



California Regional Water Quality Control Board San Diego Region



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Matthew Rodriguez
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Edmund G. Brown Jr.
Governor

August 25, 2011

Certified Mail – Return Receipt Requested

Article Number: 7010 1060 0000 4952 9093

Mr. Rob Rundle
Principal Regional Planner
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101

In reply refer to:

756987: mporter

Dear Mr. Rundle:

**SUBJECT: Clean Water Act Section 401 Water Quality Certification No. 10C-088
for the Sorrento to Miramar Double Track Project – Phase I**

Enclosed is the Clean Water Act Section 401 Water Quality Certification for discharges to Waters of the U.S. and acknowledgment of enrollment under State Water Resources Control Board Order No. 2003-017-DWQ for the Sorrento to Miramar Double Track Project – Phase I. A description of the project and project location can be found in the project information sheet, location map, and site maps which are included as Attachments 1 through 6.

Any petition for reconsideration of this Certification must be filed with the State Water Resources Control Board within 30 days of certification action (23 CCR § 3867). If no petition is received, it will be assumed that you have accepted and will comply with all the conditions of this Certification.

Failure to comply with all conditions of this Certification may subject you to enforcement actions by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), including administrative enforcement orders requiring you 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.

California Environmental Protection Agency

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In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Mike Porter at 858-467-2726 or mporter@waterboards.ca.gov.

Respectfully,



DAVID W. GIBSON
Executive Officer

Enclosures:

Clean Water Act Section 401 Water Quality Certification No. 10C-088 Sorrento to Miramar Double Track Project – Phase I, with six attachments

E-copies: Refer to Attachment 2 of Certification 10C-088 for the Distribution List.

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File No.	10C-088
WDID	9000002149
Reg. Measure ID	375937
Place ID	756987
Party ID	524619
Person ID	524620

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 Rob Rundle
 SANDAG
 401 B Street
 Suite 800
 San Diego, CA 92101

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 (Transfer from service label)

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California Regional Water Quality Control Board

San Diego Region



Linda S. Adams
Acting Secretary for
Environmental Protection

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

PROJECT: Sorrento to Miramar Double
Track Project – Phase 1
Water Quality Certification 10C-088

WDID: 9 000002149

CIWQS
Reg. Meas: 375937
Place: 756987
Party: 524619
Person: 524620

APPLICANT: Mr. Rob Rundle
Principal Regional Planner
San Diego Association of Governments
401 B Street
Suite 800
San Diego, CA 92101

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"/> Waiver of Waste Discharge Requirements
<input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	<input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004 DWQ

PROJECT DESCRIPTION:

The San Diego Association of Governments (SANDAG) has proposed to construct a second railroad track parallel to an existing track to reduce train traffic. The proposed project area is located mostly parallel to and over Soledad Valley Creek, parallel and south-west of Sorrento Valley Road, starts at the Sorrento Valley Coaster Station, and ends at confluence of Carroll Canyon and Soledad Canyon Creeks (approximate 1/2 mile east of I-805). The proposed project contains the following construction elements:

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- 1) Construction of a new double track from mile post (MP) 249.8 to MP 251.0 would result in approximately 6,300 feet of new track. The majority of the new double track will be east of the existing track.
- 2) Replacement of the existing wood bridge 249.9 with a steel deck, double track bridge. The new bridge will be supported by three bents and each bent will have eight steel piles for a total of 24 piles. Steel plates will wrap each bent to reduce debris accumulation. The new bridge will be approximately 131 feet long and 33 feet wide. Four culverts and fill will be temporarily placed in the creek bed to provide an equipment platform to facilitate bridge construction.
- 3) A new crossover will be installed north of Bridge 249.9, south of and adjacent to Sorrento Valley Boulevard.
- 4) A 12-foot wide access unpaved road will be located north of the existing track along much of the alignment.
- 5) Control Point (CP) Pines will be relocated from its existing location north of Bridge 249.9 to MP 251.0.
- 6) Removal of existing wooden bridge 249.9.
- 7) Removal of the temporary culverts and fill from the creek.

Temporary impacts to waters (0.10-acre) and wetlands (0.16-acre) of the State and U.S. will be caused by temporary fill and culverts for new bridge construction, existing bridge demolition, and temporary access for equipment crossings over Soledad Canyon Creek and its associated wetlands. Permanent impacts to waters (0.03-acre) and wetlands (0.01-acre) of the State and U.S. will be caused by the new bridge bents and abutments.

