

CRITICAL STRESS CALCULATOR RESULTS - REACH 2

[Map](#) [Details](#)[Result View](#)

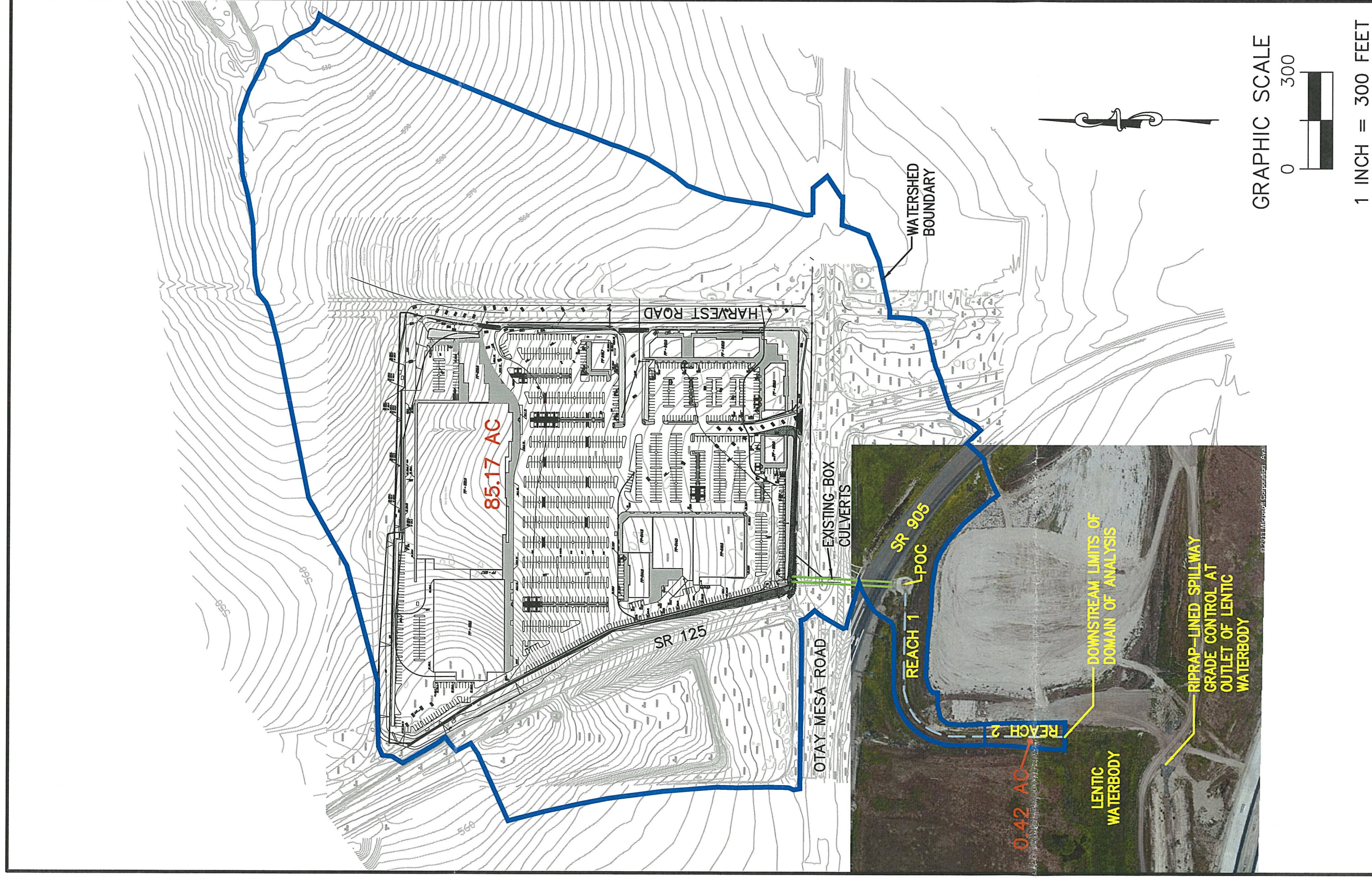
Define Drainage Basins

Basin: **Reach 2**Project: **California Crossings**[Start](#)[Project](#)[Basin](#)[POC](#)[Export](#)

