

## San Diego Regional Water Quality Control Board

October 23, 2015

**Certified Mail – Return Receipt Requested**

Article Number: 7009 1410 0002 2347 3407

Mr. Harry Persaud  
Orange County Public Works  
300 North Flower Street, Suite 622  
Santa Ana, CA 92703

**In reply/refer to:  
R9-2013-0111:795363:dbradford**

**Subject: Clean Water Act Section 401 Water Quality Certification  
No. R9-2013-0111 for the Camino del Rio Extension Project**

Mr. Persaud:

Enclosed find Clean Water Act Section 401 Water Quality Certification No. R9-2013-0111 (Certification) issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board ) in response to the application submitted by Orange County Public Works for the Camino del Rio Extension Project (Project). A description of the Project and Project location can be found in the Certification and site maps which are included as attachments to the Certification.

Orange County Public Works is enrolled under State Water Resources Control Board Order No. 2003-017-DWQ as a condition of the Certification and is required to implement and comply with all terms and conditions of the Certification in order to ensure that water quality standards are met for the protection of wetlands and other aquatic resources. Failure to comply with this Certification may subject Orange County Public Works to enforcement actions by the San Diego Water Board including administrative enforcement orders requiring Orange County Public Works to cease and desist from violations or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative civil liability in amounts of up to \$10,000 per day per violation; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

Please submit all reports and information required under this Certification in electronic format via e-mail to [SanDiego@waterboards.ca.gov](mailto:SanDiego@waterboards.ca.gov). Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to the San Diego Water Board, 2375 Northside Drive, San Diego, CA 92108. Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted.

HENRY ABARBANEL, PH.D. CHAIR | DAVID GIBSON, EXECUTIVE OFFICER

2375 Northside Drive, Suite 100, San Diego, California 92108-2700 | [www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line:  
Certification No. R9-2013-0111;795363: dbradford.

For questions or comments regarding the Certification, please contact Darren Bradford by telephone at (619) 521-3356 or by email at darren.bradford@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON  
Executive Officer

Enclosure:

Clean Water Act Section 401 Water Quality Certification No. R9-2013-0111 for the Camino del Rio Extension Project

DWG:jgs:eb:dlb

cc: U.S. Army Corps of Engineers  
Regulatory Branch  
Gerry Salas  
Gerardo.Salas@usace.army.mil

California Department of Fish and Game  
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U.S. EPA, OWOW, Region 9  
R9-WTR8-Mailbox@epa.gov

State Water Resources Control Board  
Division of Water Quality  
401 Water Quality Certification and  
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Tech Staff Information	
Certification No.	R9-2013-0111
Party ID	251069
Reg. Meas. ID	391014
Place ID	795363
Person ID	534961
WDID	9000002616

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

2375 Northside Drive, Suite.100, San Diego, CA 92108  
Phone (619) 516-1990 • Fax (619) 516-1994  
<http://www.waterboards.ca.gov/sandiego/>

Clean Water Act Section 401 Water Quality Certification  
and Waste Discharge Requirements  
for Discharge of Dredged and/or Fill Materials

**PROJECT: Camino del Rio Extension Project  
Certification Number R9-2013-0111  
WDID: 9000002616**

Reg. Meas. ID: 391014  
Place ID: 795363  
Party ID: 251069  
Person ID: 534961

**APPLICANT: Orange County Public Works  
300 North Flower Street, Suite 622  
Santa Ana, CA 92703**

**ACTION:**

<input type="checkbox"/> Order for Low Impact Certification	<input type="checkbox"/> Order for Denial of Certification
<input checked="" type="checkbox"/> Order for Technically-conditioned Certification	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ	

**PROJECT DESCRIPTION**

An application dated June 6, 2013 was submitted by Orange County Public Works (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed Camino del Rio Extension Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on September 28, 2015. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with construction activity at the Project site. The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2013-0365).

The Project is located within the City of San Clemente, Orange County, California at Camino del Rio at the existing terminus in the Foster Ranch Community. The Project center reading is located at latitude 33.472119 and longitude -117.613164. The Applicant has paid all required application fees for this Certification in the amount of \$9,207.00. On an annual basis, the Applicant shall also pay all active discharge fees and post discharge monitoring fees, as appropriate<sup>1</sup>. On June 11, 2013, the San Diego Water Board provided public notice of the

<sup>1</sup> The Applicant shall pay an annual active discharge fee each fiscal year or portion of a fiscal year during which discharges occur until the regional board or the State Board issues a Notice of Completion of Discharges Letter to the discharger. Dischargers shall pay an annual post-discharge monitoring fee each fiscal year or portion of a fiscal year commencing with the first fiscal year following the fiscal year in which the regional board or State Board issued a Notice of Completion of Discharges Letter to the discharger, but continued water quality monitoring or compensatory mitigation monitoring is required. Dischargers  
*(footnote continued on next page)*

Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to eliminate an existing gap in the County Arterial Highway System by constructing the Camino del Rio Road portion of the roadway extension between Camino del Rio and La Pata Avenue. The Project will extend Camino del Rio as a four lane roadway with two lanes in either direction from its existing terminus in the Forster Ranch Community of San Clemente to La Pata Avenue. Camino Del Rio exists as a secondary four-lane roadway (two lanes in each direction) from Camino De Los Mares to its terminus east of Calle Precipicio.

The plans for the Camino Del Rio extension include 8-foot bike lanes and 5-foot sidewalks on both sides of the roadway. No median is included in the Camino Del Rio extension, consistent with City of San Clemente standards for a secondary arterial roadway. The existing Forster Ranch Ridgeline Trail will cross the future Camino Del Rio 300 feet west of the future intersection of Avenida La Pata/Camino Del Rio. Two 10-space off-street parking areas immediately adjacent to the Camino Del Rio extension will be constructed east of the existing Camino Del Rio terminus.

The Project will convert approximately 2.68 acres of pervious ground cover to impervious surfaces. The Project area is tributary to an exempt receiving water, so does not have hydrologic conditions of concern (HCOC) and is exempt from the hydromodification requirements of the 2015 South Orange County Hydromodification Management Plan (HMP). Although the Project is exempt, the existing flood control basins upstream of the Forster Ranch residential area will provide additional peak flow detention/flood reduction capacity. Stormwater runoff will be routed to Filterra biofiltration units along the roadway drainage system to provide water quality treatment for targeted storm water pollutants and meet Low Impact Development (LID) water quality treatment requirements. Runoff will then be conveyed into the downstream debris basin/storm drain system.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that construction and post-construction discharges from the Project will not cause on-site or off-site downstream erosion, damage to downstream properties, or otherwise damage stream habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

Project construction will permanently impact 0.014 acre (612 linear feet) and temporarily impact 0.002 acre (70 linear feet) of streambed waters of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all

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*(footnote continued from previous page)*

shall pay the annual post-discharge monitoring fee each fiscal year until the regional board or the State Board issues a Notice of Project Complete Letter to the discharger. Additional information regarding fees can be found electronically at the following location: [http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/dredgefillcalculator.xlsx](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredgefillcalculator.xlsx)

potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

The Applicant reports that compensatory mitigation for the permanent loss of 0.014 acre of jurisdictional waters will be achieved through the re-establishment and enhancement of 0.08 acres of waters of the United States and/or State. All waters of the United States and/or State receiving temporary discharges of fill material will be restored upon removal of the fill within one year of impacts. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant off-site within Trabuco Creek at the O'Neil Regional Park located in the Middle Trabuco hydrologic sub-area (HSA 901.23) at a minimum compensation ratio of 5.71:1 (area mitigated:area impacted). The mitigation area is located adjacent to the downstream end point of the ongoing arundo removal/restoration activities related to the La Pata Avenue Extension Project (Water Quality Certification No. 12C-056).

Detailed written specifications and work descriptions for the compensatory mitigation project including, but not limited to, the geographic boundaries of the project, timing, sequence, monitoring, maintenance, ecological success performance standards and provisions for long-term management and protection of the mitigation areas are described in the *Conceptual Mitigation Plan Camino Del Rio Extension* (Mitigation Plan), dated August 2015. San Diego Water Board acceptance of the Mitigation Plan applies only to the Project described in this Certification and must not be construed as approval for other current or future projects that are planning to use additional acreage at the site for mitigation. The Mitigation Plan is incorporated in this Certification by reference as if set forth herein. The Mitigation Plan provides for implementation of compensatory mitigation which offsets adverse water quality impacts attributed to the Project in a manner that protects and restores the abundance, types and conditions of aquatic resources and supports their beneficial uses. Implementation of the Mitigation Plan will reduce significant environmental impacts to resources within the San Diego Water Board's purview to a less than significant level. Based on all of these considerations, the Mitigation Plan will adequately compensate for the loss of beneficial uses and habitat within waters of the United States and/or State attributable to the Project.

Additional Project details are provided in Attachments 1 through 5 of this Certification.

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### Attachments:

1. Definitions
2. Project Location Maps
3. Project Site Plans
4. Mitigation Figures
5. CEQA Mitigation Monitoring and Reporting Program

## I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

## II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2013-0111 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section 1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:  
  
[http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/generalorders/gowdr401regulated\\_projects.pdf](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gowdr401regulated_projects.pdf).
- D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality

certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

- E. **Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

- F. **Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. **Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. **Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
  2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
  3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
  4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.



- I. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- J. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
  2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of Prima Deshecha Canada or its tributaries;
  3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
  4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
  5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

### III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity*, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or stream habitat.

- H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- J. **Surface Water Diversion.** All surface waters, including ponded waters, must be diverted away from areas of active grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to the receiving water. Diversion activities must not result in the degradation of beneficial uses or exceedance of the receiving water quality objectives. Any temporary dam or other artificial obstruction constructed must only be built from materials such as clean gravel which will cause little or no siltation. Normal flows must be restored to the affected stream immediately upon completion of work at that location.
- K. **Re-vegetation and Stabilization.** All areas that have 14 or more days of inactivity must be stabilized within 14 days of the last activity. The Applicant shall implement and maintain BMPs to prevent erosion of the rough graded areas. After completion of grading, all areas must be re-vegetated with native species appropriate for the area. The re-vegetation palette must not contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be accessed at <http://www.cal-ipc.org/ip/inventory/>.
- L. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- M. **Vegetation Removal.** Removal of vegetation must occur by hand, mechanically, or through application of United States Environmental Protection Agency (USEPA) approved herbicides deployed using applicable BMPs to minimize adverse effects to beneficial uses of waters of the United States and/or State. Discharges related to the application of aquatic pesticides within waters of the United States must be done in compliance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, the *Statewide General National Pollution Discharge Elimination System Permit for the Discharge of Aquatic Weed Control in Waters of the United States*, and any subsequent reissuance as applicable.

- N. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- O. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.
- P. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of Prima Deshecha Canada and its tributaries. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.
- Q. **Groundwater Dewatering.** If groundwater dewatering is required for the Project, the Applicant shall enroll in and comply with the requirements of San Diego Water Board Order No. R9-2008-0002 NPDES No. CAG919002, *General Waste Discharge Requirements For Groundwater Extraction Waste Discharges From Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay or its successor permit.*

#### IV. POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or stream habitats.
- B. **Storm Drain Inlets.** All storm drain inlet structures within the Project boundaries must be stamped or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- C. **Post-Construction BMP Design.** The Project must be designed to comply with the most current Standard Storm Water Mitigation and Hydromodification Plans for Orange County. Post-construction BMPs are described in the *Water Quality Management Plan Camino Del Rio Extension Project (SWMP)*.
- D. **Post-Construction BMP Implementation.** All post-construction BMPs must be constructed, functional, and implemented prior to completion of Project construction, occupancy, and/or planned use, and maintained in perpetuity. The post construction BMPs must include those described in the SWMP, dated April 10, 2015 (Revised on

September 1, 2015), prepared on behalf of the Applicant by Tetra Tech Inc.; or any subsequent version of the SWMP approved by the City of San Clemente.

