have been calculated per Table 3-2 of the Drainage Design Manual. Where actual imperviousness conditions differed significantly from the tabulated imperviousness values provided in Table 3-2, the C value was modified per the weighting formula provided at the bottom of the table.
- Time of Concentration values for each basin is determined to be 5 minutes due to the short travel distances.
- Intensity values have been calculated per the “Intensity-Duration-Frequency Curves” graph located Appendix I-B of the Drainage Design Manual.
- For hydrology calculations refer to the pages following. For attachments and references to the calculations see **Appendix C – Hydrology References.**

Existing Site Conditions										
Basin	Basin Area	Basin Acreage (A)	Pervious Area	Impervious Area	% Pervious	% Impervious	<sup>1</sup> Runoff Coefficient	Tc	<sup>2</sup> Intensity 100-year	Q <sub>100</sub>
	(sf)	(ac)	(sf)	(sf)	%	%	(C)	(min)	(in/hr)	(cfs)
1	9,255	0.21	4,055	5,200	43.8%	56.2%	0.60	5.0	4.20	0.53
2	27,245	0.63	23,185	4,060	85.1%	14.9%	0.50	5.0	4.20	1.32
3-A	870	0.02	0	870	0%	100%	0.85	5.0	4.20	0.07
3-B	3,200	0.07	0	3,200	0%	100%	0.85	5.0	4.20	0.25
3-C	430	0.01	0	430	0%	100%	0.85	5.0	4.20	0.04
Total	41,000	0.94	27,240	13,760	66.4%	33.6%				

Proposed Site Conditions										
Basin	Basin Area	Basin Acreage (A)	Pervious Area	Impervious Area	% Pervious	% Impervious	<sup>1</sup> Runoff Coefficient	Tc	<sup>2</sup> Intensity 100-year	Q <sub>100</sub>
	(sf)	(ac)	(sf)	(sf)	%	%	(C)	(min)	(in/hr)	(cfs)
1-A	750	0.02	483	267	64.4%	35.6%	0.50	5.0	4.20	0.04
1-B	2,050	0.05	1,088	962	53.1%	46.9%	0.50	5.0	4.20	0.11
1-C	2,000	0.05	1,130	870	56.5%	43.5%	0.50	5.0	4.20	0.11
1-D	1,700	0.04	820	880	48.2%	51.8%	0.55	5.0	4.20	0.09
1-E	2,570	0.06	1,473	1,097	57.3%	42.7%	0.50	5.0	4.20	0.13
2	27,445	0.63	14,770	12,675	53.8%	46.2%	0.50	5.0	4.20	1.32
3-A	1,000	0.02	0	1,000	0%	100%	0.85	5.0	4.20	0.07
3-B	475	0.01	0	475	0%	100%	0.85	5.0	4.20	0.04
3-C	1,320	0.03	0	1,320	0%	100%	0.85	5.0	4.20	0.11
3-D	870	0.02	0	870	0%	100%	0.85	5.0	4.20	0.07
3-E	390	0.01	0	390	0%	100%	0.85	5.0	4.20	0.04
3-F	430	0.01	0	870	0%	202%	0.85	5.0	4.20	0.04
TOTAL	41,000	0.94	19,764	21,676	48.1%	52.9%				

1. Runoff coefficients have been calculated by using the values and weighting formula on Table 3-2 of the City of San Diego Drainage Design Manual.

2. Intensity values have been calculated per the "Intensity-Duration Frequency Curves" graph located in Appendix I-B of the City of San Diego Drainage Design Manual.

## ON-SITE HYDRAULIC CALCULATIONS:

Basin 7 is directed towards three (3) 18"x18" grated inlets with filter inserts that are conveyed via pipe flow to an existing curb inlet, which continues downstream within the existing storm drain system. The capacity for each 18"x18" catch basin is 2.59 cfs, so the drainage system is proven to be sufficiently sized in order to accommodate the proposed condition flow rate of 0.22 cfs.

See **Appendix D** for hydraulic capacity calculations for the 18"x18" catch basin.

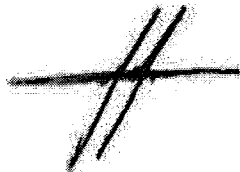
## CONCLUSION

For the northern portion of the project site, the proposed conditions result in a decrease in run-off that is directed towards the parking lot and towards the field area. Appendix A and B show the existing and proposed flow rates for these specific areas.

For the southern portion of the project site, Proposed Basins 3-A, 3-B, and 3-C are directed into the existing storm drain system after flowing through sufficiently sized catch basin inserts. The proposed routing will result in a 0.22 cfs increase in downstream discharge compared to existing conditions for a 100-year storm event. Proposed Basins 3-D, 3-E, and 3-F maintain their existing drainage patterns and confluence points, which will not result in any increased run-off into the existing downstream storm drain system.

## ENGINEER OF WORK

This report was prepared under the supervision of Samuel Waisbord, PE, Project Manager for Nasland Engineering.



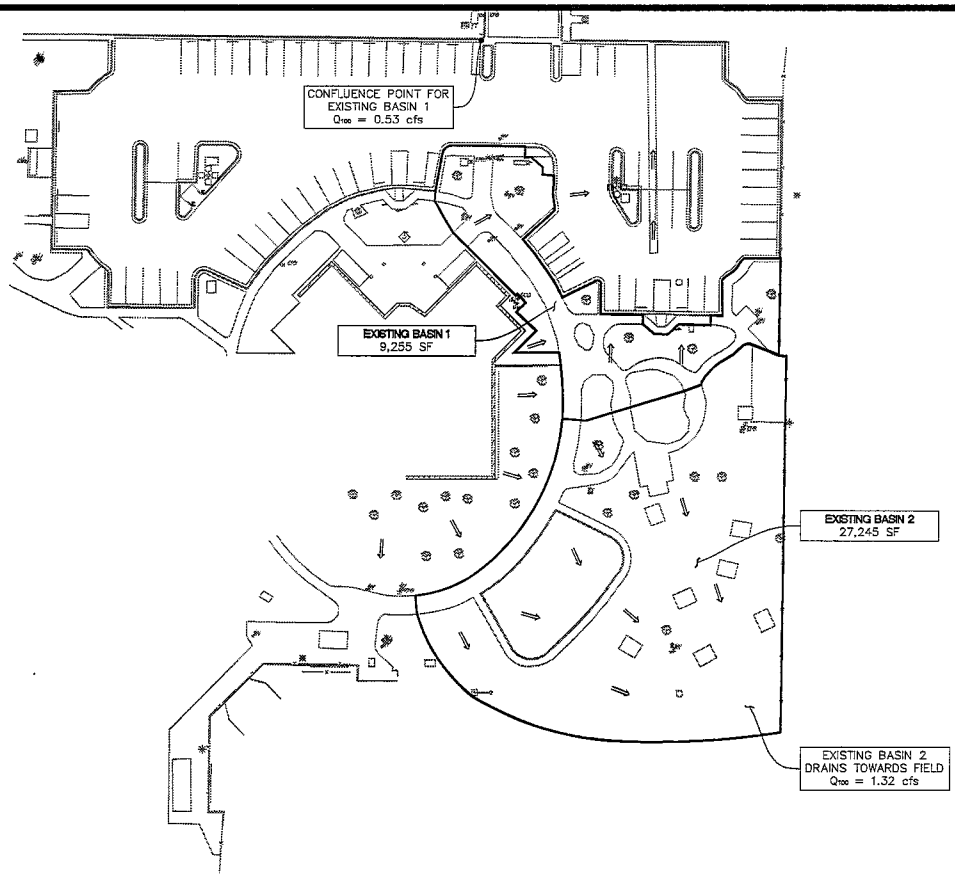
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Samuel Waisbord • RCE 78071 • Expires 09-30-17