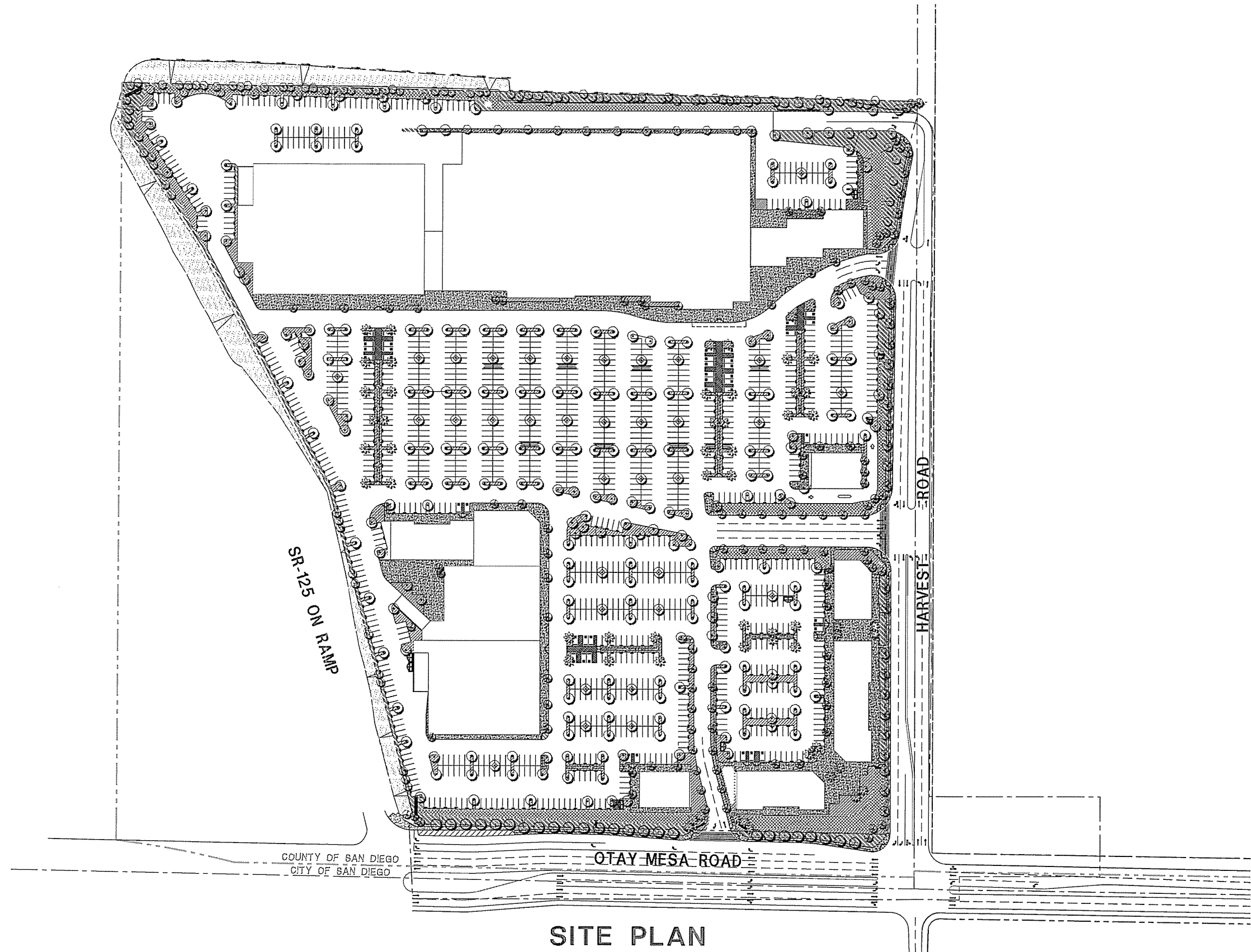
Manage Your Point of Compliance (POC)

Analyze the receiving water at the 'Point of Compliance' by completing this form. Click Edit and enter the appropriate fields, then click the Update button to calculate the critical flow and low-flow threshold condition. Finally, click Save to commit the changes.