- E. **Post-Construction BMP Maintenance.** The post construction BMPs must be designed, constructed, and maintained in accordance with the most recent California Storm Water Quality Association (CASQA)<sup>2</sup> guidance. The Applicant shall:
1. No less than two times per year, assess the performance of the BMPs to ensure protection of the receiving waters and identify any necessary corrective measures;
  2. Perform inspections of BMPs, at the beginning of the wet season no later than October 1 and the end of the wet season no later than April 1, for standing water, slope stability, sediment accumulation, trash and debris, and presence of burrows;
  3. Regularly perform preventative maintenance of BMPs, including removal of accumulated trash and debris, as needed to ensure proper functioning of the BMPs;
  4. Identify and promptly repair damage to BMPs; and
  5. Maintain a log documenting all BMP inspections and maintenance activities. The log shall be made available to the San Diego Water Board upon request.
- F. **Bridge, Crossing, and Culvert Design.** Bridges, culverts, dip crossings, or other stream crossing structures shall be designed and installed so they will not cause scouring of the stream bed and/or erosion of the banks in the vicinity of the Project. Storm drain lines/culverts and other stream crossing structures shall be designed and maintained to accommodate at least a 100-year, 24-hour storm event, including associated bedload and debris, with a similar average velocity as upstream and downstream sections. Bottoms of temporary culverts shall be placed at stream channel grade and bottoms of permanent culverts shall be open bottom or embedded and backfilled below the grade of the stream greater than or equal to a depth of 1 foot.
- V. **PROJECT IMPACTS AND COMPENSATORY MITIGATION**
- A. **Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Project Impacts and Compensatory Mitigation.** Unavoidable Project impacts to Prima Deshecha Canada and its unnamed tributaries within the San Juan Watershed must not exceed the type and magnitude of impacts described in the table below. At a minimum, compensatory mitigation required to offset unavoidable temporary and permanent Project impacts to waters of the United States and/or State must be achieved as described in the table below:

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<sup>2</sup> California Storm Water Quality Association (*California Storm Water BMP Handbook, New Development and Redevelopment 2003*), available on-line at: <http://www.cabmphandbooks.org/> [Accessed on January 15, 2012]

	Impacts (acres)	Impacts (linear ft.)	Mitigation for Impacts (acres)	Mitigation Ratio (area mitigated :area impacted)	Mitigation for Impacts (linear ft.)	Mitigation Ratio (linear feet mitigated :linear feet impacted)
<b>Permanent Impacts</b>						
Stream Channel	0.014	612	0.04 Re-establishment <sup>1</sup>	2.86:1	612 Establishment	1:1
			0.04 Enhancement <sup>2</sup>	2.86:1	NA Enhancement	
<b>Temporary Impacts<sup>3</sup></b>						
Streambed and Riparian	0.002	70	N/A	N/A	N/A	N/A

1. Streambed re-establishment off-site within Trabuco Creek in O'Neil Regional Park.
2. Riparian enhancement off-site within Trabuco Creek in O'Neil Regional Park.
3. All areas of temporary impacts must be restored to pre-project contours and re-vegetated with native species.

- C. Compensatory Mitigation Plan Implementation.** The Applicant must fully and completely implement the Mitigation Plan; any deviations from, or revisions to, the Mitigation Plan must be pre-approved by the San Diego Water Board.
- D. Performance Standards.** Compensatory mitigation required under this Certification shall be considered achieved once it has met the ecological success performance standards contained in the Mitigation Plan (Page 10) to the satisfaction of the San Diego Water Board.
- E. Compensatory Mitigation Site Design.** The compensatory mitigation site(s) shall be designed to be self-sustaining once performance standards have been achieved. This includes minimization of active engineering features (e.g., pumps) and appropriate siting to ensure that natural hydrology and landscape context support long-term sustainability in conformance with the following conditions:
1. Most of the channels through the mitigation sites shall be characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;
  2. As viewed along cross-sections, the channel and buffer area(s) shall have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope shall contain physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
  3. The mitigation sites shall have a well-developed plant community characterized by a high degree of horizontal and vertical interspersions among plant zones and layers.

- F. **Temporary Project Impact Areas.** The Applicant must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge of pollutants to waters of the United States and/or State. Restoration must include grading of disturbed areas to pre-project contours and re-vegetation with native species. The Applicant must implement all necessary BMPs to control erosion and runoff from areas associated with the Project.
- G. **Long-Term Management and Maintenance.** The compensatory mitigation site(s) must be managed, protected, and maintained, in perpetuity, in conformance with the long-term management plan and the final ecological success performance standards identified in the Mitigation Plan. The aquatic habitats, riparian areas, buffers and uplands that comprise the mitigation site(s) must be protected in perpetuity from land-use and maintenance activities that may threaten water quality or beneficial uses within the mitigation area(s) in a manner consistent with the following requirements:
1. Any maintenance activities on the mitigation site(s) that do not contribute to the success of the mitigation site(s) and enhancement of beneficial uses and ecological functions and services are prohibited;
  2. Maintenance activities must be limited to the removal of trash and debris, removal of exotic plant species, replacement of dead native plant species, and remedial measures deemed necessary for the success of the compensatory mitigation project;
  3. The Mitigation site(s) must be maintained, in perpetuity, free of perennial exotic plant species including, but not limited to, pampas grass, giant reed, tamarisk, sweet fennel, tree tobacco, castor bean, and pepper tree. Annual exotic plant species must not occupy more than 5 percent of the mitigation site(s); and
  4. If at any time a catastrophic natural event (e.g., fire, flood) causes damage(s) to the mitigation site(s) or other deficiencies in the compensatory mitigation project, the Applicant must take prompt and appropriate action to repair the damage(s) including replanting the affected area(s) and address any other deficiencies. The San Diego Water Board may require additional monitoring by the Applicant to assess how the compensatory mitigation site(s) or project is responding to a catastrophic natural event.
- H. **Timing of Mitigation Site Construction.** The construction of proposed mitigation must be concurrent with project grading and completed no later than 9 months following the start of Project construction. Delays in implementing mitigation must be compensated for by an increased mitigation implementation of 10% of the cumulative compensatory mitigation for each month of delay.
- I. **Mitigation Site(s) Preservation Mechanism.** **Within 60 days from the start of Project construction**, the Applicant must provide the San Diego Water Board with a draft preservation mechanism (e.g. deed restriction, conservation easement, etc.) that will protect all mitigation areas and their buffers in perpetuity. **Within one year of the start of Project construction**, the Applicant must submit proof of a completed final

preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. The conservation easement, deed restriction, or other legal limitation on the mitigation properties must be adequate to demonstrate that the sites will be maintained without future development or encroachment on the sites which could otherwise reduce the functions and values of the sites for the variety of beneficial uses of waters of the United States and/ or State that it supports. The legal limitation must prohibit, without exception, all residential, commercial, industrial, institutional, and transportation development, and any other infrastructure development that would not maintain or enhance the wetland and streambed functions and values of the sites. The preservation mechanism must clearly prohibit activities that would result in soil disturbance or vegetation removal, other than the removal of non-native vegetation. Other infrastructure development to be prohibited includes, but is not limited to, additional utility lines, maintenance roads, and areas of maintained landscaping for recreation.

## VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.
- C. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this Certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.
- D. **Records of Monitoring Information.** Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements;
  - 2. The individual(s) who performed the sampling or measurements;
  - 3. The date(s) analyses were performed;
  - 4. The individual(s) who performed the analyses;
  - 5. The analytical techniques or methods used; and
  - 6. The results of such analyses.
- E. **California Rapid Assessment Method.** California Rapid Assessment Method (CRAM)<sup>3</sup> monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory

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<sup>3</sup> The most recent versions of the California Rapid Assessment Method (CRAM) for Wetlands and additional information regarding CRAM can be accessed at <http://www.cramwetlands.org/>



mitigation site(s). These conditions reflect the overall level of ecological function of an aquatic resource. Prior to initiating Project construction, the Applicant shall develop a monitoring plan to implement California Rapid Assessment Method (CRAM) monitoring. The Applicant must conduct a quantitative function-based assessment of the health of streambed habitat to establish pre-project baseline conditions, set CRAM success criteria, and assess the mitigation site(s) progress towards meeting the success criteria. CRAM monitoring must be conducted prior to the start of Project construction authorized under this Certification and annually following construction completion for a period of 5 years. The annual CRAM monitoring results shall be submitted with the Annual Project Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the Final Project Completion Report.

F. **Benthic Macroinvertebrate Community Analysis.** The Applicant shall conduct bioassessment monitoring, as described in this section, to assess the success of mitigation areas and the impact of construction activities, whenever applicable, using benthic macroinvertebrate community data. Bioassessment shall include: 1) the collection and reporting of benthic macroinvertebrate data; and 2) the collection and reporting of physical habitat data. Bioassessment using benthic macroinvertebrates shall be conducted in perennial wadeable streams during the index period. Perennial streams shall be defined as streams with surface water flow present during the appropriate index period<sup>4</sup>. Wadeable streams shall be defined as streams that can be safely waded in order to be sampled for benthic invertebrates during the appropriate index period. If the appropriate sampling period lies outside the index period, please contact the San Diego Water Board.

1. **Field Methods.** Bioassessment monitoring must be performed using the SWAMP field methods specified in *Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California*<sup>5</sup> (SOP, Ode 2007) or any updates of these methods. The Applicant shall conduct, concurrently with all required benthic macroinvertebrate collections, the "Full" suite of physical habitat characterization measurements as specified in Table 1 of the SOP.
2. **Laboratory Methods.** Benthic macroinvertebrates shall be identified using the SWAMP laboratory methods specified in *Standard Operating Procedures for Laboratory Processing and Identification of Benthic Macroinvertebrates in California*<sup>6</sup> (Laboratory SOP, Woodard et al. 2012) or any updates of these methods. Standard Taxonomic Effort (STE) Level II of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT) is required. Quality control samples are required for 10% of the samples each year and Quality

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<sup>4</sup> The appropriate index period can be found electronically at the following location:  
[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/constpermits/cgp\\_biomap.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/cgp_biomap.pdf)

<sup>5</sup> The SOP can be found electronically at the following location:  
[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/phab\\_sopr6.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/phab_sopr6.pdf)

<sup>6</sup> The Laboratory SOP can be found electronically at the following location:  
[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/bmi\\_lab\\_sop\\_final.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/bmi_lab_sop_final.pdf)

Assurance samples must be analyzed by the Aquatic Bioassessment Laboratory of the California Department of Fish and Wildlife.

3. **Data Analysis.** Analysis of benthic macroinvertebrate data shall be conducted using scoring tools including but not limited to the *Southern California Index of Biotic Integrity*<sup>7</sup> (Ode et. al. 2005) and the *California Stream Condition Index*<sup>8</sup> (CSCI, Mazor et. al., currently in review) when the CSCI scoring tool is finalized.
  4. **Data Storage.** Benthic macroinvertebrate data and physical habitat data shall be submitted to the California Environmental Data Exchange Network<sup>9</sup> (CEDEN).
  5. **Monitoring Sites.** All monitoring sites shall be approved by staff at the San Diego Water Board before sampling is initiated and must meet the following conditions:
    - a. **Mitigation Sites.** At a minimum, bioassessment monitoring for mitigation areas must be performed at three sites (assessment stations) in Trabuco Creek before Project initiation, and then in years three and five following start of Project construction, during the established "index period" for the San Juan watershed. The first assessment station is the reference station, which must be located upstream of the mitigation site(s) in a reference area; the second assessment station must be located within the mitigation site(s); and the third assessment station must be located downstream of the mitigation site(s). The reference station upstream of the mitigation site(s) must be located and sampled concurrently with the second and third assessment stations. Reference stations shall be defined as stations that show minimally disturbed conditions.
  6. **Monitoring Reports.** An evaluation, interpretation and tabulation of the benthic macroinvertebrate community analysis must be submitted prior to **March 1** with the respective Annual Project Monitoring Report.
- G. **Post-Construction BMP Effectiveness Monitoring Plan.** The Applicant shall prepare and submit a BMP Effectiveness Monitoring Plan (BMP Monitoring Plan) to assess the ability of selected storm water structural treatment BMPs to reduce pollutant concentrations and loadings, and prevent exceedances of receiving water quality standards. A BMP Monitoring Plan, in conformance with the following criteria, shall be submitted prior to completion of Project construction, but no later than **December 31, 2015**.

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<sup>7</sup> The *Southern California Index of Biotic Integrity* can be found electronically at the following location:  
[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/reports/coastalstreams.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/coastalstreams.pdf)

<sup>8</sup> The *California Stream Condition Index* can be found electronically at the following location:  
[http://www.waterboards.ca.gov/plans\\_policies/docs/biological\\_objective/2\\_scoring%20tool.pdf](http://www.waterboards.ca.gov/plans_policies/docs/biological_objective/2_scoring%20tool.pdf)

<sup>9</sup> The California Environmental Data Exchange Network can be found electronically at the following location:  
<http://www.ceden.org/>

1. **Quality Assurance Project Plan.** The BMP Monitoring Plan shall include a Quality Assurance Project Plan (QAPP) describing the monitoring objectives and organization, functional activities, and quality assurance/quality control protocols. The QAPP shall identify appropriate reporting limits for each monitored constituent and provide that analyses will be performed in a laboratory certified to perform such analyses by the California Department of Public Health or a laboratory approved by the San Diego Water Board.
2. **Sample Stations.** The BMP Monitoring Plan shall provide for water quality and flow monitoring at inflow and outflow stations of at least three storm water structural treatment BMPs to determine concentration and mass based pollutant removal efficiencies for each monitored constituent. The Plan shall also provide for upstream and downstream sample stations in the receiving water that are spatially representative of water quality conditions to evaluate the receiving water quality effects of each sampled BMP effluent which may be discharged.
3. **Sample Collection.** The BMP Monitoring Plan shall provide for BMP and receiving water monitoring to be performed in the wet season during the "seasonal first-flush" (first storm event of the wet season) and one other subsequent storm event. The wet season is from October 1 through April 30. A qualifying storm event is considered rainfall precipitation of 0.1 inches and greater. If the first storm of the wet season cannot reasonably be monitored due to safety or mobilization impracticality considerations, then the next subsequent qualifying storm event shall be sampled. BMP inflow and outflow samples and receiving water samples shall be collected during the same qualifying storm event.
4. **Sample Type.** The BMP Monitoring Plan shall provide that storm events will be sampled using flow-weighted composite sampling techniques unless otherwise specified below. For storm events lasting less than 24 hours, samples shall be collected for at least seventy-five percent (75%) of the storm event hydrograph. For storm events lasting longer than 24 hours, samples shall be collected for at least seventy-five percent 75% of the hydrograph of the first 24 hours of the storm. Ongoing continuous flow monitoring is required for each of the sampled storm events as necessary to properly conduct the flow-weighted composite sampling. Precipitation data shall be collected from the nearest rain gauge reporting at least hourly rainfall amounts.
5. **Test Procedures.** The BMP Monitoring Plan shall provide that monitoring is conducted according to United States Environmental Protection Agency (USEPA) test procedures approved at 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* as amended, unless other test procedures are specified by the San Diego Water Board.