# **APPENDIX A**

## **EXISTING HYDROLOGIC CONDITIONS EXHIBIT**

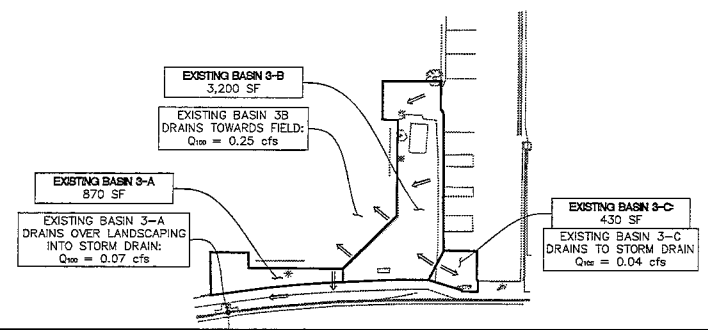




**LEGEND:**  
 BASIN LIMITS  
 DRAINAGE FLOW

Existing Site Conditions										
Basin	Basin Area (sq ft)	Basin Permeability (A)	Pervious Area (sq ft)	Impervious Area (sq ft)	% Pervious	% Impervious	Runoff Coefficient (C)	Tc (min)	Intensity 100-year (in/hr)	Q <sub>100</sub> (cfs)
1	9,255	0.21	4,255	5,000	43.9%	56.1%	0.90	5.0	4.20	0.53
2	27,245	0.63	23,185	4,060	85.1%	14.9%	0.50	5.0	4.20	1.32
3-A	870	0.02	0	870	0%	100%	0.85	5.0	4.20	0.07
3-B	3,200	0.07	0	3,200	0%	100%	0.85	5.0	4.20	0.25
3-C	430	0.01	0	430	0%	100%	0.85	5.0	4.20	0.04
<b>Total</b>	<b>41,000</b>	<b>0.84</b>	<b>27,240</b>	<b>13,760</b>	<b>66.4%</b>	<b>33.6%</b>				

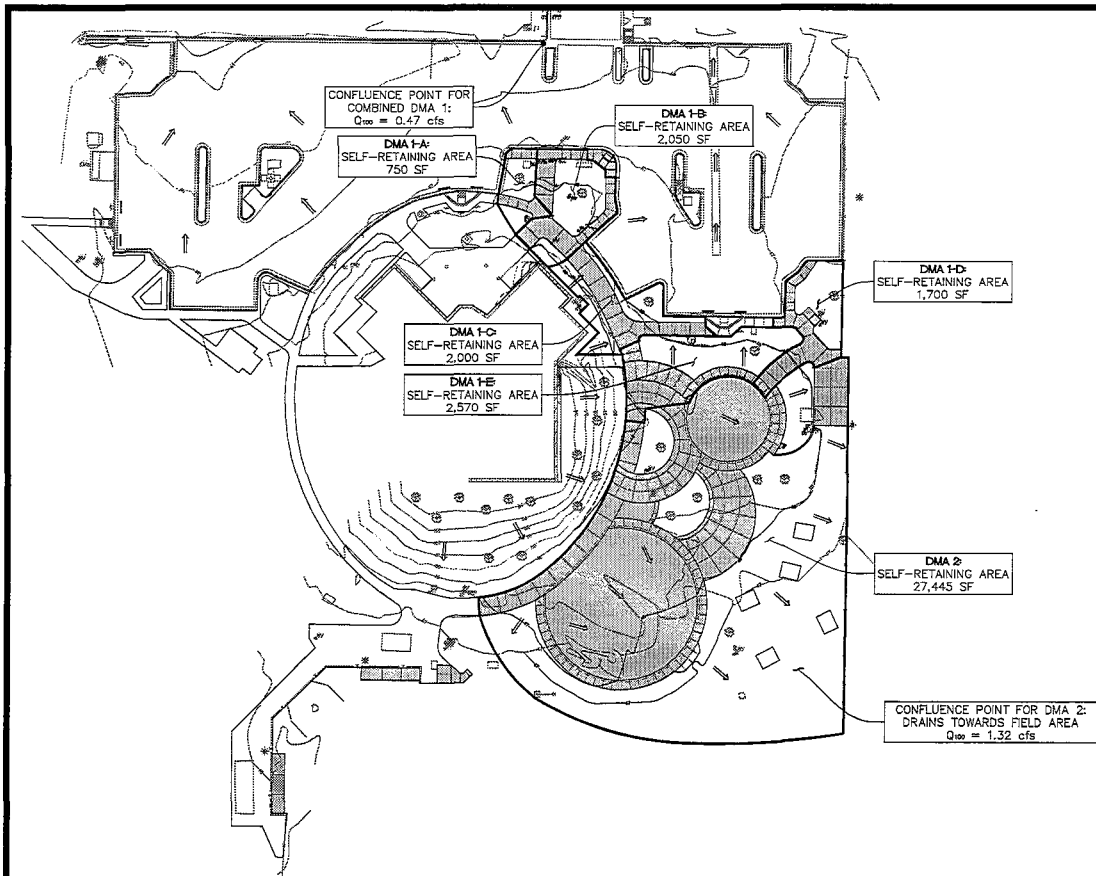
1. Runoff coefficients have been calculated by using the volume and weighting formula on Table 3-2 of the City of San Diego Drainage Design Manual.  
 2. Intensity values have been calculated on the "Intensity-Duration-Frequency Curves" graph located in Appendix 1-B of the City of San Diego Drainage Design Manual.



**EXISTING HYDROLOGIC CONDITIONS EXHIBIT**

## **APPENDIX B**

### **PROPOSED HYDROLOGIC CONDITIONS EXHIBIT**



**LEGEND:**

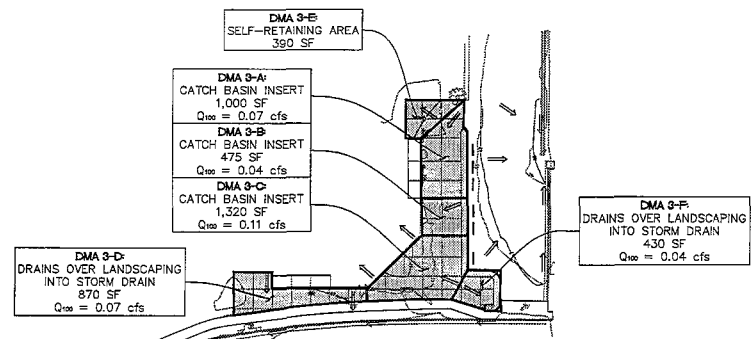
BASIN LIMITS  
 DRAINAGE FLOW  
 IMPERVIOUS AREA



Proposed Site Conditions										
Basin	Basin Area (sf)	Basin Average (ft)	Pervious Area (sf)	Impervious Area (sf)	% Pervious	% Impervious	Runoff Coefficient (C)	Ts (min)	Tp (hr)	Intensity (in/hr)
1-A	750	0.02	433	287	58.4%	25.0%	0.50	5.0	4.20	0.04
1-B	2,050	0.05	1,255	862	61.1%	46.6%	0.50	5.0	4.20	0.11
1-C	2,000	0.05	1,150	870	58.0%	43.5%	0.50	5.0	4.20	0.09
1-D	1,700	0.04	820	880	48.2%	51.8%	0.50	5.0	4.20	0.09
1-E	2,570	0.06	1,413	1,297	54.9%	47.1%	0.50	5.0	4.20	0.13
2	27,445	0.63	14,370	12,875	52.4%	46.2%	0.50	5.0	4.20	1.32
3-A	1,000	0.02	0	1,000	0%	100%	0.85	5.0	4.20	0.07
3-B	475	0.01	0	475	0%	100%	0.85	5.0	4.20	0.04
3-C	1,320	0.03	0	1,320	0%	100%	0.85	5.0	4.20	0.11
3-D	870	0.02	0	870	0%	100%	0.85	5.0	4.20	0.07
3-E	280	0.01	0	280	0%	100%	0.60	5.0	4.20	0.04
3-F	430	0.01	0	430	0%	100%	0.65	5.0	4.20	0.04
<b>TOTAL</b>	<b>41,000</b>	<b>0.34</b>	<b>18,284</b>	<b>22,876</b>	<b>44.6%</b>	<b>54.9%</b>				

1. Runoff coefficients have been calculated by using the values and weighting formula on Table 3-2 of the City of San Diego Drainage Design Manual.