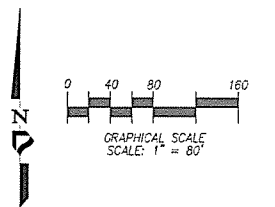
[Cancel](#)[Save](#)[Update](#)Channel Susceptibility: **LOW**Low Flow Threshold: **0.5Q2**Channel Assessed: **Yes**Watershed Area (ac): **85.59**Vertical Susceptibility: **Low (Vertical)**Lateral Susceptibility: **Low (Lateral)**Material: **Vegetation**Roughness: **0.100**Channel Top Width (ft): **37.4**Channel Bottom Width (ft): **29.4**Channel Height (ft): **2.0**Channel Slope: **0.0056**[Large View](#)



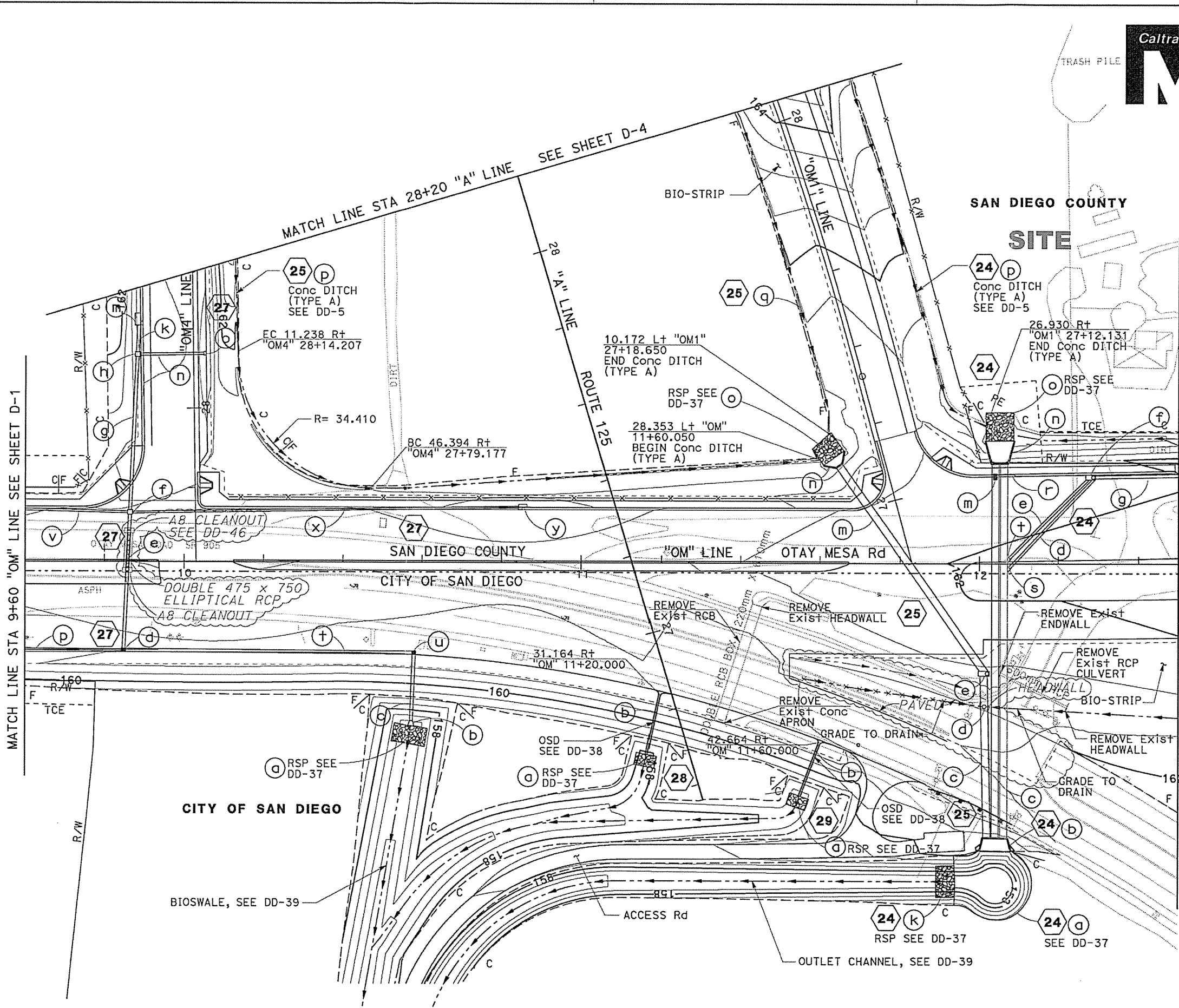
STUDY AREA EXHIBIT



SITE PLAN
California Crossings
San Diego, California



PROJECT DESIGN CONSULTANTS
 Planning | Engineering | Survey
 701 B Street, Suite 800 San Diego, CA 92101
 619.235.6471 Tel 619.234.0349 Fax

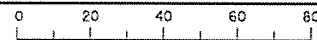


ISSUE RECORD		
No.	PURPOSE	DATE
0	RELEASED FOR CONSTRUCTION	09SEP05
1	CMT RFR C-031.04.01	24JUL07
AS BUILT		

THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS



USERNAME => jreeves
DGN FILE => 1aia02.dgn

CU 11274

EA 232301

SEGMENT 1A