6. **Monitoring Duration.** The BMP Monitoring Plan shall provide for wet season BMP effectiveness monitoring for a minimum of five years following completion of Project construction. The Applicant may discontinue this monitoring after the initial five years of monitoring unless directed in writing by the San Diego Water Board to continue the monitoring.
7. **Monitoring Parameters.** The BMP Monitoring Plan shall identify the constituents to be monitored and the corresponding sample type. All BMP inflow, BMP outflow, and receiving water samples shall at a minimum be tested for the pollutants listed in the table below:

Pollutant	Group	Reporting Units <sup>1</sup>	Sample Type	Sample Frequency
Total Suspended Solids	Conventional	mg/L	Composite	Twice per wet season <sup>2</sup>
Settleable Solids	Conventional	ml/L	Grab	Twice per wet season <sup>2</sup>
Turbidity	Conventional	NTU	Grab	Twice per wet season <sup>2</sup>
pH	Conventional	units	Grab	Twice per wet season <sup>2</sup>
Phosphorus	Conventional	mg/L	Composite	Twice per wet season <sup>2</sup>
Nitrogen	Conventional	mg/L	Composite	Twice per wet season <sup>2</sup>
Arsenic	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Cadmium	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Chromium	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Copper	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Iron	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Lead	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Mercury	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Nickel	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Selenium	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Thallium	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>
Zinc	Metals (Total and Dissolved)	µg/L	Composite	Twice per wet season <sup>2</sup>

Notes:

1. mg/L = milligrams per liter, ml/L = milliliter per liter µg/L = micrograms per liter, NTU = nephelometric turbidity units
2. The wet season is from October 1 through April 30.

8. **Annual Reports.** The BMP Monitoring Plan shall include a schedule for completion and submittal of Annual Post-Construction BMP Effectiveness Monitoring Reports that meets the requirements described in section VI.L of this Certification.
  
- H. **BMP Monitoring Plan Implementation.** The Applicant shall implement the BMP Monitoring Plan by **October 31, 2016**, unless otherwise directed in writing by the San Diego Water Board. The Applicant shall modify the BMP Monitoring Plan as requested by the San Diego Water Board.
  
- I. **Discharge Commencement Notification.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to the start of Project construction.**
  
- J. **Geographic Information System Data.** The Applicant must submit Geographic Information System (GIS) shape files of the Project impact sites within 30 days of the start of project construction and GIS shape files of the Project mitigation sites within 30 days of mitigation installation. All impact and mitigation site shape files must be polygons. Two GPS readings (points) must be taken on each line of the polygon and the polygon must have a minimum of 10 points. GIS metadata must also be submitted.
  
- K. **Annual Project Progress Reports.** The Applicant must submit annual Project progress reports describing status of BMP implementation, compensatory mitigation, and compliance with all requirements of this Certification to the San Diego Water Board prior to **March 1** of each year following the issuance of this Certification, until the Project has reached completion. The Annual Project Progress Reports must contain compensatory mitigation monitoring information sufficient to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Annual Project Progress Reports must be submitted even if Project construction has not begun. The monitoring period for each Annual Project Progress Report shall be January 1<sup>st</sup> through December 31<sup>st</sup> of each year. Annual Project Progress Reports must include, at a minimum, the following:
  1. **Project Status and Compliance Reporting.** The Annual Project Progress Report must include the following Project status and compliance information:
    - a. The names, qualifications, and affiliations of the persons contributing to the report;
    - b. The status, progress, and anticipated schedule for completion of Project construction activities including the installation and operational status of best management practices project features for erosion and storm water quality treatment;
    - c. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion; and
    - d. A description of each incident of noncompliance during the annual monitoring period and its cause, the period of the noncompliance including exact dates and

times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. **Compensatory Mitigation Monitoring Reporting.** Mitigation monitoring information must be submitted as part of the Annual Project Progress Report for a period of not less than five years, sufficient to demonstrate that the compensatory mitigation project has accomplished its objectives and met ecological success performance standards contained in the Mitigation Plan. Following Project implementation the San Diego Water Board may reduce or waive compensatory mitigation monitoring requirements upon a determination that performance standards have been achieved. Conversely the San Diego Water Board may extend the monitoring period beyond five years upon a determination that the performance standards have not been met or the compensatory mitigation project is not on track to meet them. The Annual Project Progress Report must include the following compensatory mitigation monitoring information:
  - a. Names, qualifications, and affiliations of the persons contributing to the report;
  - b. An evaluation, interpretation, and tabulation of the parameters being monitored, including the results of the Mitigation Plan monitoring program, and all quantitative and qualitative data collected in the field;
  - c. A description of the following mitigation site(s) characteristics:
    - i. Detritus cover;
    - ii. General topographic complexity;
    - iii. General upstream and downstream habitat and hydrologic connectivity; and
    - iv. Source of hydrology
  - d. Monitoring data interpretations and conclusions as to how the compensatory mitigation project(s) is progressing towards meeting performance standards and whether the performance standards have been met;
  - e. A description of the progress toward implementing a plan to manage the compensatory mitigation project after performance standards have been achieved to ensure the long term sustainability of the resource in perpetuity, including a discussion of long term financing mechanisms, the party responsible for long term management, and a timetable for future steps;
  - f. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;
  - g. Stream photo documentation, including all areas of permanent and temporary impact, prior to and after mitigation site construction. Photo documentation must be conducted in accordance with guidelines posted at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/401\\_certification/docs/401c/401PhotoDocRB9V713.pdf](http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/401c/401PhotoDocRB9V713.pdf). In addition, photo documentation must

include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;

- h. A qualitative comparison to adjacent preserved streambed areas;
  - i. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification;
  - j. The results of the Benthic Macroinvertebrate Community Analysis monitoring required under section VI.F of this Certification;
  - k. As-built drawings of the compensatory mitigation project site(s), no bigger than 11"X17"; and
  - l. A survey report documenting boundaries of the compensatory mitigation site(s).
- L. **Annual Post-Construction BMP Effectiveness Monitoring Reports.** The Applicant shall prepare and submit BMP monitoring results, required under section VI.G of this Certification, in an **Annual Post-Construction BMP Effectiveness Monitoring Report** (BMP Effectiveness Report) by **June 1** of each year. The BMP Effectiveness Report shall contain all BMP monitoring data collected during the preceding wet season period (October 1- April 30). The submittal of annual BMP Effectiveness Reports shall continue for five years following Project construction completion. The Applicant may discontinue the submittal of annual BMP Effectiveness Reports after the initial five years of monitoring unless directed in writing by the San Diego Water Board to continue the monitoring and submittal of annual reports. The BMP Effectiveness Report shall contain the following information:
- 1. **Monitoring Data Information.** Each Report shall contain the information described in section VI.D of this Certification. The Report shall describe how the data collected compared with data quality objectives described in the QAPP and any corrective actions taken. The locations, type, and number of samples shall be identified and shown on a site map. For any monitoring period in which no discharge occurred, the monitoring report must still be submitted and include a statement certifying that no discharge occurred during the monitoring period.
  - 2. **Monitored Drainage Area.** Each Report shall include a brief summary of each monitored drainage area, including any changes to the drainage area or changes to the monitoring station(s) that could affect hydrology or pollutant loading.
  - 3. **Storm Event Description.** Each Report shall include general information about the sampled storm event including but not limited to:
    - b. Date of the storm event;
    - c. Duration of the storm event;
    - d. Precipitation data including rainfall distribution throughout the event;
    - e. Flow and hydrograph data including sampled and total runoff time periods and volumes; and

- f. Any logistical problems associated with sample collection.
4. **Pollutant Loads and BMP Pollutant Removal Efficiency.** The estimated pollutant loads for each monitored constituent in the inflow and outflow of each monitored BMP shall be calculated and reported in terms of pounds per day. The concentration and mass based BMP pollutant removal efficiency for each monitored constituent shall be calculated and reported.
  5. **Data Analysis and Interpretation.** Each Report shall provide an evaluation, interpretation and tabulation of the monitoring data including interpretations and conclusions regarding the effectiveness of the storm water BMPs monitored and conclusions as to whether applicable water quality standards were attained at each sample station in the receiving waters.
- M. **Final Project Completion Report.** The Applicant must submit a Final Project Completion Report to the San Diego Water Board **within 30 days of completion of the Project.** The final report must include the following information:
1. Date of construction initiation;
  2. Date of construction completion;
  3. BMP installation and operational status for the Project;
  4. As-built drawings of the Project, no bigger than 11"X17";
  5. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/401\\_certification/docs/StreamPhotoDocSOP.pdf](http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/StreamPhotoDocSOP.pdf). In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and
  6. An evaluation, interpretation, and tabulation of all California Rapid Assessment Method (CRAM) and benthic macroinvertebrate community assessment data collected throughout the term of Project construction in accordance with section VI.E and VI.F of this Certification.
- N. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.



- O. **Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to [SanDiego@waterboards.ca.gov](mailto:SanDiego@waterboards.ca.gov). Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board  
San Diego Region  
Attn: 401 Certification No. R9-2013-0111: 795363:dbradford  
2375 Northside Drive, Suite 100  
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2013-0111: 795363:dbradford

- P. **Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
  2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
  3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
  4. A duly authorized representative may sign applications, reports, or information if:
    - a. The authorization is made in writing by a person described above.
    - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
    - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

- Q. **Document Certification Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

*"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

## VII. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- B. **Hazardous Substance Discharge.** Except for a discharge which is in compliance with this Certification, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of Orange, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.
- C. **Oil or Petroleum Product Discharge.** Except for a discharge which is in compliance with this Certification, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This

requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.

- D. **Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.
- E. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**
  2. **Transfer of Mitigation Responsibility:** Any notification of transfer of responsibilities to satisfy the mitigation requirements set forth in this Certification must include a signed statement from an authorized representative of the new party (transferee) demonstrating acceptance and understanding of the responsibility to comply with and fully satisfy the mitigation conditions and agreement that failure to comply with the mitigation conditions and associated requirements may subject the transferee to enforcement by the San Diego Water Board under Water Code section 13385, subdivision (a). Notification of transfer of responsibilities meeting the above conditions must be provided to the San Diego Water Board **within 10 days of the transfer date.**
  3. **Transfer of Post-Construction BMP Maintenance Responsibility:** The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board **within 10 days** of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

## VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The County of Orange is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has filed a Notice of Determination dated May 25, 2011, for the Environmental Impact Report (EIR) titled *La Pata Avenue Gap Closure and Camino Del Rio Extension* (State Clearing House Number 2005061051). The Lead Agency has determined the Project will have a significant effect on the environment and mitigation measures were made a condition of the Project.
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has considered the Lead Agency's FEIR and finds that the Project as proposed will have a significant effect on resources within the San Diego Water Board's purview.
- C. The San Diego Water Board has required mitigation measures as a condition of this Certification to avoid or reduce the environmental effects of the Project to resources within the Board's purview to a less than significant level.
- D. The Lead Agency has adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6 and CEQA Guidelines section 15097 to ensure that mitigation measures and revisions to the Project identified in the FEIR are implemented. The Mitigation Monitoring and Reporting Program (MMRP) is included and incorporated by reference in Attachment 5 to this Certification. The Applicant shall implement the Lead Agency's MMRP described in the FEIR, as it pertains to resources within the San Diego Water Board's purview. The San Diego Water Board has imposed additional MMRP requirements as specified in sections V and VI of this Certification.
- E. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Determination in accordance with CEQA Guidelines section 15096 subdivision (i).

## IX. SAN DIEGO WATER BOARD CONTACT PERSON

Darren Bradford, Environmental Scientist  
Telephone: (619) 521-3356  
Email: [darren.bradford@waterboards.ca.gov](mailto:darren.bradford@waterboards.ca.gov)

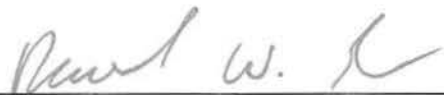
## X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Camino del Rio Extension Project** (Certification No. R9-2013-0111) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "*Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)*," which requires compliance with all conditions of this Water Quality Certification. Please note that

enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2013-0111 issued on October 23, 2015.