2. Intensity values have been calculated per the "Tornado-Derived Frequency Curves" graph located in Appendix A-B of the City of San Diego Drainage Design Manual.



**PROPOSED HYDROLOGIC CONDITIONS EXHIBIT**

**Nasland** Civil Engineering Surveying Land Planning  
 T (858) 293-7770  
 4740 Ruffner Street  
 San Diego, CA 92111  
 nasland.com

**APPENDIX D**

**HYDRAULIC CALCULATIONS**

TABLE 2

RUNOFF COEFFICIENTS (RATIONAL METHOD)

DEVELOPED AREAS (URBAN)

<u>Land Use</u>	<u>Coefficient, C</u> <u>Soil Type (1)</u>
Residential:	<u>D</u>
Single Family	.55
Multi-Units	.70
Mobile Homes	.65
Rural (lots greater than 1/2 acre)	.45
Commercial (2)	
80% Impervious	.85
Industrial (2)	
90% Impervious	.95

NOTES:

- (1) Type D soil to be used for all areas.
- (2) Where actual conditions deviate significantly from the tabulated imperviousness values of 80% or 90%, the values given for coefficient C, may be revised by multiplying 80% or 90% by the ratio of actual imperviousness to the tabulated imperviousness. However, in no case shall the final coefficient be less than 0.50. For example: Consider commercial property on D soil.

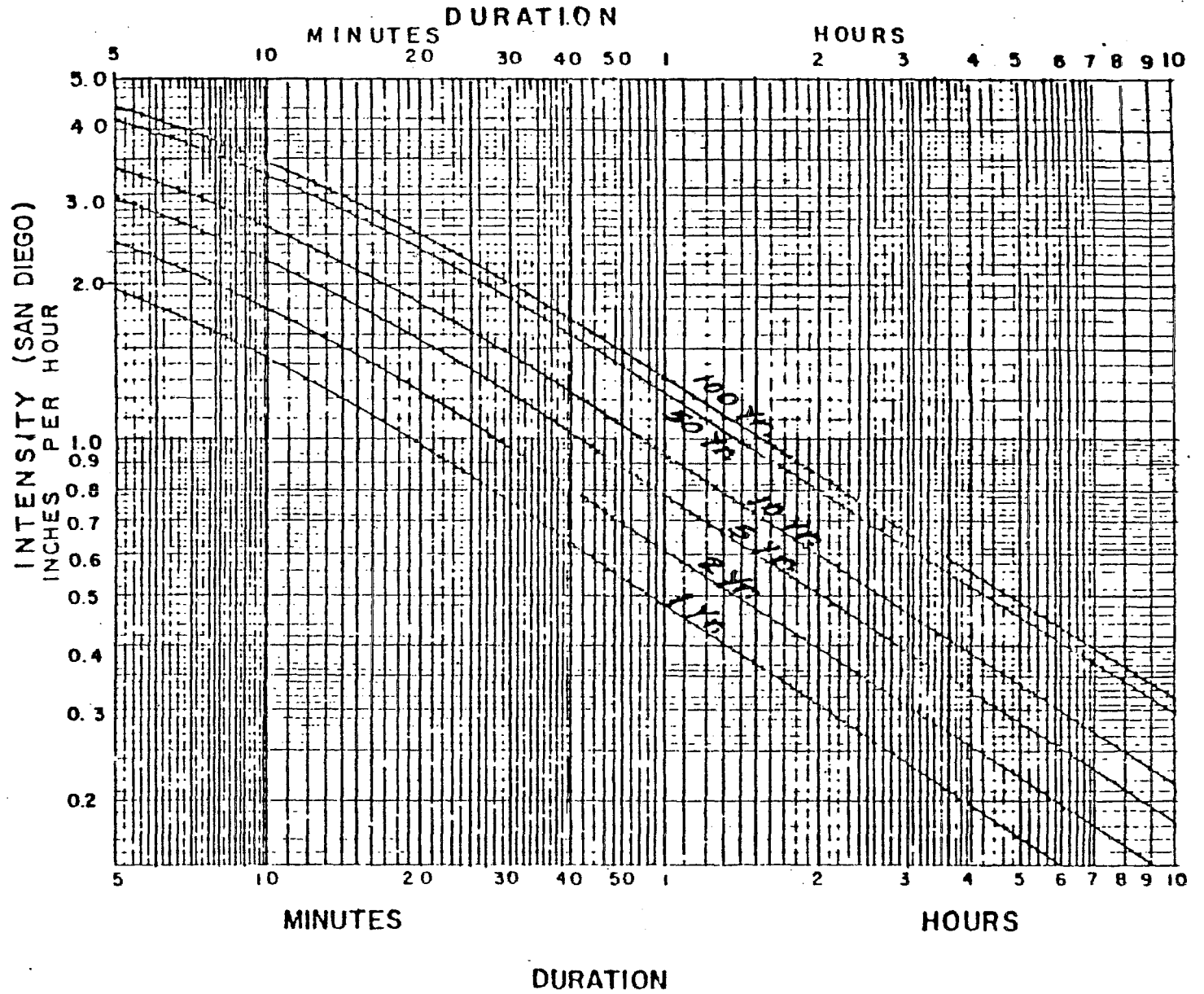
$$\begin{aligned}
 \text{Actual imperviousness} &= 50\% \\
 \text{Tabulated imperviousness} &= 80\% \\
 \text{Revised C} &= \frac{50}{80} \times 0.85 = 0.53
 \end{aligned}$$

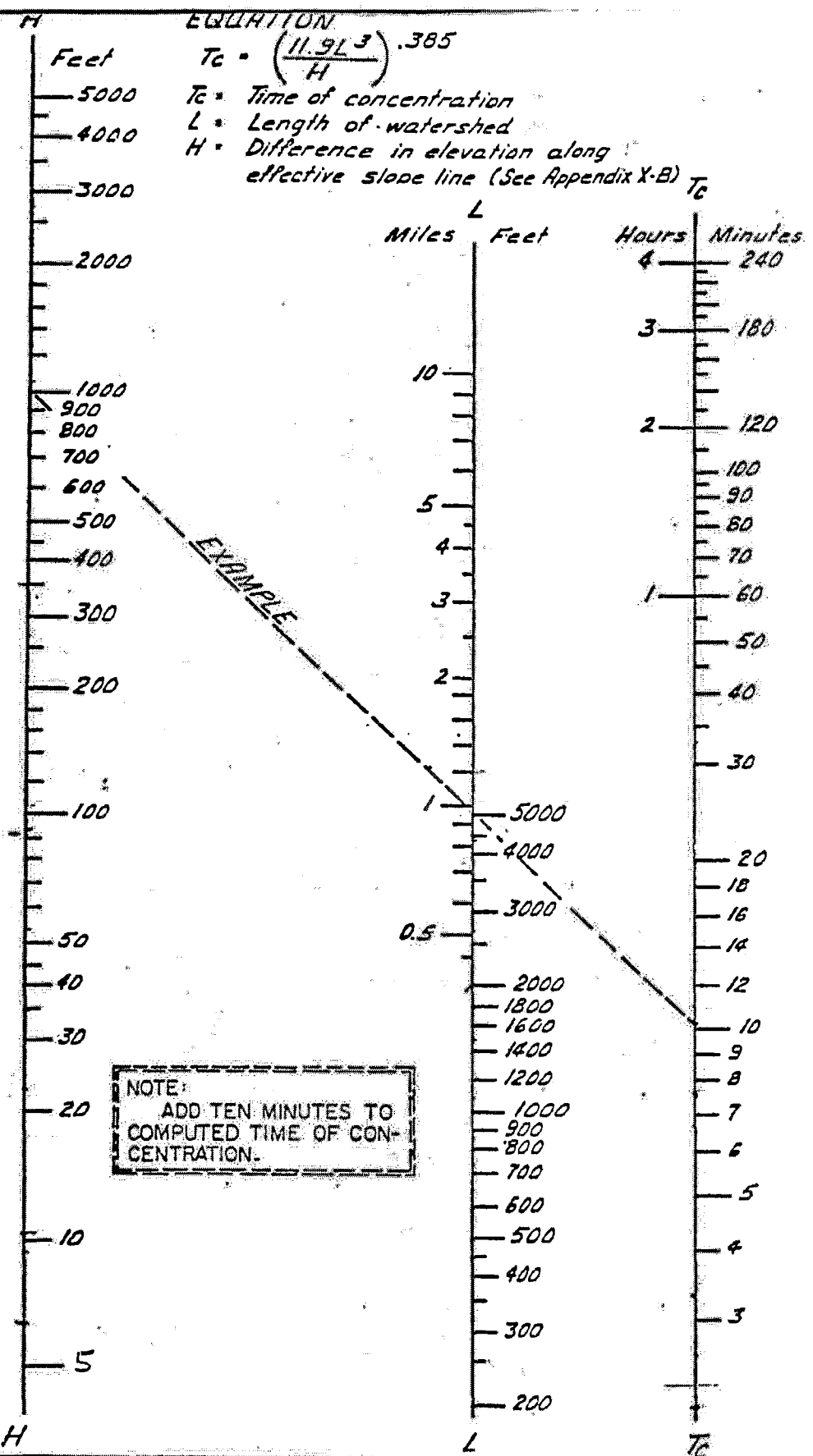
ELEV.	FACTOR
0-1500	1.00
1500-3000	1.25
3000-4000	1.42
4000-5000	1.60
5000-6000	1.70
DESERT	1.25