DIST 11

COUNTY SD

ROUTE 125

KILOMETER POST TOTAL PROJECT 2.7/8.2

SHEET No. 24JUL07

TOTAL SHEETS

Caltrans

Metric

REGISTERED CIVIL ENGINEER

EA CAMERINO

No. 58844

Exp. 6-30-09

CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

24JUL07

California Transportation Ventures, Inc.

880 Kuhn Drive

Chula Vista, CA 91914

Rick Engineering Company

5620 Friars Road

San Diego, CA 92110

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Caltrans now has a web site! To get to the web site, go to: <http://www.dot.ca.gov>

AS BUILT

CONTRACT No. 11-232301

C.C.A. DATE 03-04-10

R.E. NAME Melinda Estes, P.E.

24 25 27 28 29

DRAINAGE PLAN

SCALE 1:500

D-2

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	125	2.7/8.2		

Steve A. Camerino 24JUL07
REGISTERED CIVIL ENGINEER DATE

EA CAMERINO
No. 58844
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

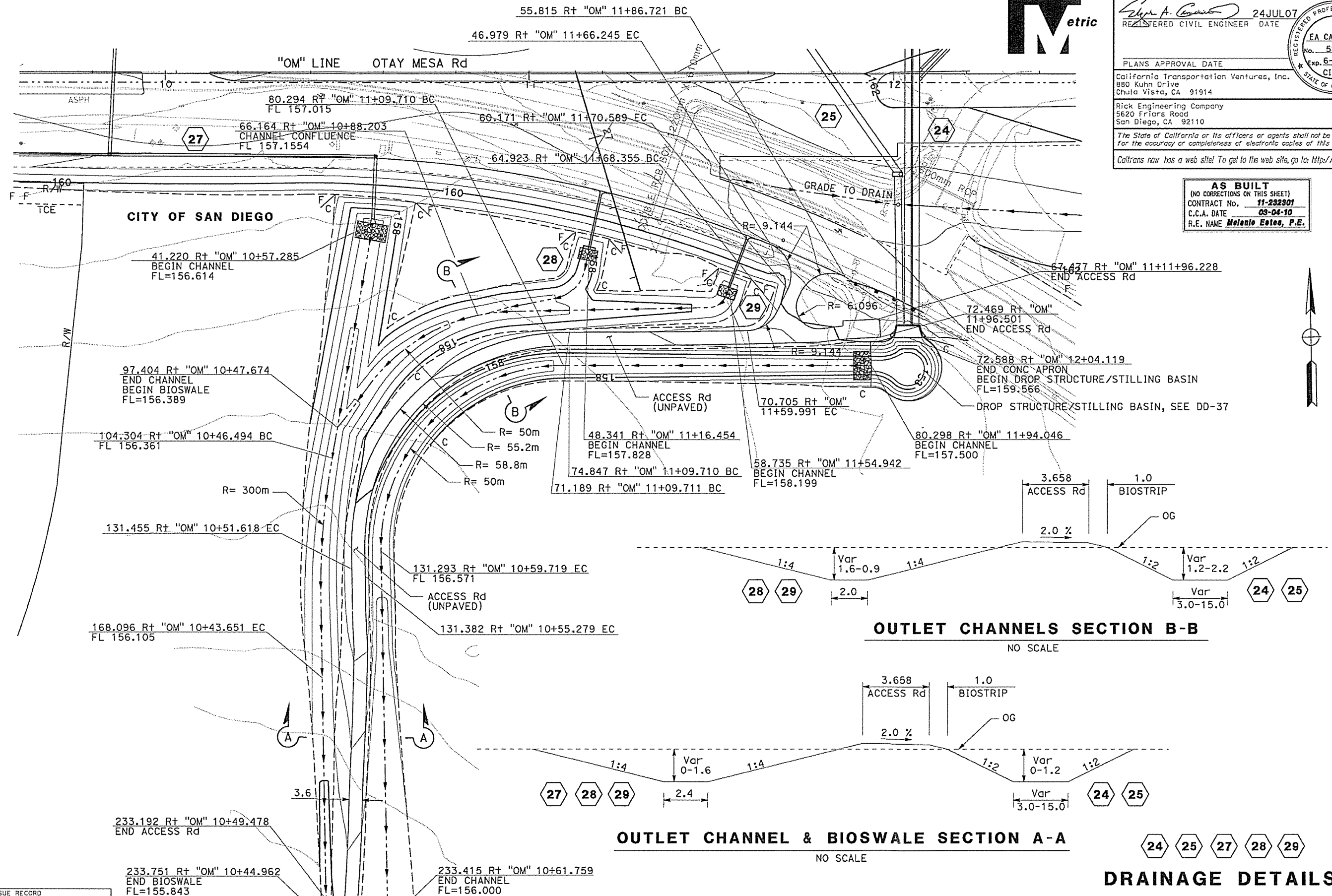
California Transportation Ventures, Inc.
880 Kuhn Drive
Chula Vista, CA 91914