\_\_\_\_\_  
DAVID W. GIBSON  
Executive Officer  
San Diego Water Board

23 October 2015  
Date

# ATTACHMENT 1

## DEFINITIONS

**Activity** - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

**Buffer** - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

**California Rapid Assessment Method (CRAM)** - is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

**Compensatory Mitigation Project** - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

**Discharge of dredged material** – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

**Discharge of fill material** – means the addition of fill material into waters of the United States and/or State.

**Dredged material** – means material that is excavated or dredged from waters of the United States and/or State.

**Ecological Success Performance Standards** – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

**Enhancement** – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment** – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

**Fill material** – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

**Isolated wetland** – means a wetland with no surface water connection to other aquatic resources.

**Mitigation Bank** – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

**Preservation** - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Start of Project Construction** - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

**Uplands** - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

**Water quality objectives and other appropriate requirements of state law** – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Orange County Public Works  
Camino del Rio Extension Project  
Certification No. R9-2013-0111

**ATTACHMENT 2**  
**PROJECT LOCATION MAPS**

Figure 3.1 – Project Location and Vicinity Map  
Figure 1 – Camino Del Rio Project Location Map  
Figure F-10 – San Clemente Exemption Map



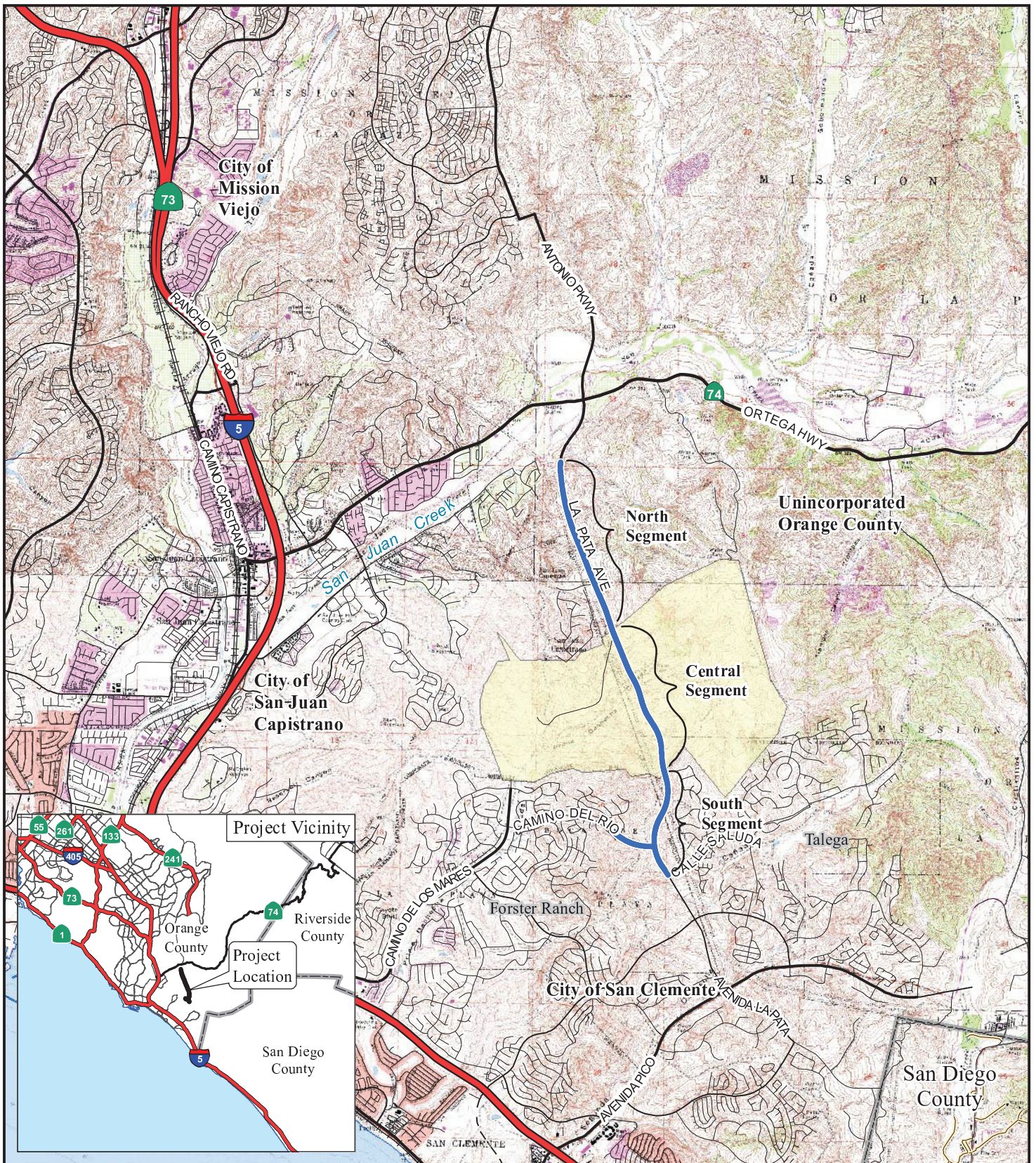
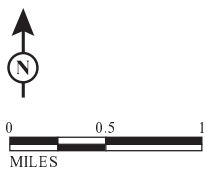


FIGURE 3.1

LEGEND

- Project Limits
- Prima Deshecha Landfill Boundary
- - - - City Boundary

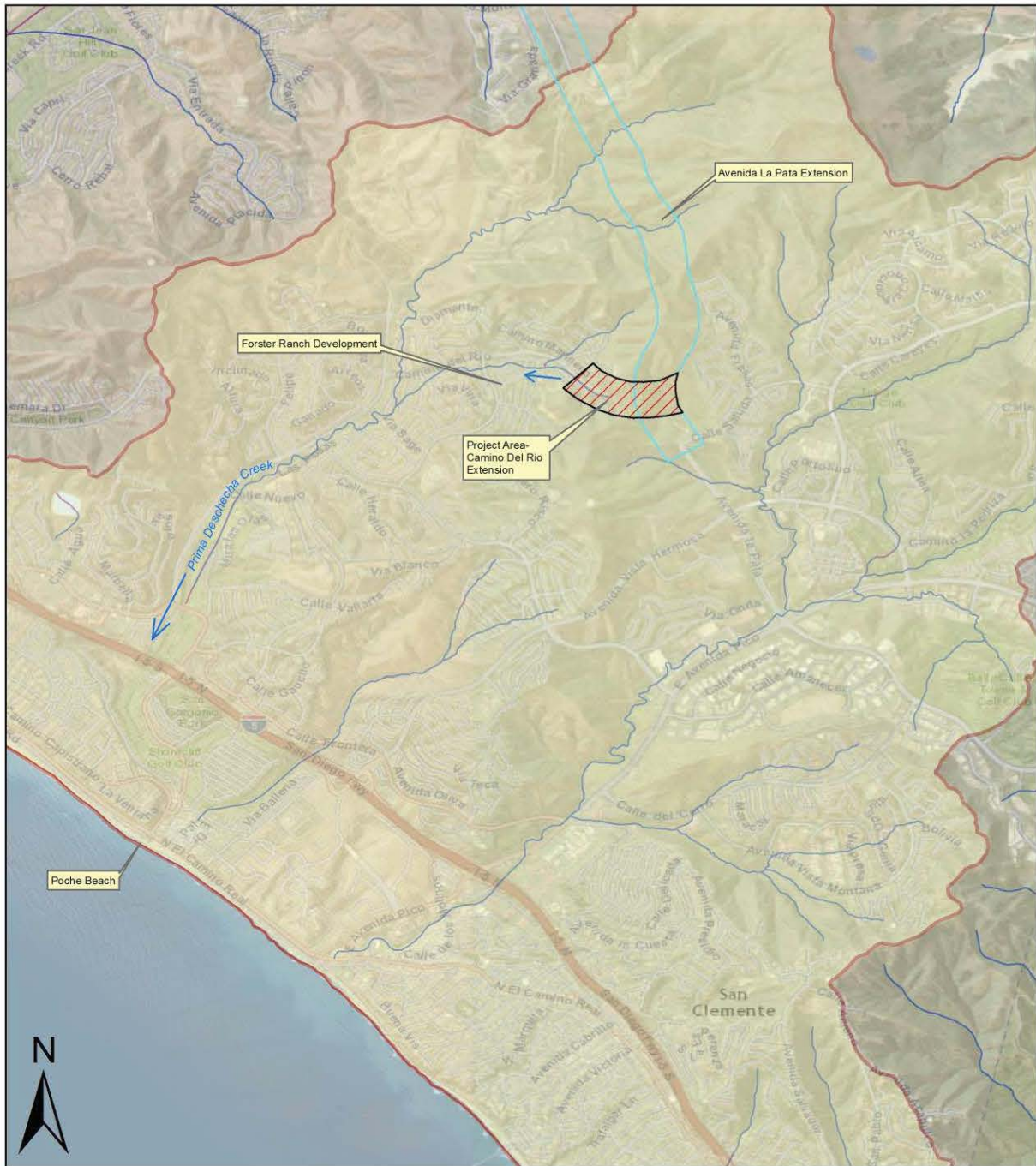


*La Pata Avenue Gap Closure and Camino Del Rio Extension*  
Project Location and Vicinity

SOURCE: ESRI (2008); TBM (2008); RBF (4/21/09); USGS 7.5' Quad. (San Juan Capistrano, 1981; San Clemente, 1975; Canada Gobernadora, 1988; Dana Point, 1975)

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**Water Quality Management Plan (WQMP)**  
**Camino Del Rio Extension Project**



**Figure 1. Camino Del Rio Project Location Map**

-  Camino Del Rio Project Area
-  Avenida La Pata Extension
-  Prima Deshecha Canada Watershed

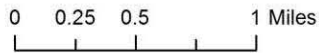
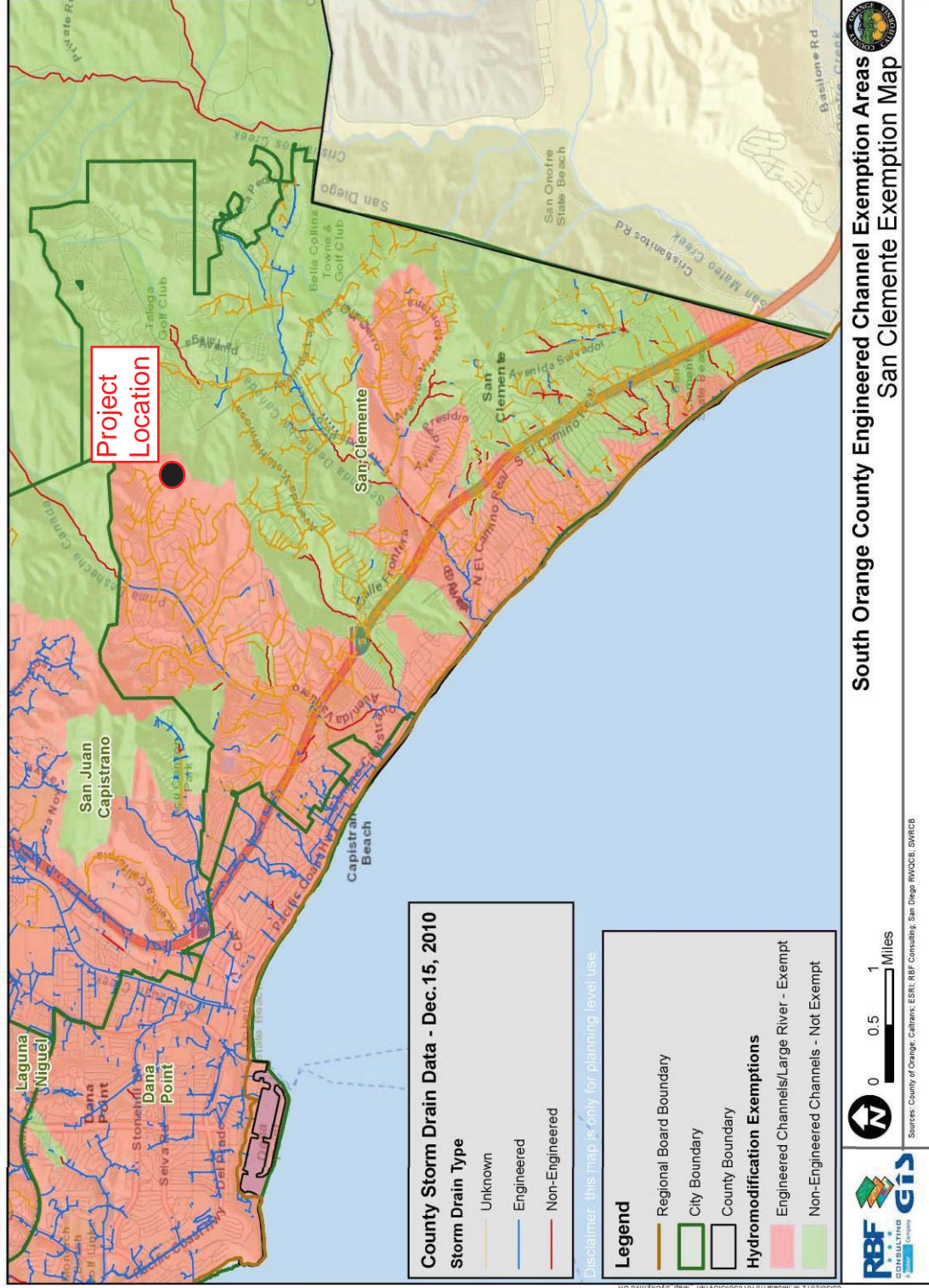