To obtain correct intensity,  
multiply intensity on chart  
by factor for design  
elevation.

83

**RAINFALL**  
**INTENSITY - DURATION - FREQUENCY**  
**CURVES**  
**for**  
**COUNTY OF SAN DIEGO**  
**APPENDIX J-1**



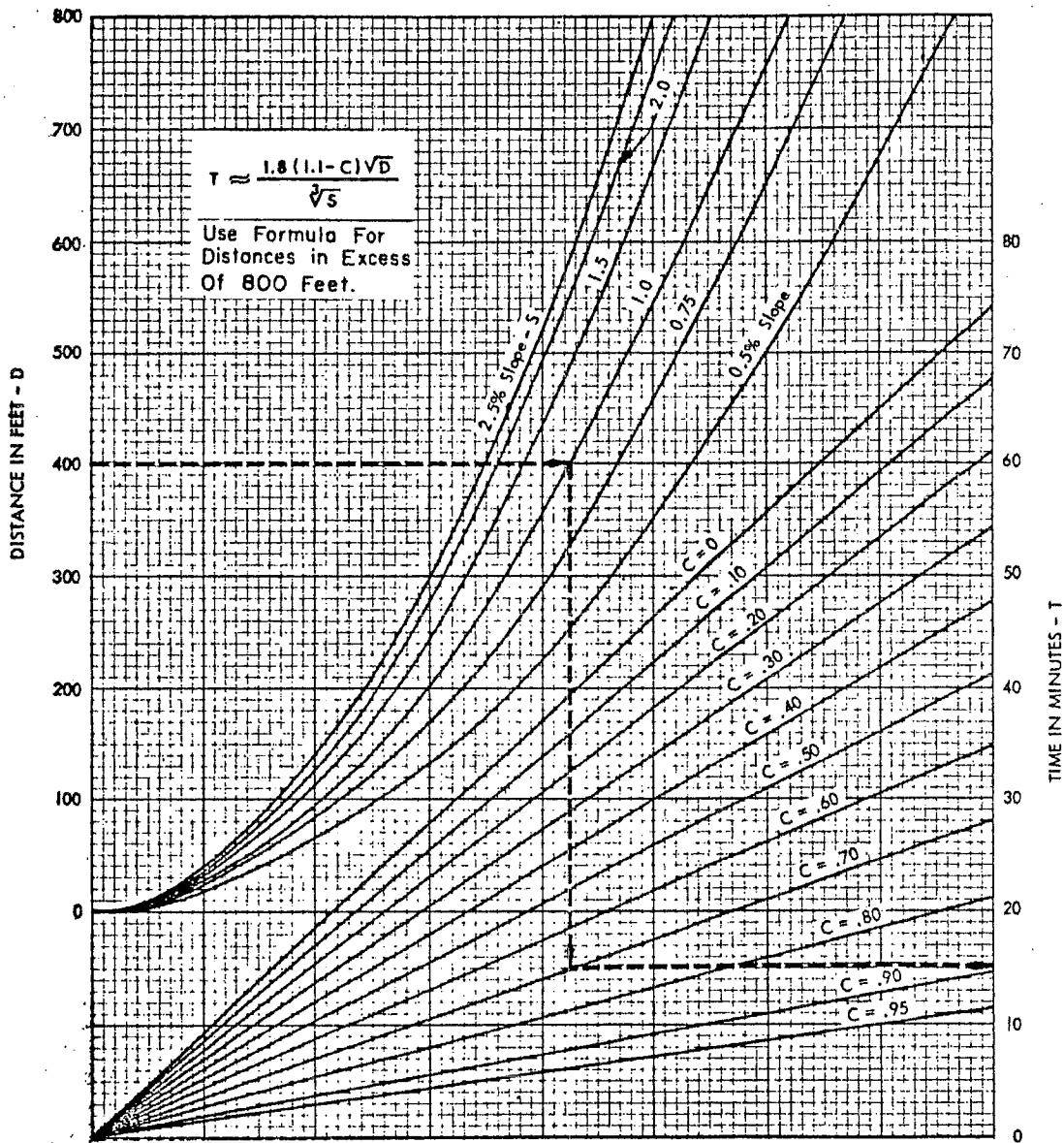


**SAN DIEGO COUNTY**  
 DEPARTMENT OF SPECIAL DISTRICT SERVICES  
**DESIGN MANUAL**  
 APPROVED *[Signature]*

**NOMOGRAPH FOR DETERMINATION**  
**OF TIME OF CONCENTRATION (Tc)**  
**FOR NATURAL WATERSHEDS**

DATE \_\_\_\_\_ APPENDIX \_\_\_\_\_

# URBAN AREAS OVERLAND TIME OF FLOW CURVES



Surface Flow Time Curves

EXAMPLE:

GIVEN: LENGTH OF FLOW = 400 FT.