Unavoidable impacts will be compensatorily mitigated through the establishment of:

1. Alkali meadow habitat (0.68-acre) consisting of Salt grass, San Diego sagewort, Spike rush, and Yerba mansa; and
2. Riparian habitat (1.56-acres) consisting of willows (4 species), Fremont's cottonwood, Coast live oak, and Western sycamore, Mulefat, and herbaceous understory.

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I. STANDARD CONDITIONS:

The following three standard conditions apply to all Certification actions, except as noted under Condition 3 for denials.

- 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 California Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
- B. This Certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to 23 CCR subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. The validity of any non-denial Certification action (Actions 1 and 2) must be conditioned upon total payment of the full fee required under 23 CCR section 3833, unless otherwise stated in writing by the certifying agency.

II. ADDITIONAL CONDITIONS: GENERAL

- A. Water Quality Certification No. 10C-088 (Certification) is only valid if the project begins no later than 5 (five) years from the date of issuance. If the project has not begun within 5 years from the date of issuance, this Certification expires.
- B. The San Diego Association of Governments must, at all times, fully comply with the engineering plans, specifications and technical reports submitted to the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), to support this Certification and all subsequent submittals required as part of this Certification and as described in Attachment 1. The conditions within this Certification must supersede conflicting provisions within such plans submitted prior to the Certification action. Any modifications thereto, would require notification to the San Diego Water Board and reevaluation for individual Waste Discharge Requirements and/or Certification amendment.
- C. During construction, the San Diego Association of Governments must maintain a copy of this Certification at the project site so as to be available at all times to site personnel and agencies.

- D. The San Diego Association of Governments must permit the San Diego Water Board or its authorized representative at all times, upon presentation of credentials:
1. Entry onto project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept.
 2. Access to copy any records required to be kept under the terms and conditions of this Certification.
 3. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Certification.
 4. Sampling of any discharge or surface water covered by this Order.
- E. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation must 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.
- F. In response to a suspected violation of any condition of this Certification, the San Diego Water Board may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the San Diego Water Board deems appropriate, provided that the burden, including costs, of the reports must bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
- G. In response to any violation of the conditions of this Certification, the San Diego Water Board may add to or modify the conditions of this Certification as appropriate to ensure compliance.

III. ADDITIONAL CONDITIONS: CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. Prior to the start of the project, and annually thereafter, the San Diego Association of Governments must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response, and Best Management Practice (BMP) implementation and maintenance.

- B. The San Diego Association of Governments 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 U.S. and/or State.
- C. The San Diego Association of Governments must enroll in and comply with the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the *NPDES General Permit for Storm Water Discharges Associated with Construction Activity*.
- D. The San Diego Association of Governments must implement the *Stormwater Pollution Prevention Plan for the Sorrento to Miramar Phase I Double Track Project*, prepared by David Evans and Associates, Inc., dated May 2011, and revised copy received on June 21, 2011.
- E. The treatment, storage, and disposal of wastewater during the life of the project must be done in accordance with waste discharge requirements established by the San Diego Water Board pursuant to CWC § 13260.
- F. Discharges of concentrated flow during construction or after completion must not cause downstream erosion or damage to properties or stream habitat.
- G. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the U.S. and/or the State or placed in locations that may be subjected to storm flows. Pollutants discharged to areas within a stream diversion area must be removed at the end of each work day or sooner if rain is predicted.
- H. All surface waters, including ponded waters, must be diverted away from areas undergoing 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 water quality objectives of the receiving waters. 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.
- I. All areas that will be left in a rough graded state must be stabilized no later than one week after completion of grading. The San Diego Association of Governments and subsequent owners, are responsible for implementing and maintaining BMPs to prevent erosion of the rough graded areas to prevent flow from this area from causing negative impacts to beneficial uses. After completion of grading, all areas must be revegetated with native species appropriate for the area. The revegetation palette must not

contain any plants listed on the California Invasive Plant Council Invasive Plant Inventory, which can be found online at <http://www.cal-ipc.org/ip/inventory/weedlist.php>.