Figure F-10: San Clemente Exemption Map



Orange County Public Works  
Camino del Rio Extension Project  
Certification No. R9-2013-0111

**ATTACHMENT 3  
PROJECT SITE PLANS**

Figure 3.6 – Proposed Vertical Alignment  
Figure 3.7 – Storm Drain Facilities  
Figure 3.14 – Camino Del Rio Parking Plan  
Figure 3.13 – Existing and Proposed Trail Crossings  
Figure 3.8 – Treatment BMPs  
Site Map 1 of 2 – Site Map  
Site Map 2 of 2 – Roadway Drainage Map

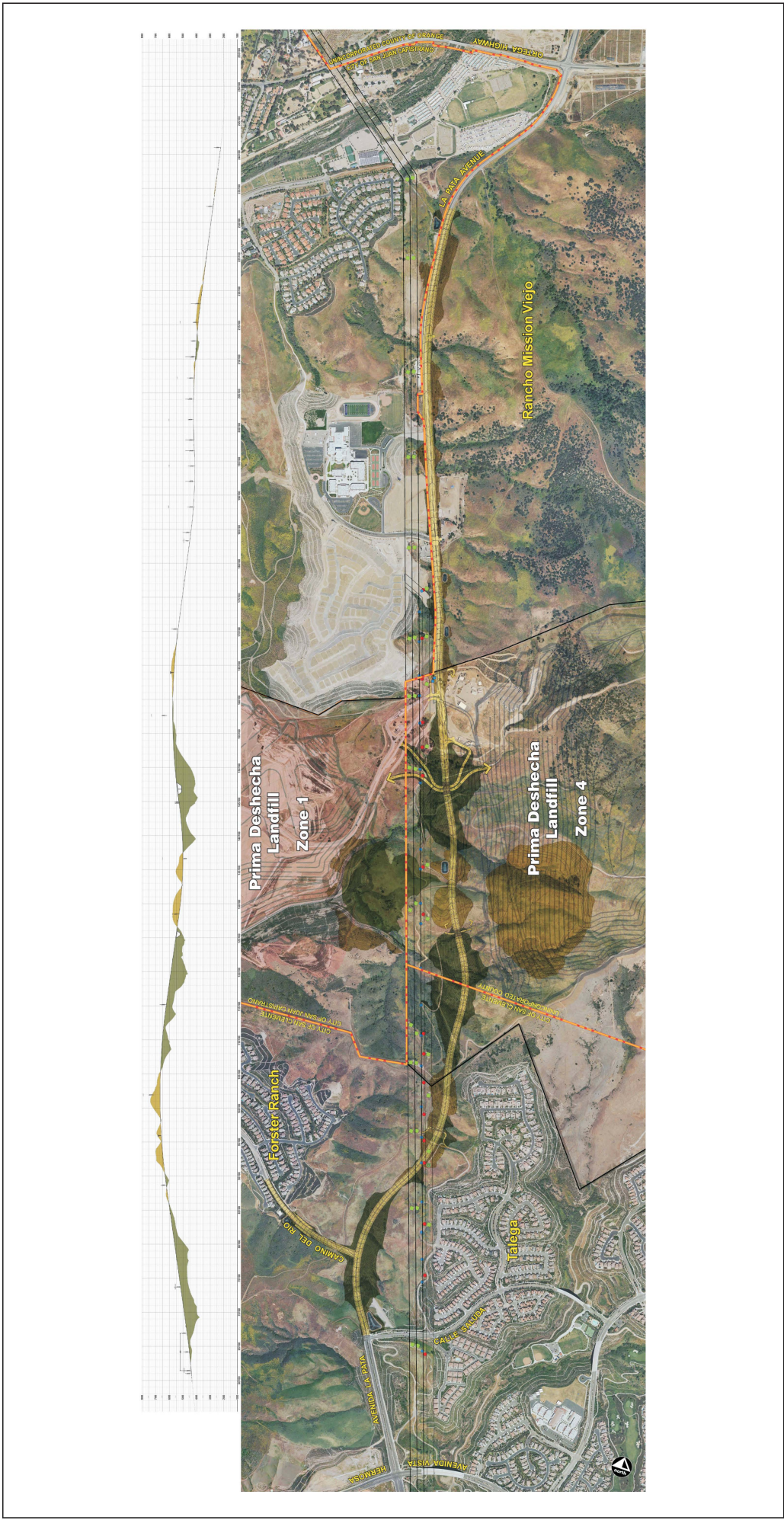
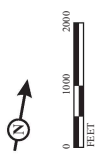
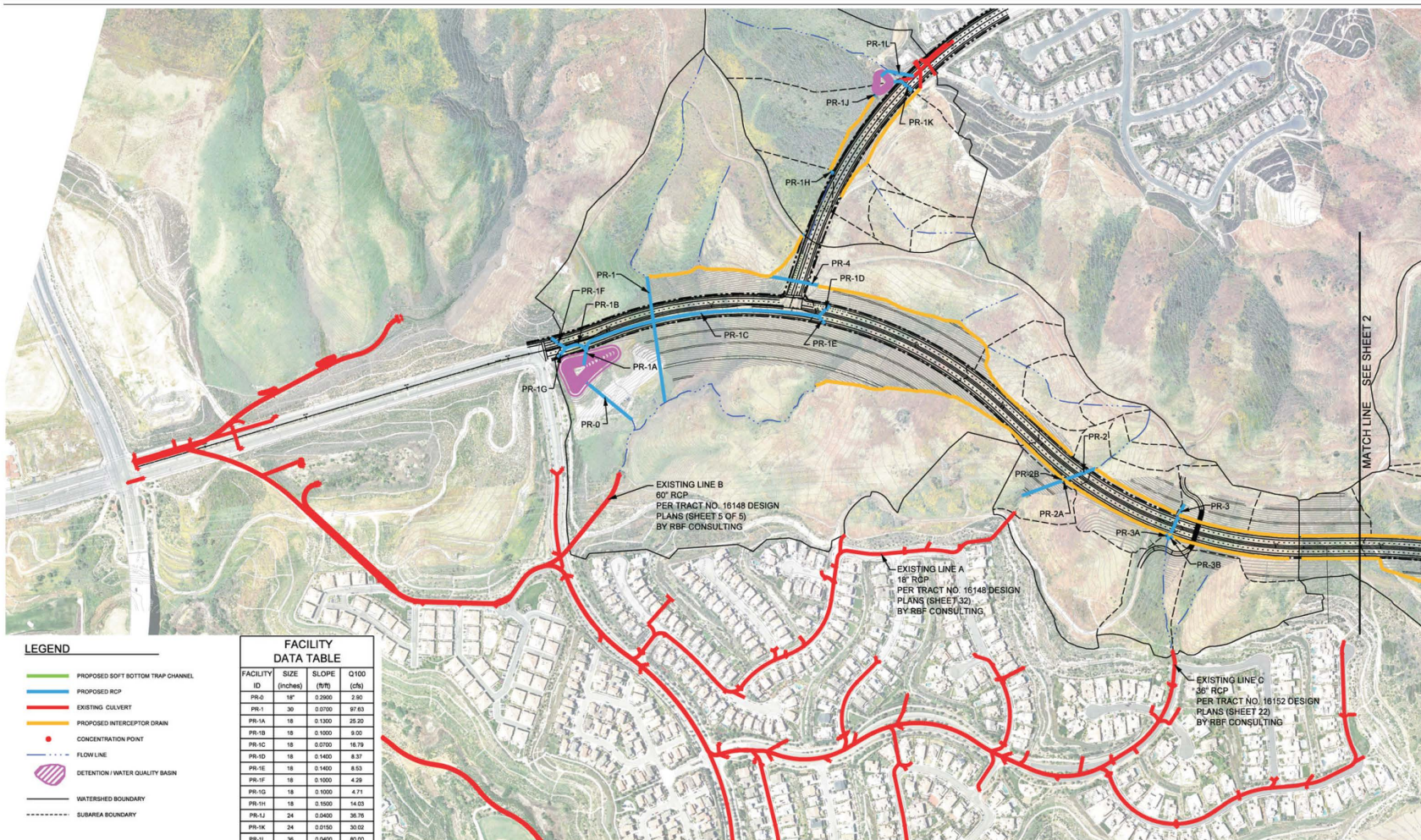


FIGURE 3.6

La Pata Avenue Gap Closure and  
Camino Del Rio Extension Project  
Proposed Vertical Alignment

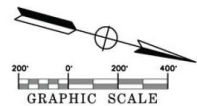


SOURCE: RBF  
E:\ORG8087\G\Proposed Vertical Alignment.cdr (7/29/10)



**LEGEND**

- PROPOSED SOFT BOTTOM TRAP CHANNEL
- PROPOSED RCP
- EXISTING CULVERT
- PROPOSED INTERCEPTOR DRAIN
- CONCENTRATION POINT
- FLOW LINE
- DETENTION / WATER QUALITY BASIN
- WATERSHED BOUNDARY
- - - SUBAREA BOUNDARY



FACILITY DATA TABLE			
FACILITY ID	SIZE (Inches)	SLOPE (ft/ft)	LENGTH (ft)
PR-0	18"	0.0360	2.90
PR-1	30"	0.0700	87.63
PR-1A	18"	0.1000	28.20
PR-1B	18"	0.1000	9.00
PR-1C	18"	0.0700	16.79
PR-1D	18"	0.1400	8.37
PR-1E	18"	0.1400	8.53
PR-1F	18"	0.1000	4.58
PR-1G	18"	0.1000	4.71
PR-1H	18"	0.1000	14.63
PR-1I	24"	0.0400	36.76
PR-1K	24"	0.0150	30.52
PR-1L	36"	0.0400	80.50
PR-2	18"	0.1000	16.88
PR-2A	18"	0.1000	2.00
PR-2B	18"	0.1000	2.00
PR-3	18"	0.0140	7.54
PR-3A	18"	0.1000	2.00
PR-3B	18"	0.1000	2.00
PR-4	36"	0.0043	43.68

NOTE: ALL ROADWAY LATERALS ARE SIZED ASSUMING SLOPE = 0.1000 AND ARE ALL ASSUMED TO BE 18" RCP

FIGURE 3.7  
Sheet 1 of 3

La Pata Avenue Gap Closure  
and Camino del Rio Extension  
Storm Drain Facilities



FIGURE 3.14

La Pata Avenue Gap Closure and  
Camino Del Rio Extension Project  
Camino Del Rio Parking Plan

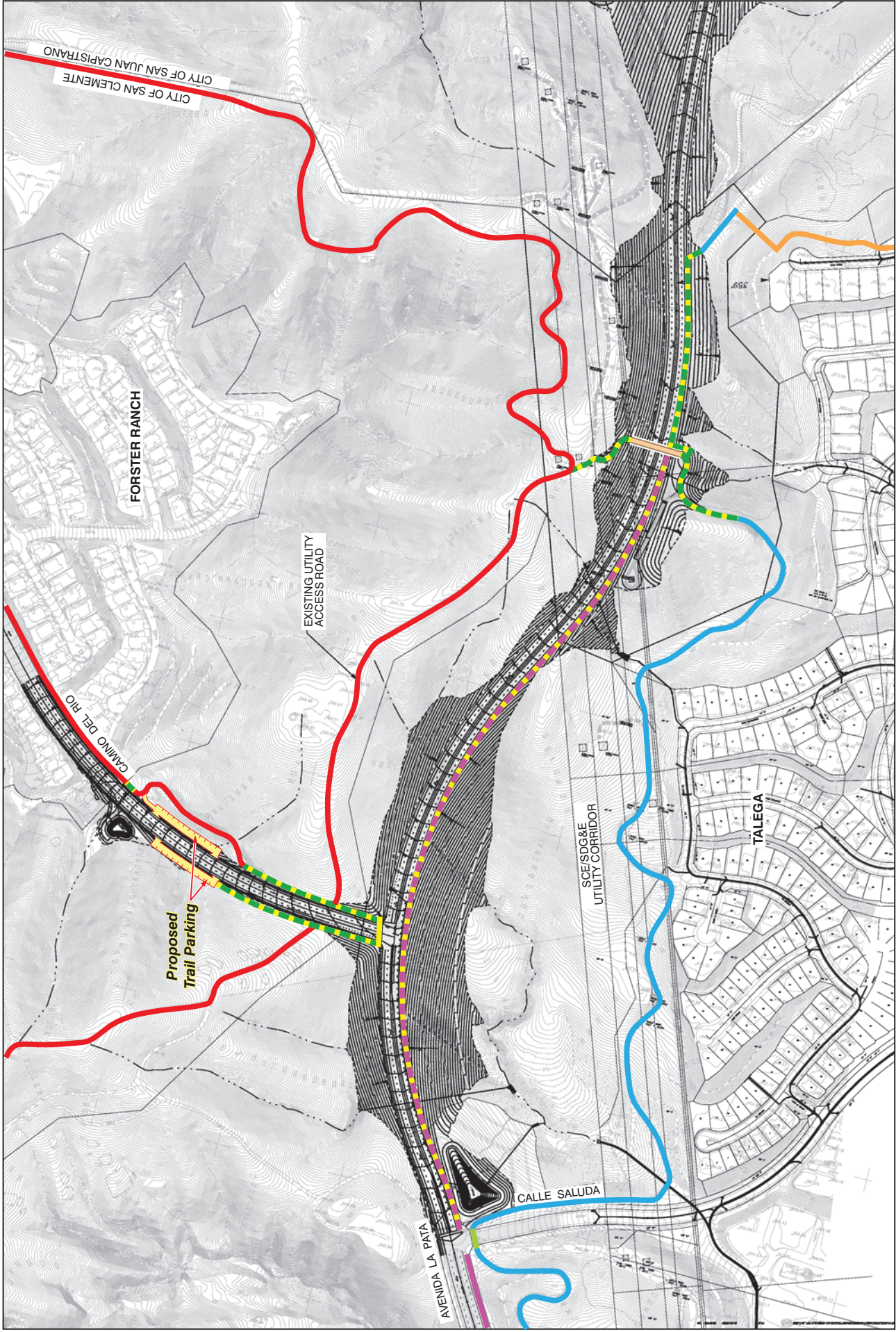
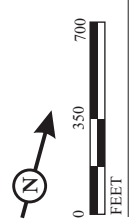