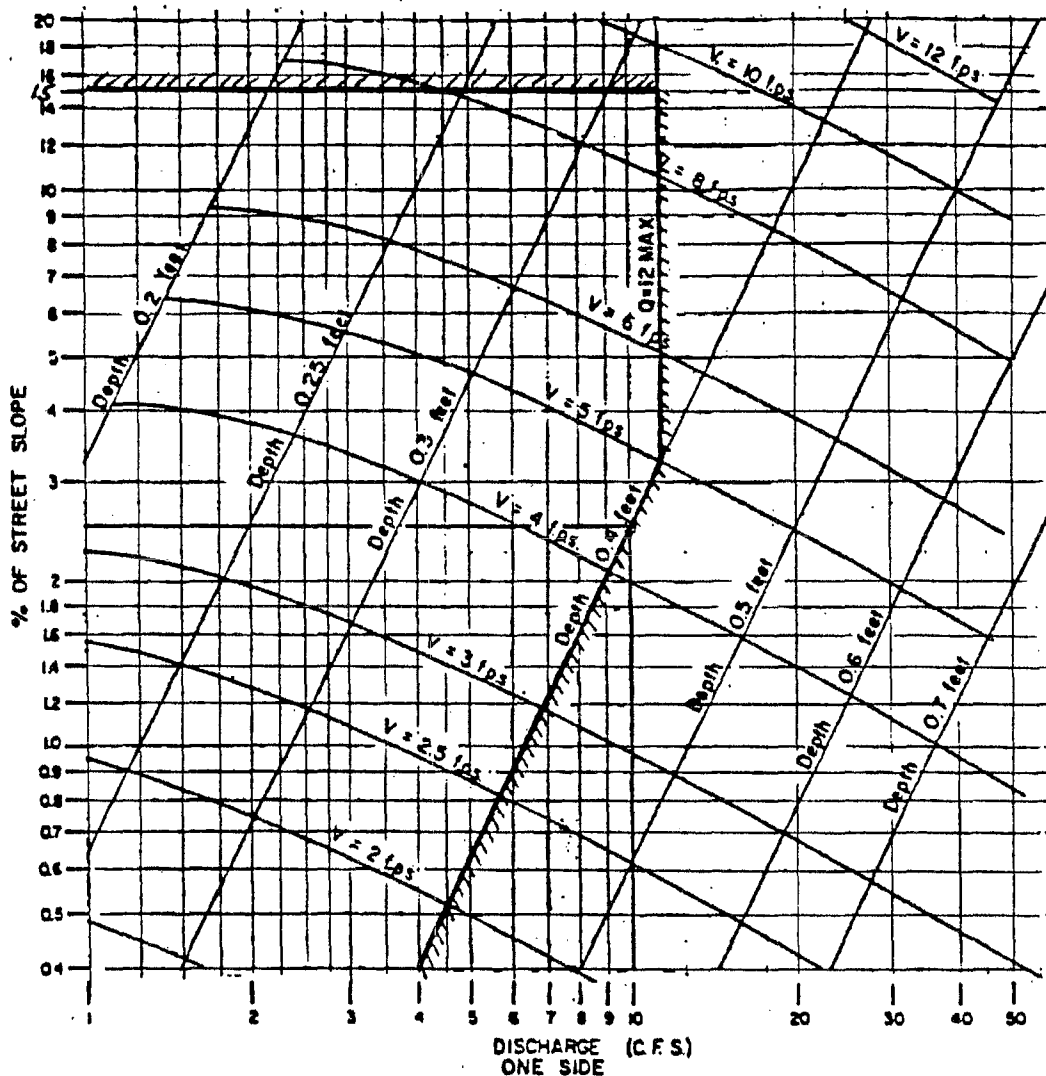
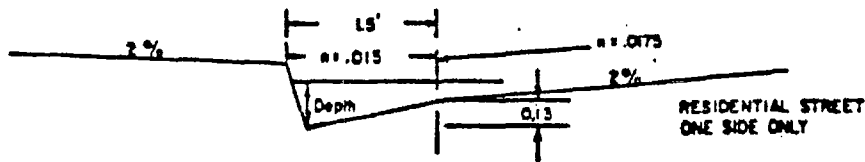
SLOPE = 1.0%

COEFFICIENT OF RUNOFF C = .70

READ: OVERLAND FLOWTIME = 15 MINUTES



CHART I-104.12



EXAMPLE:

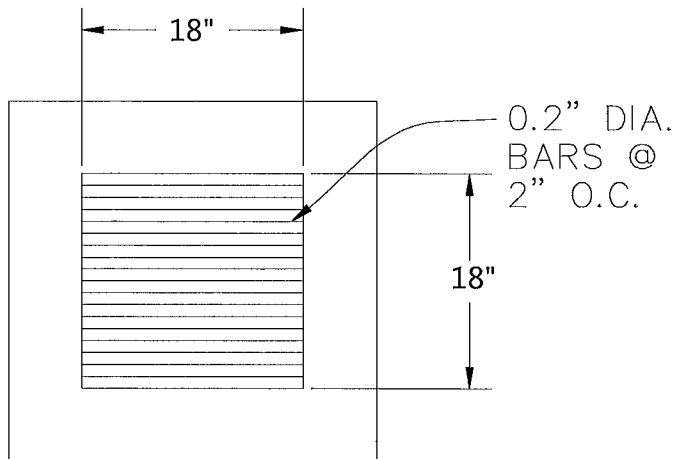
Given:  $Q = 10$   $S = 2.5\%$   
 Chart gives: Depth = 0.4, Velocity = 4.4 fps.

REV.		CITY OF SAN DIEGO - DESIGN GUIDE	SHT. NO.
		GUTTER AND ROADWAY	
		DISCHARGE - VELOCITY CHART	

# **APPENDIX C**

## **HYDROLOGY REFERENCE**

## 18" x 18" CATCH BASIN



### CLEAR OPEN AREA

$$\text{AREA OF BARS: } (18/12 \times 18/12) - (18/12 \times 36/1 \times 0.2/12) = 1.35 \text{ ft}^2$$

### PERIMETER:

$$4 \times 18/12 = 6 \text{ ft}$$

ASSUME FREEBOARD DEPTH OF 0.5'

$$\text{ASSUME 50\% CLOGGED, THEREFORE: } \begin{aligned} \text{OPEN AREA} &= 1.35 \text{ ft}^2 / 2 = 0.68 \text{ ft}^2 \\ \text{PERIMETER} &= 6 \text{ ft} / 2 = 3 \text{ ft} \end{aligned}$$

### WEIR FLOW:

$$Q_{\text{CAP}} = C_W P d^{1.5} = 3.0 (3.0 \text{ ft})(0.5)^{1.5} = \underline{3.18 \text{ cfs}}$$

### ORFICE FLOW:

$$Q_{\text{CAP}} = C_o A (2d)^{0.5} = 0.67 (0.68 \text{ ft}^2)(2 \times 32.2 \times 0.5)^{0.5} = \underline{2.59 \text{ cfs}}$$

**ATTACHMENT F**  
**RESERVED**

**ATTACHMENT G**  
**CONTRACT AGREEMENT**

## CONTRACT AGREEMENT

---

### CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and Atlas Development, herein called "Contractor" for construction of **Larsen Field ADA Improvements Phase II**; Bid No. **K-16-1410-DBB-3**; in the amount of **One Million Nine Hundred Ninety-Nine Thousand One Hundred Twenty-One Dollars and .82/100 (\$1,099,121.82)**, which is comprised of the Base Bid plus Additive Alternates A & B.

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

1. The following are incorporated into this contract as though fully set forth herein:
  - (a) The attached Faithful Performance and Payment Bonds.
  - (b) The attached Proposal included in the Bid documents by the Contractor.
  - (c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
  - (d) That certain documents entitled **Larsen Field ADA Improvements Phase II**, on file in the office of the Public Works Department as Document No. **S-13004**, as well as all matters referenced therein.
2. The Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **Larsen Field ADA Improvements Phase II**, Bid Number **K-16-1410-DBB-3**, San Diego, California.
3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances.
4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
5. This contract is effective as of the date that the Mayor or designee signs the agreement.

**CONTRACT AGREEMENT (continued)**

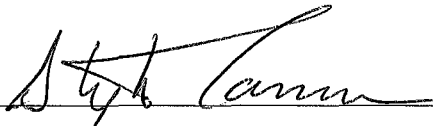
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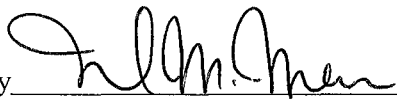
**IN WITNESS WHEREOF**, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code 22.3102 authorizing such execution.

**THE CITY OF SAN DIEGO**

**APPROVED AS TO FORM**

Jan I. Goldsmith, City Attorney

By 

By 

Print Name: Stephen Samara, Principal Contract Specialist

Print Name: Mark H. Mac

Deputy City Attorney

Date: 7-5-16

Date: 7-6-16

**CONTRACTOR**

By 

Print Name: Mark Atefi

Title: President

Date: 5/1/16

City of San Diego License No.: 201000550

State Contractor's License No.: 858038

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000003093

## CERTIFICATIONS AND FORMS

**Instruction to Bidders, Section 1** - The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this bid are true and correct.