- J. Substances hazardous to aquatic life including, but not limited to, petroleum products, raw 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.
- K. Removal of vegetation must occur by hand, mechanically, or using EPA approved herbicides deployed using applicable BMPs to prevent impacts to Beneficial Uses of waters of the State. Use of aquatic pesticides must be done in accordance with State Water Resources Control Board Water Quality Order No. 2004-0009-DWQ, and any subsequent reissuance as applicable. Removal of vegetation must occur outside of the avian nesting season (March 15 - August 31).
- L. The temporary culverts and fill required for construction of the new bridge must be removed within 30 days of completion of bridge building activities. All fill must be removed from the Soledad Canyon Creek bed and the creek bed morphology must be restored to pre-project conditions.
- M. The grain size of the fill (aggregate) must not be less than one inch in diameter.
- N. If any sediment erodes or scours away from rail line and bridge construction activities and is transported into Soledad Canyon Creek, the San Diego Association of Governments will be responsible for the restoration of 0.50-acre of salt marsh in Los Penasquitos Lagoon.

IV. ADDITIONAL CONDITIONS: POST-CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. All storm drain inlet structures within the project boundaries must be stamped and/or stenciled (or equivalent) with appropriate language prohibiting non-storm water discharges.
- B. The San Diego Association of Governments must implement the post-construction BMPs as described in the *Stormwater Pollution Prevention Plan for the Sorrento to Miramar Phase I Double Track Project*, prepared by David Evans and Associates, Inc., dated May 2011, and revised on June 21, 2011. Post-construction BMPs must include, but be limited to:

1. Pervious Pavement for permanent access (small driveway).
 2. Concrete Line Ditch.
 3. Articulated Concrete Blocks.
 4. Rock Slope Protection.
 5. Turf Reinforcement Mats.
 6. Hydroseed/Hydraulic Mulch.
- C. Post-construction BMPs must be installed and functional prior to occupancy and/or planned use of development areas.
- D. The San Diego Association of Governments or their designated party must inspect and maintain structural BMPs per the manufacturer's and industry specifications.
- E. The post-construction BMPs must be inspected prior to the commencement of the rainy season (October 1) and after every storm event exceeding 0.5 inches of precipitation.
- F. Records must be kept regarding inspections and maintenance of the post-construction BMPs.
- G. The San Diego Association of Governments assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity.

V. ADDITIONAL CONDITIONS: COMPENSATORY MITIGATION

- A. Mitigation for permanent and temporary project impacts to wetland and non-wetland waters of the United States and/or State must be implemented as described in the Final Compensatory Wetland/Upland Mitigation Plan for Deer Canyon, prepared by Caltrans, and dated May 25, 2011. The Deer Canyon Mitigation site will provide compensatory mitigation for the proposed impacts from the I-5/Genessee Avenue Interchange, the I-805 Managed Lanes, and Carroll Canyon Road Extension projects, in addition to Sorrento to Miramar Double Track Project – Phase I. The Deer Canyon Mitigation site plans do not show individual mitigation polygons for each project, but provides tables that mathematically describe how much each project is entitled to for each habitat impacted and the corresponding, requisite compensatory mitigation.
- B. Mitigation at the Deer Canyon site must consist of the establishment of:
1. Alkali meadow habitat (0.68-acre) consisting of Salt grass, San Diego sagewort, Spike rush, and Yerba mansa; and