FIGURE 3.13

*La Pata Avenue Gap Closure and Camino Del Rio Extension Project*  
**Existing and Proposed Trail Crossings**

- LEGEND**
- Existing Forster Ranch Ridgeline Trail
  - Existing Prima Deshecha North County Regional Trail
  - Existing Talega Trail
  - Existing At-Grade Crossing
  - Existing Class I Bike Path
  - Proposed Multi-Use Trail
  - Proposed Grade-Separated Crossing
  - Proposed At-Grade Crossing
  - Proposed Class I Bike Path
  - Utility Tower





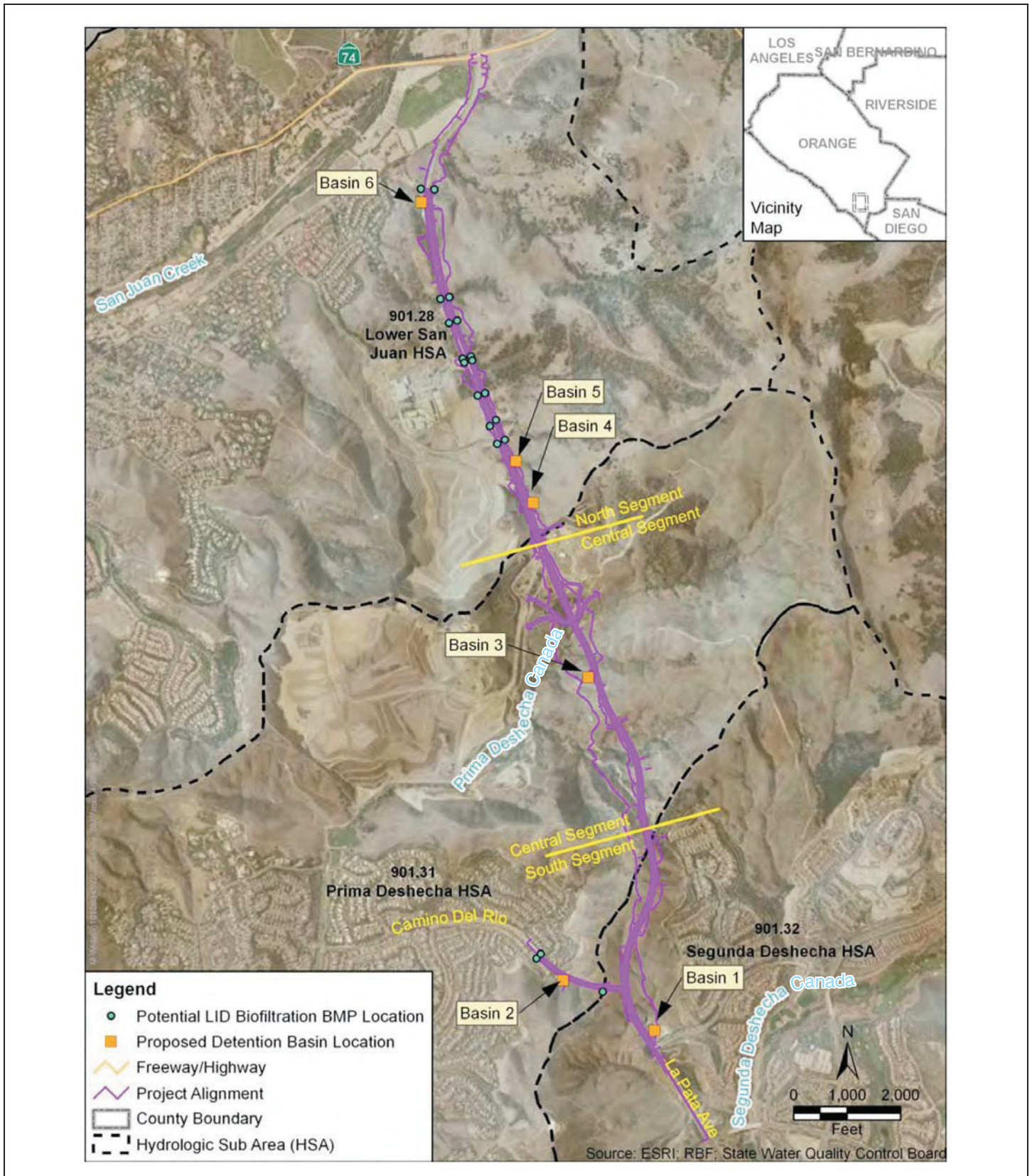





FIGURE 3.8

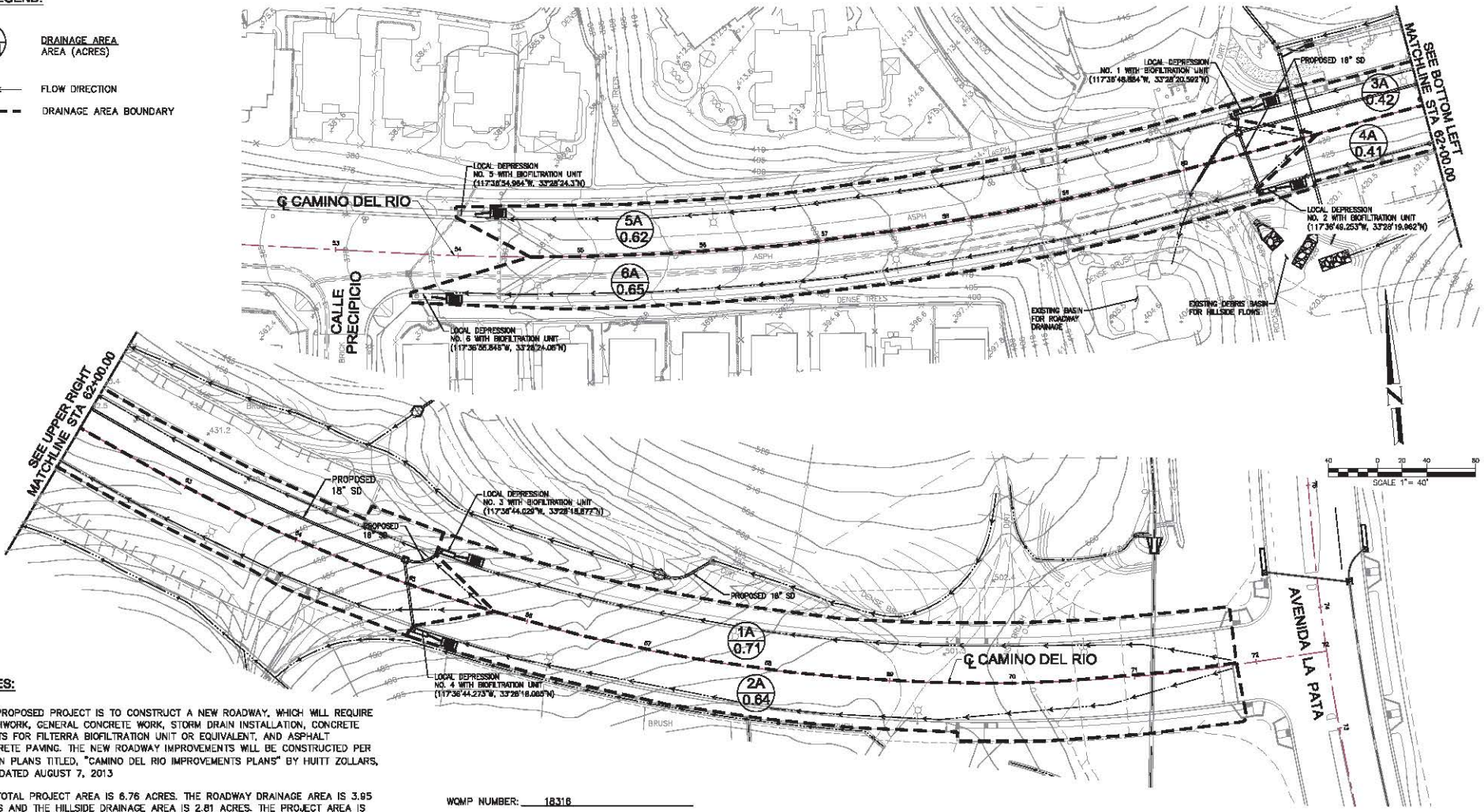


*La Pata Avenue Gap Closure  
and Camino del Rio Extension  
Treatment BMPs*



**LEGEND:**

-  DRAINAGE AREA AREA (ACRES)
-  FLOW DIRECTION
-  DRAINAGE AREA BOUNDARY



**NOTES:**



1. THE PROPOSED PROJECT IS TO CONSTRUCT A NEW ROADWAY, WHICH WILL REQUIRE EARTHWORK, GENERAL CONCRETE WORK, STORM DRAIN INSTALLATION, CONCRETE VAULTS FOR FILTERRA BIOFILTRATION UNIT OR EQUIVALENT, AND ASPHALT CONCRETE PAVING. THE NEW ROADWAY IMPROVEMENTS WILL BE CONSTRUCTED PER DESIGN PLANS TITLED, "CAMINO DEL RIO IMPROVEMENTS PLANS" BY HUITT ZOLLARS, INC., DATED AUGUST 7, 2013
2. THE TOTAL PROJECT AREA IS 6.76 ACRES. THE ROADWAY DRAINAGE AREA IS 3.85 ACRES AND THE HILLSIDE DRAINAGE AREA IS 2.81 ACRES. THE PROJECT AREA IS LOCATED WITHIN SOIL TYPE D.
3. THE ROADWAY DRAINAGE IS CONVEYED INTO FILTERRA BIOFILTRATION UNIT OR EQUIVALENT FOR WATER QUALITY TREATMENT. ROADWAY FLOWS AFTER TREATMENT IS CONVEYED INTO THE DOWNSTREAM BASIN/STORM DRAIN SYSTEM. ADJACENT HILLSIDE FLOWS ARE CONVEYED FROM A CONCRETE DITCH SYSTEM, WHICH DISCHARGES INTO THE EXISTING DEBRIS BASINS BEFORE DISCHARGING INTO THE EXISTING STORM DRAIN SYSTEM. HILLSIDE FLOWS ARE NOT CONVEYED THROUGH THE ROADWAY INTO THE CATCH BASIN SYSTEM.
4. THE PRE-CONDITION LAND USE COVER IS AN OPEN SPACE AREA WITH OPEN BRUSH LANDSCAPE.