## **Bidder's General Information**

To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND  
SUBMITTED WITH BID UNDER 23 UNITED STATES CODE 112 AND  
PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

## **CONTRACTOR CERTIFICATION**

---

### **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 7-13.3, "Drug-Free Workplace", of the project specifications, and that;

This company has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

## **CONTRACTOR CERTIFICATION**

---

### **AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the American With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 7-13.2, "American With Disabilities Act", of the project specifications, and that;

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

## **CONTRACTOR CERTIFICATION**

---

### **CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 7-13.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than \$50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

**AFFIDAVIT OF DISPOSAL**

**(To be submitted upon completion of Construction pursuant to the  
contracts Certificate of completion)**

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

\_\_\_\_\_  
(Name of Project or Task)

as particularly described in said contract and identified as Bid No. \_\_\_\_\_ ; SAP No. (WBS/IO/CC) \_\_\_\_\_; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

\_\_\_\_\_  
\_\_\_\_\_  
**NOW, THEREFORE**, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

\_\_\_\_\_  
\_\_\_\_\_  
and that they have been disposed of according to all applicable laws and regulations.

Dated this \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Contractor  
by

**ATTEST:**

State of \_\_\_\_\_ County of \_\_\_\_\_

On this \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared \_\_\_\_\_ known to me to be the \_\_\_\_\_ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

COMPANY LETTERHEAD

CERTIFICATE OF COMPLIANCE

**Materials and Workmanship Compliance**

For Contract or Task \_\_\_\_\_

I certify that the material listed below complies with the materials and workmanship requirements of the Caltrans Contract Plans, Special Provisions, Standard Specifications, and Standard Plans for the contract listed above.

I also certify that I am an official representative for \_\_\_\_\_, the manufacturer of the material listed above. Furthermore, I certify that where California test methods, physical or chemical test requirements are part of the specifications, that the manufacturer has performed the necessary quality control to substantiate this certification.

**Material Description:**

Manufacturer: _____
Model: _____
Serial Number (if applicable) _____
Quantity to be supplied: _____
Remarks: _____

Signed by: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_





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

\*\*\* PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY \*\*\*  
**TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY**  
**SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION**

ADDITIVE/DEDUCTIVE ALTERNATE	NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>①</sup>	WHERE CERTIFIED <sup>②</sup>	CHECK IF JOINT VENTURE PARTNERSHIP
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Bidder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC		
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

## **ELECTRONICALLY SUBMITTED FORMS**

### **THE FOLLOWING FORMS MUST BE SUBMITTED IN PDF FORMAT WITH BID SUBMISSION**

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND – See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions**
- B. CONTRACTOR’S CERTIFICATION OF PENDING ACTIONS**
- C. EQUAL BENEFITS ORDINANCE - CERTIFICATION OF COMPLIANCE**
- D. NON-LOBBYING CERTIFICATION**

**Bids will not be accepted until ALL forms are submitted as  
part of the bid submittal**

**BID BOND**

**See Instructions to Bidders, Bidder Guarantee of Good Faith  
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That Atlas Development Corporation as Principal, and  
Great American 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

Bid No. K-16-1410-DBB-3, Larsen Field ADA Improvements Phase II

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time  
and in the manner required in the "Notice Inviting Bids" enters into a written Agreement on the form  
of agreement bound with said Contract Documents, furnishes the required certificates of insurance,  
and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null  
and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond  
by said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in  
such suit, including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this 14th day of March, 20 16

Atlas Development Corporation (SEAL)  
(Principal)

Great American Insurance Company (SEAL)  
(Surety)

By: [Signature]  
(Signature)

By: [Signature]  
(Signature)  
Tara Bacon, Attorney-in-Fact

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

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

State of California

County of San Diego )

On March 14, 2016 before me, Maria Hallmark, Notary Public  
(insert name and title of the officer)

personally appeared Tara Bacon  
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  (Seal)

**GREAT AMERICAN INSURANCE COMPANY®**

Administrative Office: 301 E 4TH STREET • CINCINNATI, OHIO 45202 • 513-369-5000 • FAX 513-723-2740

The number of persons authorized by this power of attorney is not more than FIVE

No. 0 14839

**POWER OF ATTORNEY**

**KNOW ALL MEN BY THESE PRESENTS:** That the GREAT AMERICAN INSURANCE COMPANY, a corporation organized and existing under and by virtue of the laws of the State of Ohio, does hereby nominate, constitute and appoint the person or persons named below, each individually if more than one is named, its true and lawful attorney-in-fact, for it and in its name, place and stead to execute on behalf of the said Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof, provided that the liability of the said Company on any such bond, undertaking or contract of suretyship executed under this authority shall not exceed the limit stated below.

Name	Address	Limit of Power
DALE G. HARSHAW	KYLE KING ALL OF	ALL
GEOFFREY SHELTON	JOHN R. QUALIN SAN DIEGO, CALIFORNIA	\$75,000,000.00
TARA BACON		

This Power of Attorney revokes all previous powers issued on behalf of the attorney(s)-in-fact named above.

IN WITNESS WHEREOF the GREAT AMERICAN INSURANCE COMPANY has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 22ND day of APRIL 2013  
GREAT AMERICAN INSURANCE COMPANY



*Steph C. B.*  
Assistant Secretary

*David C. Kitchin*  
Divisional Senior Vice President

DAVID C. KITCHIN (877-377-2405)

STATE OF OHIO, COUNTY OF HAMILTON - ss:

On this 22ND day of APRIL, 2013, before me personally appeared DAVID C. KITCHIN, to me known, being duly sworn, deposes and says that he resides in Cincinnati, Ohio, that he is a Divisional Senior Vice President of the Bond Division of Great American Insurance Company, the Company described in and which executed the above instrument; that he knows the seal of the said Company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by authority of his office under the By-Laws of said Company, and that he signed his name thereto by like authority.



**KAREN L. GROSHEIM**  
NOTARY PUBLIC, STATE OF OHIO  
MY COMMISSION EXPIRES 02-20-16

*Karen L. Grosheim*

This Power of Attorney is granted by authority of the following resolutions adopted by the Board of Directors of Great American Insurance Company by unanimous written consent dated June 9, 2008.

*RESOLVED: That the Divisional President, the several Divisional Senior Vice Presidents, Divisional Vice Presidents and Divisional Assistant Vice Presidents, or any one of them, be and hereby is authorized, from time to time, to appoint one or more Attorneys-in-Fact to execute on behalf of the Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; to prescribe their respective duties and the respective limits of their authority; and to revoke any such appointment at any time.*

*RESOLVED FURTHER: That the Company seal and the signature of any of the aforesaid officers and any Secretary or Assistant Secretary of the Company may be affixed by facsimile to any power of attorney or certificate of either given for the execution of any bond, undertaking, contract of suretyship, or other written obligation in the nature thereof, such signature and seal when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.*

**CERTIFICATION**

I, STEPHEN C. BERAHA, Assistant Secretary of Great American Insurance Company, do hereby certify that the foregoing Power of Attorney and the Resolutions of the Board of Directors of June 9, 2008 have not been revoked and are now in full force and effect.