2. Riparian habitat (1.56-acres) consisting of willows (4 species), Fremont's cottonwood, Coast live oak, and Western sycamore, Mulefat, and herbaceous understory.
- C. Project impacts will require the mathematical subtraction of 0.68-acre of Alkali meadow habitat credits and 1.56-acres of Riparian habitat credits from the Deer Canyon Mitigation site available mitigation credits ledger. The amount of credit withdrawals reflects the compensatory mitigation needs of the California Coastal Commission (larger amount) in addition to the needs of the U.S. Army Corps of Engineers/San Diego Water Board (lesser amount).
- D. Permanent impacts shall not exceed 0.01-acre (40-linear feet) for wetland waters and 0.03-acre (235-linear feet) for non-wetland waters of the U.S. and/or State.
- E. Temporary impacts shall not exceed 0.16-acre (305-linear feet) for wetland waters and 0.10-acre (500-linear feet) for non-wetland waters of the U.S. and/or State.
- F. The construction of proposed mitigation must be concurrent with project grading and completed no later than 9 months following the initial discharge of dredge or fill material into on-site waters. Delays in implementing mitigation must be compensated by an increased mitigation implementation of 10 percent of the cumulative compensatory mitigation for each month of delay.
- G. The San Diego Association of Governments must restore all areas of temporary impacts and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the United States/State. Restoration must include grading of disturbed areas to pre-project contours and revegetation with native species. SANDAG must implement all necessary BMPs to control erosion and runoff from areas associated with this project.
- H. The San Diego Association of Governments must salvage leaf litter, coarse woody debris, and upper soil horizons from impacted jurisdictional water sites that are relatively free of invasive exotic species for use in on-site restoration areas.
- I. If available at the impact site, the San Diego Association of Governments must also salvage large cuttings from appropriate tree species and use them as pole plantings at the onsite restoration area.
- J. The mitigation site must be designed and constructed to meet the following conditions:

1. Most of the channel through the mitigation site is characterized by equilibrium conditions, with no evidence of severe aggradation or degradation;
 2. As viewed along cross-sections, the channel and buffer have a variety of slopes, or elevations, that are characterized by different moisture gradients. Each sub-slope contains physical patch types or features that contribute to irregularity in height, edges, or surface and to complex topography overall; and
 3. The mitigation site has a well-developed plant community characterized by a high degree of horizontal and vertical interspersion among plant zones and layers.
- K. During the mitigation monitoring phase, mitigation areas must be maintained 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 on-site or off-site mitigation areas.
- L. San Diego Water Board acceptance of the final mitigation plan for each project site applies only to the site and plan that mitigates for each project. This does not approve the mitigation site or plan for use by other current or future projects that are planning to use additional acreage at the site for mitigation.
- M. Any maintenance activities that do not contribute to the success of the mitigation site and enhancement of beneficial uses and ecological functions and services are prohibited. Maintenance activities are 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 restoration program.
- N. If at any time during the implementation and establishment of the mitigation area(s), and prior to verification of meeting success criteria, a catastrophic natural event (e.g., fire, flood) occurs and impacts the mitigation area, the San Diego Association of Governments is responsible for repair and replanting of the damaged area(s).
- O. For the purpose of determining mitigation credit for the removal of exotic/invasive plant species, only the actual area occupied by exotic/invasive plant species must be quantified to comply with mitigation requirements.

- P. For purposes of this Certification, establishment is defined as the creation of vegetated or unvegetated waters of the U.S. and/or State where the resource has never previously existed (e.g. conversion of nonnative grassland to a freshwater marsh). Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site where vegetated or unvegetated waters of the United States/State previously existed (e.g., removal of fill material to restore a drainage). Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the United States/State (e.g., removal of a heavy infestation or monoculture of exotic plant species from jurisdictional areas and replacing with native species). Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the United States/State (e.g., removal of small patches of exotic plant species from an area containing predominantly natural plant species). Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the United States/State (e.g., conservation easement).
- Q. Mitigation site maintenance and monitoring must continue until the mitigation site has met success criteria stated in the mitigation plan.
- R. The Deer Canyon mitigation site must be maintained in perpetuity by the San Diego Association of Governments or by another party designated by the San Diego Association of Governments.

VI. MONITORING REQUIREMENTS:

A. **Bioassessment -**

The San Diego Association of Governments must conduct bioassessment monitoring, as described in this section, to assess effects on the biological integrity of Soledad Canyon Deer Canyon Creeks. Bioassessment shall include: 1) the collection and reporting of specified instream biological data, and 2) the collection and reporting of specified instream physical and habitat data.

Site Locations and Frequency

Macroinvertebrate samples shall be collected once per calendar year at the following locations: Soledad Canyon Creek bridge replacement area and Deer Canyon Mitigation. Sampling areas must be located upstream, within, and downstream of the impacted areas.

Index Period

Macroinvertebrate sampling shall be conducted between April 1st and October 1st. Sampling should be conducted when water is present and preferably flowing.

Field Methods for Macroinvertebrate Collections

In collecting macroinvertebrate samples, the San Diego Association of Governments shall use the "Reachwide Benthos (Multihabitat) Procedure" specified in Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California (Ode 2007, available at: http://www.swrcb.ca.gov/swamp/docs/phab_sopr6.pdf).