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AS BUILT
(NO CORRECTIONS ON THIS SHEET)
CONTRACT No. 11-232301
C.C.A. DATE 03-04-10
R.E. NAME Melanie Estes, P.E.



THIS PLAN ACCURATE FOR DRAINAGE WORK ONLY

ALL DIMENSIONS ARE IN
METERS UNLESS OTHERWISE SHOWN

SCALE 1:500

DD-39

DRAINAGE DETAILS

SEGMENT 1A

FOR REDUCED PLANS ORIGINAL
SCALE IS IN MILLIMETERS

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      USERNAME => jreeves
      DGN FILE => 1a1c39.dgn

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CU 11274

EA 232301

DATE PLOTTED => 16-JUN-2009 09:30	LAST REVISION
TIME PLOTTED => 09:30	07-24-07

ATTACHMENT 3**Structural BMP Maintenance Information**

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Plan (Required)	☒ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Stormwater Maintenance Notification / Agreement (when applicable)	☐ Included ☒ Not Applicable

Use this checklist to ensure the required information has been included in the Structural BMP Maintenance Information Attachment:

Attachment 3a must identify:

- ☒ Specific maintenance indicators and actions for proposed structural BMP(s). This must be based on Section 7.7 of the BMP Design Manual and enhanced to reflect actual proposed components of the structural BMP(s)
- ☐ How to access the structural BMP(s) to inspect and perform maintenance
- ☐ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)
- ☐ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable
- ☐ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)
- ☐ Recommended equipment to perform maintenance
- ☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

Attachment 3b: For all Structural BMPs, Attachment 3b must include a draft maintenance agreement in the County's standard format depending on the Category (PDP applicant to contact County staff to obtain the current maintenance agreement forms). Refer to Section 7.3 in the BMP Design Manual for a description of the different categories.

Attachment 3a

Structural BMP Maintenance Plan

General maintenance guidelines are provided here per Section 7.7 of the BMP Design Manual; additional construction and maintenance detail will be provided at Final Engineering.