WOMP NUMBER: 18316

OC PERMIT NUMBERS: \_\_\_\_\_

PROJECT LOCATION ADDRESS:  
STREET INTERSECTION OF CAMINO  
DEL RIO AND CALLE PRECIPICIO  
SAN CLEMENTE, CA 92672



<b>County of Orange</b> 	 <b>TETRA TECH, INC.</b> 17895 Van Kesteron Avenue, Suite 500 Irvine, CA 92614 Phone (949) 500-8000, FAX (949) 800-5003	ORNAGE COUNTY PUBLIC WORKS CAMINO DEL RIO IMPROVEMENTS SAN CLEMENTE, CA	DATE 4/2015
		ROADWAY DRAINAGE MAP	SHEET NO. 2 of 2

Orange County Public Works  
Camino del Rio Extension Project  
Certification No. R9-2013-0111

**ATTACHMENT 4  
MITIGATION FIGURES**

Figure 2 – Jurisdictional Delineation

Figure 3 & 4 – Off-Site Trabuco Creek Mitigation Area

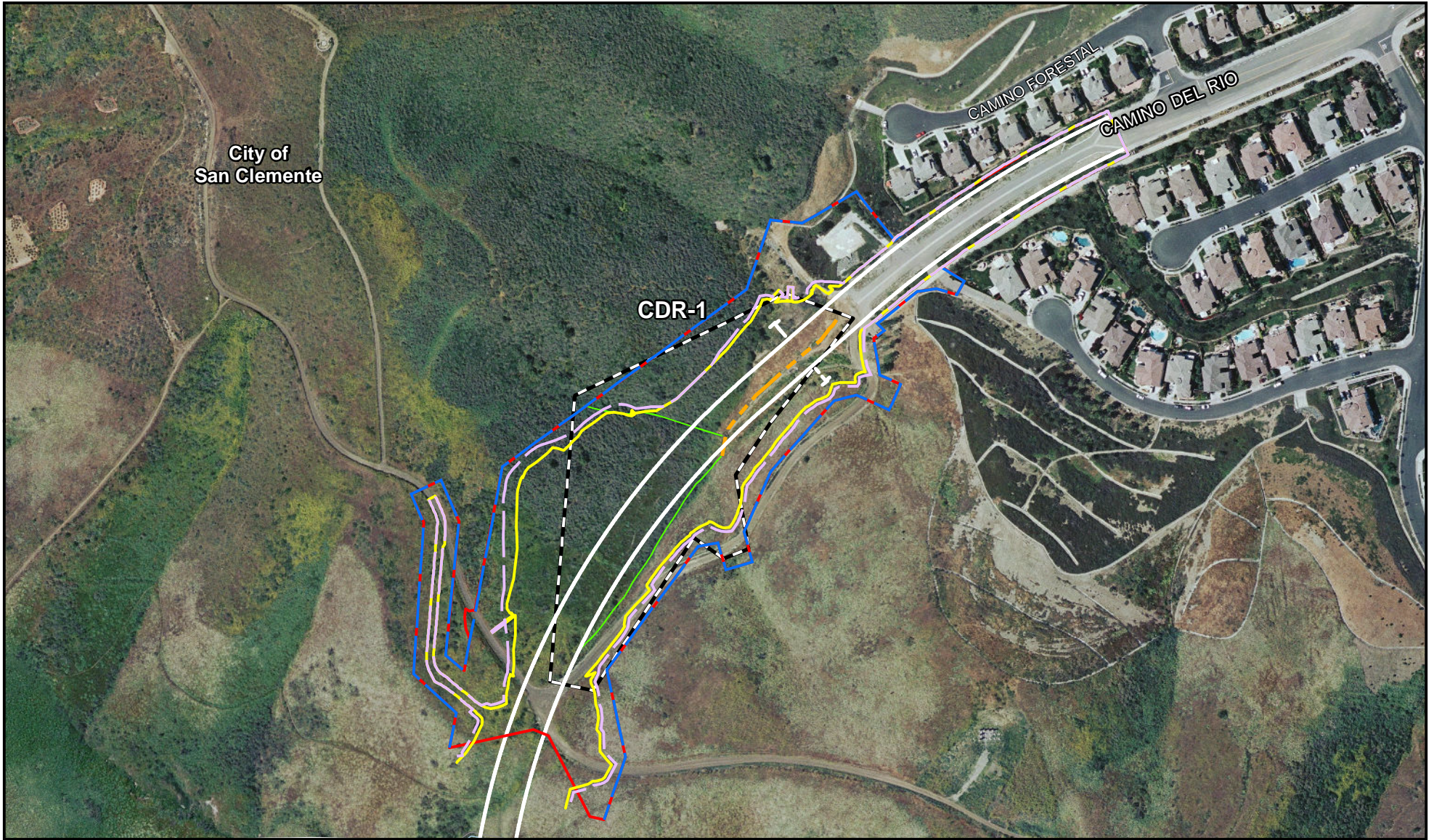
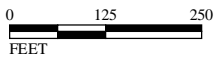


FIGURE 2

LEGEND

- |  |   |
|--|---|
|  Biological Study Area (BSA)            |  Drainage Box with ID    |
|  Proposed Roadway                       |  Swale                   |
|  Temporary Construction Easement Limits | Corps Jurisdiction  |
|  Remedial Grading Limits                |  Corps Wetland Waters    |
|  Grading Limits                         |  Corps Nonwetland Waters |



SOURCE: City of San Clemente (2009); City of San Juan Capistrano (2010); EagleAerial (4/08); Orange County (2010); RBF (6/11/2010); Huit-Zollars (1/2012, 4/23/12); GLA (2009)

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*Camino Del Rio Extension Project*  
**Jurisdictional Delineation**  
**Potential Corps Jurisdiction**



LSA

LEGEND

- La Pata Avenue Mitigation
- Restrictive Covenant Area
- Potential Camino del Rio Mitigation

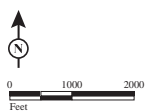
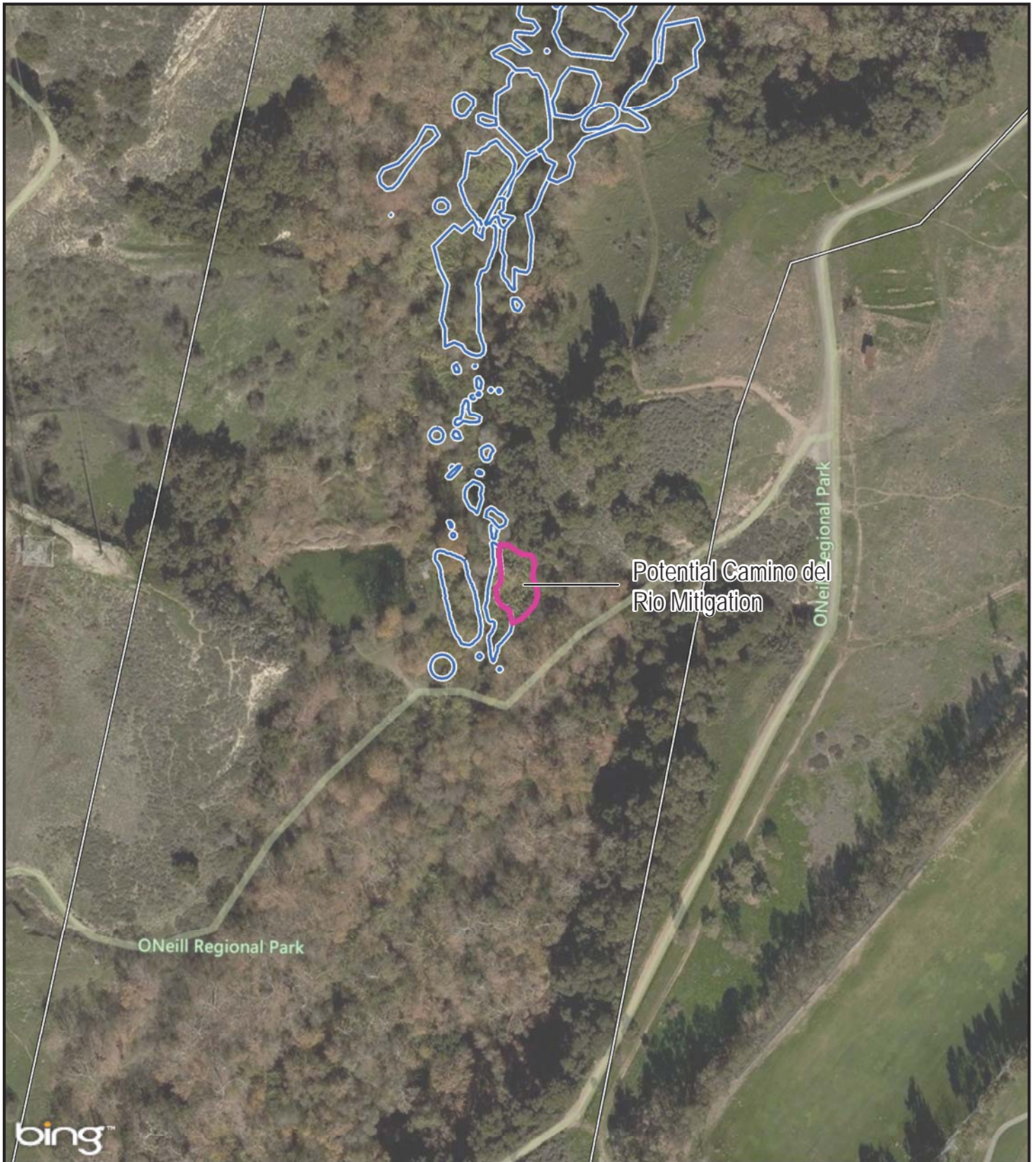





FIGURE 3

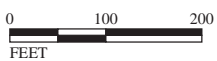
SOURCE: County of Orange (2013); OCPW (2014); Bing Maps (c. 2011)  
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LSA

LEGEND

-  La Pata Avenue Mitigation
-  Restrictive Covenant Area
-  Potential Camino del Rio Mitigation



SOURCE: County of Orange (2013); OCPW (2014); Bing Maps (c. 2011)  
 I:\OCY1301C\GIS\TrabucoCreekArundoRemoval\_Detail.mxd (8/17/2015)

FIGURE 4

*Camino Del Rio Extension Project*  
 Off-Site Trabuco Creek Mitigation Area

Orange County Public Works  
Camino del Rio Extension Project  
Certification No. R9-2013-0111

**ATTACHMENT 5**  
**CEQA MITIGATION MONITORING AND REPORTING PROGRAM**



**Table 7.1: Mitigation and Monitoring Reporting Program**

	<b>Responsible Party</b>	<b>Timing for REG or Mitigation Measure</b>
<b>4.4-7</b>	County of Orange Director of Public Works or specified designee  City of San Clemente Director of Public Works or specified designee	During Final Design
<p>The County Director of Public Works, in concert with the City of San Clemente Director of Public Works, shall ensure that sound barriers are constructed as shown on Figure 4.4.1, including:</p> <ul style="list-style-type: none"> <li>• A minimum barrier height of 4 feet for Sound Barrier (SB) No. 1, located along the residential property line.</li> <li>• A minimum barrier height of 4 feet for SB No. 2, located along the proposed right-of-way.</li> <li>• A minimum barrier height of 4 feet for SB No. 3, located along the residential property line.</li> <li>• A minimum barrier height of 4 feet for SB No. 4, located along the residential property line.</li> </ul>		
<b>4.5 Aesthetics</b>		
<b>4.5-1</b>	Prior to project construction, the County Director of Public Works shall ensure the City of San Clemente is consulted with to determine aesthetic treatments and/or materials for sound barrier construction.	During Final Design
<b>4.6 Biological Resources</b>		
<b>4.6-1</b>	Biological resources outside of the proposed project impact area shall be protected during construction. To ensure this protection, the Orange County Director of Public Works shall prepare and implement a Biological Resources Construction Plan (BRCP) that provides for the protection of the resources and establishes the monitoring requirements. The BRCP shall contain the following, at a minimum: <ul style="list-style-type: none"> <li>a. Specific measures for the protection and monitoring of sensitive amphibian, mammal, bird, and plant species identified during construction, including listed threatened or endangered species including least Bell's vireo and coastal California gnatcatcher. Such measures will include preconstruction surveys and monitoring during vegetation clearing and grubbing to flush or relocate animals and identify plants that require relocation, such as thread-leaved brodiaea.</li> <li>b. Design and installation of protective fencing or other demarcation around conserved habitat areas and to delineate construction staging areas.</li> <li>c. Specific measures for the minimization of impacts to sensitive habitats, such as preserved riparian/wetland and coastal sage scrub habitats. Such measures will specify that no grading or fill activity of any type will be permitted within these preserved areas. In addition, no construction activities, materials, or equipment will be allowed within these areas. Silt fence barriers will be installed at the grading boundaries on slopes to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities. A biological monitor should monitor as</li> </ul>	During Construction Activities