Signed and sealed this 14th day of March, 2016



*Steph C. B.*  
Assistant Secretary

**CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.
  
- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: Atlas Development

Certified By Mark Atefi Title President  
Name

M. Atefi Date 3/21/16  
Signature

**USE ADDITIONAL FORMS AS NECESSARY**

**DISCLOSURE OF LOBBYING ACTIVITIES** Approved by OMB  
 Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352  
 (See reverse for public burden disclosure)

0348-0046

<b>1. Type of Federal Action:</b> <input checked="" type="checkbox"/> a. Contract a. Grant b. Cooperative agreement c. Loan d. Loan guarantee e. Loan insurance		<b>2. Status of Federal Action:</b> <input checked="" type="checkbox"/> a. bid/offer/application b. initial award c. post-award		<b>3. Report Type:</b> <input checked="" type="checkbox"/> a. initial finding b. material change <b>For Material Change Only</b> year _____ quarter _____ date of last report _____	
<b>4. Name and Address of Reporting Entity:</b> <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known:  Congressional District, if known: _____			<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b>  Congressional District, if known: _____		
<b>6. Federal Department/Agency:</b> HUD			<b>7. Federal Program Name/Description:</b> CDBG  CFDA Number, if applicable: _____		
<b>8. Federal Action Number, if known:</b>			<b>9. Award Amount, if known:</b> \$ _____		
<b>10. a. Name and Address of Lobbying Entity</b> (if individual, last name, first name, M) Atlas Development 991C Lomas Santa Fe #115 Solana Beach CA 92075 (attach Continuation Sheet(s) SF-LLLA, if necessary)			<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI):		
<b>11. Amount of Payment</b> (check all that apply) \$ <u>  0  </u> <input type="checkbox"/> actual <input type="checkbox"/> planned		<b>13. Type of Payment</b> (check all that apply) <input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferral <input type="checkbox"/> f. other: specify: <u>  NIA  </u>			
<b>12. Form of Payment</b> (check all that apply) <input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind: specify: nature <u>  NIA  </u> Value _____					
<b>14. Brief Description of Services Performed or to be Performed and Date(s) of Service, Including officer(s), employee(s), or Member(s), contacted, for Payment indicated in item 11:</b> (attach Continuation Sheet(s) SF-LLLA, if necessary)					
<b>15. Continuation Sheet(s) SF-LLLA attached:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
<b>16.</b> Information requested through this for misauthorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure may be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.		Signature: <u>  M Atefi  </u> Print Name: <u>  Mark Atefi  </u> Title: <u>  President  </u> Telephone No.: <u>  619-200-0902  </u> Date: <u>  3,21,16  </u>			
<b>Federal Use Only:</b>					Authorized for Local Reproduction Standard Form LLL (Rev. 7-07)

**DISCLOSURE OF LOBBYING ACTIVITIES** Approved by  
**CONTINUATION SHEET**

OMB0348-0046

Reporting Entity: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

Authorized for Local Reproduction  
Standard Form - LLL-A



**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: Atlas Development Contact Name: Mark Atefi  
 Company Address: 991C Lomas Santa Fe Dr #115 Contact Phone: 619-200-0902  
Solana Beach CA 92075 Contact Email: mark.atefi@atlas-con.com

**CONTRACT INFORMATION**

Contract Title: Larsen Field ADA Improvements Phase II Start Date:  
 Contract Number (if no number, state location): K-16-1410-DBB-3 End Date:

**SUMMARY OF EQUAL BENEFITS ORDINANCE REQUIREMENTS**

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

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

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

Mark Atefi, Pres.  
 Name/Title of Signatory

M Atefi  
 Signature

3/21/16  
 Date

**FOR OFFICIAL CITY USE ONLY**

Receipt Date: \_\_\_\_\_ EBO Analyst: \_\_\_\_\_  Approved  Not Approved - Reason: \_\_\_\_\_

(Rev 02/15/2011)

# City of San Diego

CITY CONTACT: Clementina Giordano, Contract Specialist, Email: Cgiordano@sandiego.gov  
Phone No. (619) 533-3481, Fax No. (619) 533-3633

## ADDENDUM "A"

 - Bidding FOR



### Larsen Field ADA Improvements Phase II

BID NO.: K-16-1410-DBB-3  
SAP NO. (WBS/IO/CC).: S-13004  
CLIENT DEPARTMENT: 1714  
COUNCIL DISTRICT: 8  
PROJECT TYPE: GA  
CDBG #: B-15-MC-06-0542

#### **BID DUE DATE:**

**2:00 PM  
MARCH 22, 2016  
CITY OF SAN DIEGO  
PUBLIC WORKS CONTRACTS  
1010 SECOND AVENUE, 14<sup>th</sup> FLOOR, MS 614C  
SAN DIEGO, CA 92101**

# ENGINEER OF WORK

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

*Vicki Estrada*  
1) Registered Architect

3/7/16  
Date

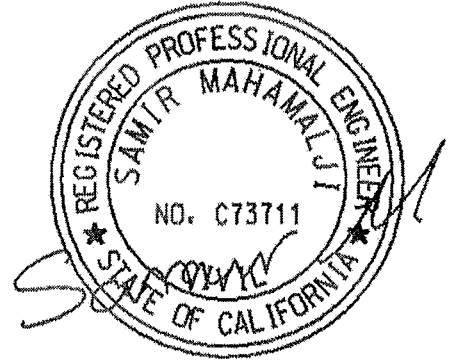
Seal:



*Samir M*  
2) For City Engineer

3/7/16  
Date

Seal:



## A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

## B. BIDDER'S QUESTIONS

### Question pertaining to Terms and Conditions

Q1. I have been trying for a couple days to post onto the MBDA website in regards to the above referenced project however, the site continues to be down in regards to posting, and states that it will be up soon. I have also emailed MBDA asking how much longer it will be down and continue to wait for a response.

Will this affect the 14 days required to post on this website to be deemed responsive to the bid?

A1. The City has checked with MBDA and they confirmed that their Business Tools are undergoing maintenance with no knowledge of when the site will be up and running again. Since the website is down for maintenance with no completion date, it shall be the Contractor's responsibility to document their efforts to post on the MBDA website and to include the documentation in their GFE.

Q2. Do we use the HUD goals on page 5 or the Minority/Female percentages on page 28? Planetbid information says that it has a minority goal of 16.9% and a Female goal of 6.9%. There is no mention of the HUD Goals.

A2. Community Development Block Grant (CDBG)/Housing of Urban Development (HUD) fair share goals are found in the Notice Inviting Bids, Section 7 – Subcontracting Participation Percentages, Item 7.5. Attachment D, Funding Agency Provisions, Section 1, refers to the Contractor's aggregate work force in each trade on all construction work in the covered area.

Q3. U.S. Department of Commerce - the phone number listed is no longer in use. Do you know where on their website we are supposed to place solicitations?

A3. The reference made in Attachment D, Funding Agency Provisions, Section 13.8 is to the U.S. Department of Commerce – Minority Business Development Agency. Solicitations shall be posted as indicated in Section 13.8, Note 3.

## C. NOTICE INVITING BIDS

1. To Notice Inviting Bids, Item 7, Subcontracting Participation Percentages, page 6, Sub-item 7.6., **DELETE** in its entirety and **SUBSTITUTE** with the following:

7.6. Bid shall be declared **non-responsive** if the Bidder fails any of the following conditions:

1. Submission of GFE documentation as specified in the Funding Agency Provisions.
2. Attending the Pre-Bid Meeting.
3. Bidder's submission of Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include DBE subcontractors shall be submitted within **4 Working Days** of the Bid opening.