TABLE 7-3. Maintenance Indicators and Actions for Vegetated BMPs

Typical Maintenance Indicator(s) for Vegetated BMPs	Maintenance Actions
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation.
Poor vegetation establishment	Re-seed, re-plant, or re-establish vegetation per original plans.
Overgrown vegetation	Mow or trim as appropriate, but not less than the design height of the vegetation per original plans when applicable (e.g. a vegetated swale may require a minimum vegetation height).
Erosion due to concentrated irrigation flow	Repair/re-seed/re-plant eroded areas and adjust the irrigation system.
Erosion due to concentrated storm water runoff flow	Repair/re-seed/re-plant eroded areas, and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or minor re-grading to restore proper drainage according to the original plan. If the issue is not corrected by restoring the BMP to the original plan and grade, The County must be contacted prior to any additional repairs or reconstruction.
Standing water in vegetated swales	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, loosening or replacing top soil to allow for better infiltration, or minor re-grading for proper drainage. If the issue is not corrected by restoring the BMP to the original plan and grade, County staff in the Watershed Protection Program must be contacted prior to any additional repairs or reconstruction.
Standing water in bioretention, biofiltration with partial retention, or biofiltration areas, or flow-through planter boxes for longer than 96 hours following a storm event*	Make appropriate corrective measures such as adjusting irrigation system, removing obstructions of debris or invasive vegetation, clearing underdrains (where applicable), or repairing/replacing clogged or compacted soils.
Obstructed inlet or outlet structure	Clear obstructions.
Damage to structural components such as weirs, inlet or outlet structures	Repair or replace as applicable.
*These BMPs typically include a surface ponding layer as part of their function which may take 96 hours to drain following a storm event.	

TYPICAL BIOFILTRATION MAINTENANCE INDICATORS

RECTORSEAL



A simple but revolutionary extendable backwater valve that eliminates the need for expensive and unsightly manholes regardless of the burial depth.

- Complies with the requirements of IAPMO/UPC, ICC, IPC & CSA Standards
- Easy to perform maintenance & inspection from ground level
- Capable of handling back pressure up to 75 psi



Scan to view
video demo



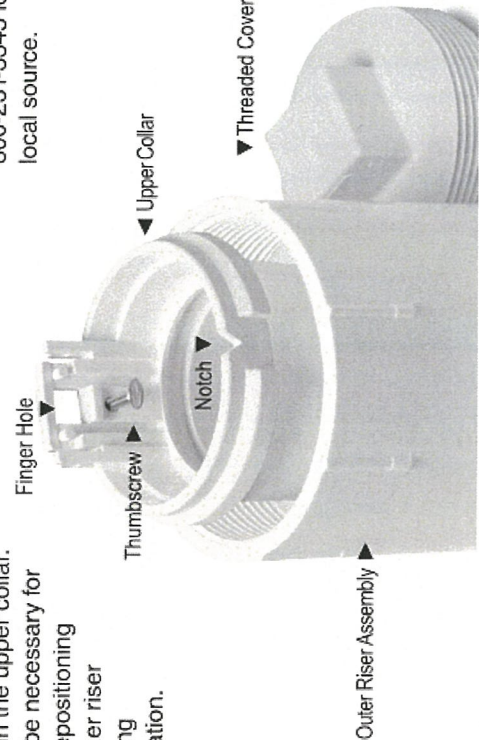
TYPICAL SURFACE MAINTAINABLE OUTLET STRUCTURE

Maintenance Procedure



The following steps will guide you through a proper inspection of your Clean Check® Extendable Backwater Valve.

- 1 Locate the Clean Check® cover.
- 2 Remove the threaded cover plug by unscrewing it to expose the upper collar of the inner riser assembly.
- 3 Loosen, but do not remove, the stainless steel thumbscrew located inside the upper collar.
- 4 Note the locations of the thumbscrew and opposing notch. There are two notches: one in the outer riser pipe and one in the upper collar. This will be necessary for correct repositioning of the inner riser pipe during re-installation.