**Table 7.1: Mitigation and Monitoring Reporting Program**

	Responsible Party	Timing for REG or Mitigation Measure
<p>necessary to ensure compliance with the BRCP.</p> <p>d. A measure for clearing of vegetation outside the breeding season (February 15 through September) and/or preconstruction nesting bird surveys for any vegetation clearing during the nesting season. This measure should include provisions for protection of raptor nesting, which can start earlier in the season. The goal of this measure is compliance with the Migratory Bird Treaty Act (MBTA).</p> <p>e. Measures for potential impacts from equipment operation and maintenance, dust, trash and construction debris, erosion, and unnecessary disturbance of adjacent habitat. All construction equipment should be operated in a manner so as to prevent accidental damage to nearby preserved areas. All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated nonsensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering waters of the United States.</p> <p>f. Measures for restoration of temporarily impacted (remedial grading) areas, and revegetation of graded slopes outside the roadway itself and necessary maintenance areas. This restoration/revegetation should be accomplished with native species, except in existing developed areas where ornamental landscaping already occurs. In any case, no nonnative invasive plants should be used. In undeveloped areas, restoration and revegetation should be done with native species, with plant and seed selection designed to blend with adjacent grassland, coastal sage scrub, and chaparral communities.</p>		
<p><b>4.6-2</b></p> <p>Prior to initiation of grading, the Orange County Director of Public Works shall prepare a plan for the relocation of thread-leaved brodiaea within the graded portions of the project alignment. This plan shall include preconstruction surveys during the flowering period of the plant to precisely locate all visible individuals of the species. The flowering period should be closely monitored, and surveys performed based on the flowering stage of known populations in the area. The plan shall include identification of suitable relocation sites in preserved open space, with Caspers Wilderness Park given the highest priority in accordance with the Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). Relocation sites may include expansion of existing populations or establishment of new populations in suitable locations. The plan shall specify the specific relocation methods, maintenance and monitoring requirements, and performance standards. The plan shall be submitted for review and approval by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). In the absence of CDFG adoption of the NCCP/HCP, the County shall obtain authorization from CDFG pursuant to Sections 2080.1 or 2081 of the Fish and Game Code.</p>	<p>County of Orange Director of Public Works or specified designee</p>	<p>Prior to the initiation of grading activities</p>
<p><b>4.6-3</b></p> <p>Prior to initiation of grading, the Orange County Director of Public Works shall provide verification to the USFWS that the amount of coastal sage scrub to be impacted by the project (30.34 acres) is within the acreage<sup>1</sup> anticipated in the NCCP/HCP, and that the requisite acreage of coastal sage scrub restoration within</p>	<p>County of Orange Planning Director or specified designee</p>	<p>Prior to the initiation of grading activities</p>



**Table 7.1: Mitigation and Monitoring Reporting Program**

	<b>Responsible Party</b>	<b>Timing for REG or Mitigation Measure</b>
<b>4.8-3</b>	County of Orange Director of Public Works or specified designee	During final design and prior to the issuance of grading permits
	<p>During final design and prior to the issuance of grading permits, the County of Orange Director of Public Works shall ensure that comprehensive geotechnical reports for the proposed projects (all three segments) are prepared and that the project final design incorporates the report recommendations. The geotechnical reports will supplement the <i>Preliminary Geotechnical Assessments</i> described above, and will incorporate the following:</p> <ul style="list-style-type: none"> <li>• Additional subsurface investigation</li> <li>• Additional laboratory testing</li> <li>• Additional review of published reports and compilation of previous data</li> <li>• Additional cross sections</li> <li>• Additional slope stability analysis</li> <li>• Additional settlement analysis</li> <li>• Additional evaluation of potentially expansive and corrosive soils</li> <li>• Refinement of project recommendations, including remedial grading</li> </ul>	
<b>4.9 Hazards and Hazardous Materials</b>		
<b>4.9-1</b>	County of Orange Director of Public Works or specified designee	Prior to the issuance of grading permits
	<p><b>Polychlorinated Biphenyl Surveys for Leaking Transformers.</b> Prior to the issuance of grading permits, the County of Orange Director of Public Works will ensure that all utility pad-mounted transformers within the project area will be inspected for leaks prior to disturbance or removal. Leaking transformers should be considered a potential for polychlorinated biphenyl (PCB) hazard, unless tested, and should be handled accordingly.</p>	
<b>4.9-2</b>	County of Orange Director of Public Works or specified designee	Prior to the issuance of grading permits
	<p><b>Thermoplastic Paint Survey.</b> Prior to the issuance of grading permits, yellow traffic striping shall be tested by the County of Orange Director of Public Works, and handling and disposal of contaminated materials will be conducted in compliance with the recommendations of the analysis. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e., American Society for Testing and Materials (ASTM) E 1527-05, and 40 Code of Federal Regulations [CFR], Subchapter R, Toxic Substances Control Act [TSCA], Part 716).</p>	
<b>4.9-3</b>	County of Orange Director of Public Works or specified designee	Prior to the issuance of grading permits
	<p><b>Aerially Deposited Lead Surveys for Unpaved Areas Adjacent to Roadways.</b> Prior to the issuance of grading permits, the County of Orange Director of Public Works shall conduct soil sampling for aerially deposited lead (ADL) contamination in unpaved locations where excavation will occur along roads in areas not previously sampled during prior investigations, and handling of the soil and disposal of surplus materials will be conducted in compliance with the recommendations of the analysis. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e., ASTM E 1527-05, and 40 CFR, Subchapter R, TSCA, Part 716).</p>	

**Table 7.1: Mitigation and Monitoring Reporting Program**

	<b>Responsible Party</b>	<b>Timing for REG or Mitigation Measure</b>
<p><b>4.9-4</b> <b>Safety Requirements for Unknown Buried Waste.</b> If buried waste is encountered during excavation activities, all construction work shall cease and the County of Orange Director of Public Works shall immediately notify the Local Enforcement Agency (LEA) representing CalRecycle. In addition the County of Orange and its construction subcontractors shall protect all temporary structures from methane intrusion pursuant to California Code of Regulations (CCR) Title 27, Section 21190(g). If the existing grading plan is revised during final design or if preliminary work undertaken to locate buried waste at WMU 2 indicates that contact with buried waste is likely during excavation activities, a detailed Contingency Plan containing specific steps to be implemented to manage buried solid and/or hazardous waste when encountered during excavation activities at WMU 2 shall be prepared and approved by LEA, RWQCB-San Diego Region, and SCAQMD (Rule 1150), prior to initiation of grading activities.</p>	<p>County of Orange Director of Public Works or specified designee</p>	<p>During construction</p>
<p><b>4.9-5</b> <b>Transportation Management Plan.</b> A Transportation Management Plan (TMP) will be prepared by the County of Orange Director of Public Works. Specifics of the TMP will be established during the design phase of the project, but are expected to include a community outreach program, media bulletins, appropriate signing, adherence to dust control restrictions, avoidance of traffic restrictions during peak travel periods, and coordination of work as necessary with any other roadway projects in the vicinity. The TMP will include but not be limited to the following elements:</p> <ul style="list-style-type: none"> <li>• <b>Traffic Control:</b> This project will require traffic control elements such as lane/shoulder closures and temporary signing/stripping on local streets.</li> <li>• <b>Construction Sequencing:</b> The TMP will address the potential for other planned improvements to be under construction in the project vicinity. Construction sequencing will be designed to avoid or minimize the simultaneous construction of improvements that could result in traffic impacts.</li> <li>• <b>Public Awareness Campaign (PAC):</b> Vehicles traveling through the construction zone, particularly on La Pata Avenue north of the Prima Deshecha Landfill, may experience longer than normal delays due to construction. To reduce these delays and confusion to the motoring public during construction activities, the County of Orange, in conjunction with the Cities of San Juan Capistrano and San Clemente and the Capistrano Unified School District, will implement a PAC. The purpose of the PAC is to keep the surrounding community abreast of the project's progress and construction activities that could affect travel plans. The use of mailers/flyers, local newspaper advertising, local radio information, and public meetings, as appropriate, may be used to disseminate this information.</li> <li>• <b>Signing:</b> Post information signing on La Pata Avenue, Calle Saluda, and the local arterials prior to and during construction to inform motorists of delays and alternate travel routes.</li> </ul>	<p>County of Orange Director of Public Works or specified designee</p>	<p>During Final Design</p>

**Table 7.1: Mitigation and Monitoring Reporting Program**

	Responsible Party	Timing for REG or Mitigation Measure
<ul style="list-style-type: none"> <li>• <b>Pedestrian Access:</b> Provide a pedestrian detour plan to address sidewalk closures.</li> <li>• <b>Construction Timing and Phasing:</b> The project construction will be staged to maintain local traffic through La Pata Avenue, Calle Saluda, and other local arterials during construction activities.</li> </ul>	N/A	N/A
<b>4.10 Population and Housing</b>		
There are no potentially significant impacts related to population and housing and no mitigation is required.		
<b>4.11 Water Quality</b>		
<b>REG WQ-1</b>	County of Orange Director of Public Works or specified designee	Prior to and during construction activities
<p>Prior to and during construction, the County of Orange shall comply with the requirements of the <i>National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities</i> (Construction General Permit); Order 2009-0009-DWQ; NPDES No. CAS000002 and any subsequent permit as they relate to construction activities. This shall include submission of a <i>Notice of Intent</i> (NOI) to the State Water Resources Control Board (SWRCB) at least 30 days prior to the start of construction, preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and submission of a <i>Notice of Termination</i> (NOT) to the Santa Ana RWQCB upon completion of construction and stabilization of the site. Prior to construction activities and after the final design phase and environmental determinations, a construction SWPPP, and a water quality monitoring and reporting program shall be developed for the project. The construction phase SWPPP shall be designed to identify potential pollutant sources associated with construction activities; identify non-storm water discharges; and identify, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants associated with the construction site.</p>		
<b>REG WQ-2</b>	County of Orange Director of Public Works or specified designee	Prior to and during construction
<p>The County of Orange shall comply with the provisions of the <i>General Waste Discharge Requirements for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region except for San Diego Bay</i>, National Pollutant Discharge Elimination System (NPDES) No. CAG919002, Order No. R9-2008-0002, as they relate to the discharge of non-storm water dewatering wastes for the project. This will include submitting to the San Diego Regional Water Quality Control Board (RWQCB) an application and required fees for authorization to discharge at least 60 days prior to the start of construction and notice of termination within 30 days at completion of dewatering activities.</p>		
<b>REG WQ-3</b>	County of Orange Director of Public Works or specified designee	During final design
<p>The County of Orange shall comply with the requirements of the Orange County Drainage Area Management Plan (DAMP) and Local Implementation Plan (LIP) as they relate to hydrology and water quality. Project-specific Source Control and Treatment Control Best Management Practices (BMPs) contained in the Final Water Quality Management Plan (WQMP) shall be incorporated into final design. The BMPs shall be properly designed and maintained to target pollutants of concern and reduce runoff from the project site. The WQMP shall include an operations and maintenance plan for the prescribed Treatment Control BMPs to ensure their long-term performance.</p>		

**Table 7.1: Mitigation and Monitoring Reporting Program**

		<b>Responsible Party</b>	<b>Timing for REG or Mitigation Measure</b>
<b>4.11-1</b>	During final design, a final hydrologic analysis shall be prepared in accordance with the current Orange County Hydrology Manual. The final hydrologic analysis shall include a stability analysis to ensure a stable channel design for the soft-bottom channels proposed on the north and south sides of the buttress fill. The soft-bottom channel design shall conform with the Hydrologic Conditions of Concern (HCOC) requirements. The final hydrologic analysis shall also expand the analysis of the extended detention basins to be used for flood control. The basin analysis shall be expanded to include additional storm events and ensure the northernmost basin conforms to the Talega Runoff Management Plan.	County of Orange Director of Public Works or specified designee	During final design
<b>4.11-2</b>	During final project design, and prior to the issuance of any grading permits, the County of Orange shall submit final detailed applications, certification forms, hydraulic analyses, and fee payment to the Federal Emergency Management Agency (FEMA) to obtain a Letter of Map Revision (LOMR). The drainage structures within the Prima Deshecha Cañada 100-year floodplain shall not be constructed until the LOMR is approved by FEMA.	County of Orange Director of Public Works or specified designee	During final design and prior to issuance of grading permits
<b>4.11-3</b>	During final design and prior to the issuance of grading permits, the County of Orange Director of Public Works shall ensure that a mudflow analysis is prepared for the proposed project (all three segments) for areas where natural slopes or drainages descend directly to the roadway or roadway cut slope. The mudflow analysis shall quantify the potential debris flow hazards and provide recommendations, such as oversized perimeter drainage devices (i.e., brow ditches) or debris basins, to accommodate potential debris. The County of Orange Director of Public Works shall ensure that the recommendations of the mudflow analysis are incorporated into final design of the proposed project.	County of Orange Director of Public Works or specified designee	During final design and prior to issuance of grading permits
<b>4.12 Public Service and Utilities</b>			
<b>4.12-1</b>	<b>Utility Relocation.</b> Prior to initiation of grading and throughout construction, the Orange County Director of Public Works will coordinate with utility companies to maintain the provision of services and avoid service interruptions. In the event that an interruption is anticipated and unavoidable, the Orange County Director of Public Works will coordinate with the specified utility to ensure that interruptions in service would occur during periods of low demand (i.e., the winter season).	County of Orange Director of Public Works or specified designee	Prior to the initiation of grading and during construction
<b>4.12-2</b>	<b>Utility Access.</b> The Orange County Director of Public Works will ensure that project plans provide for access to utility infrastructure for maintenance and repair purposes during and after construction.	County of Orange Director of Public Works or specified designee	During and after construction
<b>4.13 Recreation</b>			
<b>4.13-1</b>	<b>Construction Area Trails Management Plan.</b> Prior to issuance of a grading permit, the County of Orange Director of Public Works shall approve a Construction Area Trail Management Plan. The Plan shall be designed by a registered Traffic Engineer and shall address potential trail closures, detours, or other disruptions to trail circulation. The Plan shall identify types and locations of signage to direct trail users during construction and detour routes. The County of Orange Director of Public Works shall verify that the	County of Orange Director of Public Works or specified designee	Prior to the issuance of a grading permit