**D. ATTACHMENTS**

1. To Attachment D, Community Development Block Grant (CDBG) Housing Urban Development (HUD) Funding Agency Provisions, pages 41 through 43, Item 13, DBE Potential Resources Centers, **DELETE** in its entirety and **SUBSTITUTE** with the following:

**13. DBE POTENTIAL RESOURCES CENTERS:**

- 13.1.** Utilization of the US Small Business Administration (SBA) and Minority Business Development Agency (MBDA) resources is required at no cost. These agencies offer several services, including Internet access to databases of DBEs.
- 13.2.** For additional assistance, the recipient or contractor can telephone the local offices of both agencies in their area (SBA Minority Enterprise Development Offices and DOC MBDA Regional Centers). The Internet web sites also include names, addresses, and phone or fax numbers of local SBA and MBDA centers. Do not write to these sources.
- 13.3.** The Contractor shall provide documentation that the local SBA/MBDA offices or web sites were notified of the contracting bid opportunity at least 15 Working Days prior to Bid opening and solicitation to DBE subcontractors at least 10 Working Days prior to Bid opening. Documentation shall not only include the efforts to contact the information sources and list the Contract opportunity, but also the solicitation and response to the bid request.
- 13.4.** Include qualified DBEs on solicitation lists and record the information on Form AA63. Solicitation shall be as broad as possible.
- 13.5.** If DBE sources are not located, explain why and describe the efforts made.
- 13.6.** The Contractor shall send invitations to at least 3 (or all, if less than 3) DBE vendors for each item of work referred by sources contacted. The invitations shall adequately specify the items for which bids are requested. The record of "good faith" efforts shall

indicate a real desire for a positive response, such as a certified mail receipt or a documented telephone conversation.

13.7. A regular letter or an unanswered telephone call is not an adequate "good faith" effort. A list of all sub-bidders, including the bidders not selected and non DBE Subcontractors, and bid amount for each item of the Work shall be submitted on Form AA62. If a low bid was not accepted, an explanation shall be provided.

13.8. Federal Agencies (must be contacted and solicitations posted on their websites):

Name and Address	Telephone and Web Site
<b>U.S. Small Business Administration</b>	(415) 744-6820 Extension 0
455 Market Street, Suite 600	Dynamic Small Business Search: <a href="http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm">http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm</a> <sup>1</sup>
San Francisco, CA 94105	Bid Notification: <a href="https://eweb1.sba.gov/subnet/common/dsp_login.cfm">https://eweb1.sba.gov/subnet/common/dsp_login.cfm</a> <sup>2</sup>
RE: Minority Enterprise Development Offices	
<b>U.S. Department of Commerce</b>	(415) 704-7415
Minority Business Development Agency	Bid Notification:
555 Montgomery Street	<a href="http://www.mbda.gov/workspace">http://www.mbda.gov/workspace</a> <sup>3</sup>
San Francisco, CA 94111	RE: Business Development Centers

State Agencies (must be contacted):

Name and Address	Telephone and Web Site
<b>California Department of Transportation</b>	Mailing Address: PO Box 942874
(CALTRANS) Business Enterprise Program <sup>4</sup>	Sacramento, CA 94274-0015
1820 Alhambra Blvd.	(916) 227-9599
Sacramento, CA 95816	DBE Database: <a href="http://www.dot.ca.gov/hq/bep/find_certified.htm">http://www.dot.ca.gov/hq/bep/find_certified.htm</a>
<b>CA Public Utilities Commission (CPUC)</b> <sup>5</sup>	
505 Van Ness Avenue	Directory: <a href="https://sch.thesupplierclearinghouse.com/FrontEnd/SearchCertifiedDirectory.asp">https://sch.thesupplierclearinghouse.com/FrontEnd/SearchCertifiedDirectory.asp</a>
San Francisco, CA 94102-3298	

Notes:

1. The Contractor shall use the SBA's Dynamic Small Business Search database to search for potential subcontractors, suppliers, and/or manufacturers. Provide a copy of search records with GFE documentation.
2. The Contractor shall use SUB-Net to post subcontracting opportunities. The Contractor shall post Subcontractor opportunities at least 15 Working Days prior to bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Provide copy of the Display Solicitation Record with the GFE documentation.
3. The Contractors shall use MBDA web portal to post subcontracting opportunities. The Contractor shall post subcontractor opportunities at least 15 Working Days prior to Bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Provide copy of the Offer Overview with the GFE documentation.
4. Based on the federal DBE program, CALTRANS maintains a database and provides directories of minority and woman-owned firms. Provide copy of search records with GFE documentation.
5. CPUC maintains a database of DBE-owned business enterprises and serves to inform the public. Provide copy of search records with GFE documentation.

James Nagelvoort, Director  
Public Works Department

Dated: *March 8, 2016*  
San Diego, California

JN/AJ/egz

Bid Results for Project Larsen Field ADA Improvements Phase II (K-16-1410-DBB-3)  
 Issued on 02/17/2016  
 Bid Due on March 22, 2016 2:00 PM (Pacific)  
 Exported on 03/22/2016

VendorID	Company Name	Address	City	State	ZipCode	Country	Contact	Phone	Fax	Email	Vendor Type
294226	Atlas Development	991C Lomas Santa Fe Dr #115	Soiana Beach		92075	United States	Mark atefi	619-200-0902	858-350-9337	mark.atefi@atlas-corp.net	ELBE,PQUAL,Local

Responsee	Responsee Title	Responsee Phone	Responsee Email
Mark Atefi	President	619-200-0902	mark.atefi@atlas-corp.net

Bid Format	Submitted Date	Delivery Method	Responsive	Status	Confirmation	Ranking
Electronic	March 22, 2016 1:51:27 PM (Pacific)			Submitted	75347	0

Attachments		
File Title	File Name	File Type
Atlas Development - Bid Bond	Bid Bond - Larsen Field.pdf	General Attachments
Atlas Development - Certification of Pending Actions	Contractor's Certification of Pending Act	General Attachments
Atlas Development - Equal Benefits Certificate of Compliance	Equal Benefits Ordinance Cert of Compli	General Attachments
Atlas Development - Lobbying Disclosure	Disclosure of Lobbying Activities.pdf	General Attachments

Line Items							
Item Num	Section	Item Code	Description	Unit of Measure	Quantity	Unit Price	Line Total
1	Main Bid	238990	Construction of Park Improvements	LS	1	\$778,264.12	\$778,264.12
2	Main Bid	524126	Bonds (Payment and Performance)	LS	1	\$30,000.00	\$30,000.00
3	Main Bid	238990	Mobilization	LS	1	\$50,000.00	\$50,000.00
4	Main Bid	541330	Water Pollution Control Program Development	LS	1	\$3,000.00	\$3,000.00
5	Main Bid	237990	Water Pollution Control Program Implementation	LS	1	\$12,000.00	\$12,000.00
6	Main Bid		Field Orders - Type II	AL	1	\$50,815.00	\$50,815.00
						Subtotal	\$924,079.12
7	Alternate A	238990	South East Baseball Field Improvements Including Drinking Fountain, A	LS	1	\$105,427.12	\$105,427.12
						Subtotal	\$105,427.12
8	Alternate B	238990	Bleachers, Baseball Backstop Re-mashing, and Batter Boards	LS	1	\$69,615.58	\$69,615.58
						Subtotal	\$69,615.58
						Total	\$1,099,121.82

Subcontractors										
Name	Description	License Num	Amount	Type	Address	Address 2	City	State	ZipCode	Country
Tot Lot Pros	Installation of Play Area Structures									
DIR # 1000002374	967975	\$39,500.00			14688 El Molino St.	Fontana		92335	United States	
Robertson Industries, Inc	Resilient Surfacing									
DIR # 1000002700	667261	\$91,770.00		CADIR	2414 West 12th St, Suite 5	Tempe		85281	United States	
Landmark Consulting	Surveying									
DIR # 1000005403	977786	\$8,190.00		SLBE,CADIR	9555 Genesee Ave. Ste 200	San Diego		92121	United States	
RAP Engineering, Inc.	Asphalt									
DIR # 1000002968	880956	\$63,541.00		LAT,MALE,ELBE,PQUAL,DBE,MBE,CADIR	503 E. Mission Road	San Marcos		92069	United States	
In-Line Fence & Railing	Chain Link Fence									
DIR # 1000002605	769516	\$11,608.00		SLBE	P.O. Box 2637,Ramona, CA,	Ramona		92065	United States	
Planet Care Innovations	Landscaping									
DIR # 100021853	1004655	\$62,875.00			25060 Hance	Suite 103-213	Murrieta		92562	United States
			\$277,484.00							

Prime Self Performance
74.75