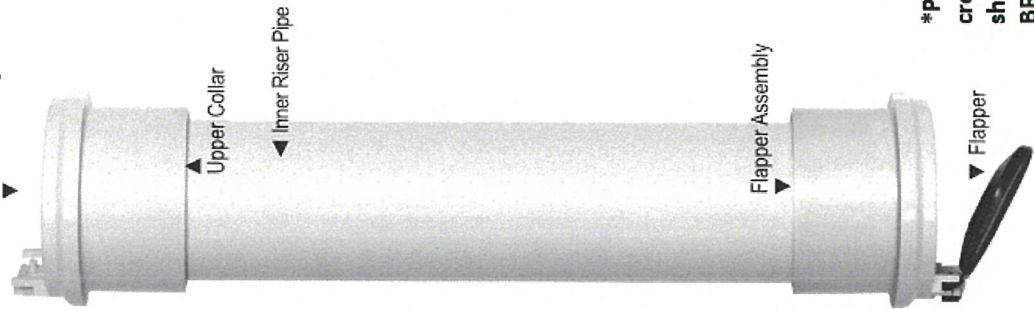
- 5 Using the finger hole provided above the thumbscrew of the upper collar, extract the inner riser assembly.

- 6 Clean any debris from the flapper, inner riser assembly, and the in ground valve body.

- 7 Inspect the flapper for any deterioration or damage caused by the harsh environment in which it operates. If deterioration is present, replace the flapper* (they are available from your local plumbing contractor or wholesale supply house.)

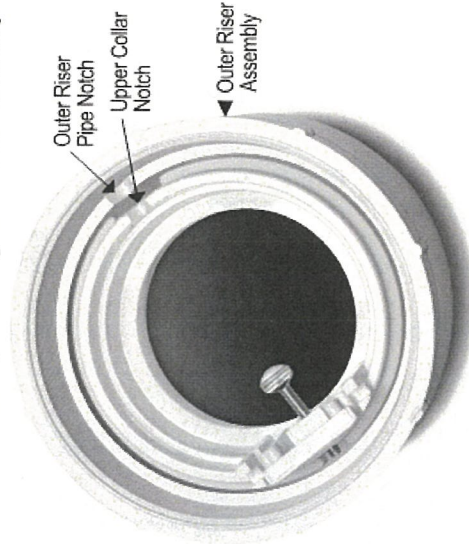
For additional availability, contact:
RectorSeal
Customer Service at
800-231-3345 for a
local source.

Inner Riser Assembly



- 8 The Clean Check® Extendable Backwater Valve is designed for easy re-installation. To properly re-seat the valve, slowly lower the inner assembly back into the outer riser pipe and rotate it until you feel the unit drop into place. The notch in the upper collar should now be lined up with the notch in the outer riser pipe.

Important: Correct alignment of the notch in the upper collar and the notch in the outer riser pipe is necessary for correct repositioning of the inner assembly.



- 9 After seating the inner riser assembly properly, hand tighten the thumbscrew until it re-seats against the inside wall of the outer riser pipe. Be certain the thumbscrew is NOT resting on the top of the larger outer riser pipe.

- 10 Replace the threaded cover plug.

***Prior to installing new flapper, use hole saw to create outlet orifice in middle of flapper. Orifice shall be the following diameter:**
BR1 - 2.0 IN, BR2 - 1.0 IN, BR3 - 1.0 IN, BR4 - 3.0 IN

ATTACHMENT 4

**County of San Diego PDP Structural BMP Verification for
Permitted Land Development Projects**

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County of San Diego BMP Design Manual Verification Form	
Project Summary Information	
Project Name	Otay 250
Record ID (e.g., grading/improvement plan number)	PDS 2015 – SPA-15-001
Project Address	9300 Otay Mesa Road Otay, CA
Assessor's Parcel Number(s) (APN(s))	646-080-26 TO 29, 646-080-31 TO 33, 646-240-30, 646-310-17
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	Otay 910 & Tijuana 911 Water Tanks 911.12
Responsible Party for Construction Phase	
Developer's Name	Sunroad Otay Partners, LP
Address	4445 Eastgate Mall, Suite 400 San Diego, CA 92121
Email Address	
Phone Number	(858) 362-8500
Engineer of Work	Stevens Cresto Engineering, Inc.
Engineer's Phone Number	(858) 694-5660
Responsible Party for Ongoing Maintenance	
Owner's Name(s)*	
Address	
Email Address	
Phone Number	
*Note: If a corporation or LLC, provide information for principal partner or Agent for Service of Process. If an HOA, provide information for the Board or property manager at time of project closeout.	