Habitat Assessment Methods

The discharger shall conduct, concurrently with all required macroinvertebrate collections, the "Full" suite of physical/habitat characterization measurements as specified in Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California (Ode 2007), and as summarized in the Surface Water Ambient Monitoring Program's Stream Habitat Characterization Form — Full Version.

Laboratory Methods

Macroinvertebrates shall be identified and classified according to the Standard Taxonomic Effort (STE) Level II of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT; requirements for Level I and Level II taxonomic effort, and are located at: <http://www.safit.org/ste.html>) and using a fixed-count of 600 organisms per sample.

Quality Assurance

The San Diego Association of Governments shall have and follow a quality assurance (QA) plan that covers the required bioassessment monitoring. The QA plan shall include, or be supplemented to include, a specific requirement for external QA checks (i.e., verification of taxonomic identifications and correction of data where errors are identified). External QA checks shall be performed on one of the discharger's macroinvertebrate samples collected per calendar year, or ten percent of the samples per year (whichever is greater). QA samples shall be randomly selected. The external QA checks shall be paid for by the discharger, and performed by the California Department of Fish and

Game's Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent or better expertise and performance may be used if approved in writing by Water Board staff.

Sample Preservation and Archiving

The original sample material shall be stored in 70 percent ethanol and retained by the discharger until: 1) all QA analyses specified herein and in the relevant QA plan are completed; and 2) any data corrections and/or re-analyses recommended by the external QA laboratory have been implemented. The remaining subsampled material shall be stored in 70 percent ethanol and retained until completeness checks have been performed according to the relevant QA plan. The identified organisms shall be stored in 70 percent ethanol, in separate glass vials for each final ID taxon. (For example, a sample with 45 identified taxa would be archived in a minimum of 45 vials, each containing all individuals of the identified taxon.) Each of the vials containing identified organisms shall be labeled with taxonomic information (i.e., taxon name, organism count) and collection information (i.e., site name/site code, waterbody name, date collected, and method of collection). The identified organisms shall be archived (i.e., retained) by the discharger for a period of not less than three years from the date that all QA steps are completed, and shall be checked at least once per year and "topped off" with ethanol to prevent desiccation. The identified organisms shall be relinquished to the Water Board upon request by any Water Board staff.

Definitions: The "original sample material" is that material (i.e., macroinvertebrates, organic material, gravel, etc.) remaining after the subsample has been removed for identification. The "remaining subsampled material" is that material (e.g., organic material, gravel, etc.) that remains after the organisms to be identified have been removed from the subsample for identification. (Generally, no macroinvertebrates are present in the remaining subsampled material, but this needs to be verified via QA completeness checks.) The "identified organisms" are those organisms within the subsample that are specifically identified and counted.

Data Submittal

The macroinvertebrate results (i.e., taxonomic identifications consistent with the specified SAFIT STEs, and number of organisms within each taxa) shall be submitted to the Water Board in electronic format. The Water Board's Surface Water Ambient Monitoring Program (SWAMP) is currently developing standardized formats for reporting bioassessment data. All bioassessment data collected after those formats become available shall be submitted using the SWAMP formats. Until those

formats are available, the biological data shall be submitted in MS-Excel (or equivalent) format.⁴

The physical/habitat data shall be reported using the standard format titled SWAMP Stream Habitat Characterization Form — Full Version.⁵

Invasive Species Prevention

In conducting the required bioassessment monitoring, the discharger and its consultants shall take precautions to prevent the introduction or spread of aquatic invasive species. At minimum, the discharger and its consultants shall follow the recommendations of the California Department of Fish and Game to minimize the introduction or spread of the New Zealand mudsnail.⁶

The results of the Bioassessment must be submitted **each year with the Annual Progress Report.**

B. **California Rapid Assessment Method-**

The San Diego Association of Governments must conduct a quantitative, function-based assessment of the health of wetland and riparian habitats in the impact areas in Soledad Canyon and Deer Canyon Creeks using the California Rapid Assessment Method (CRAM)¹ at the three assessment stations described above (in section VI.A., 'Benthic Macroinvertebrate Community Analysis'). Monitoring must occur prior to impacts and for at least three consecutive years after impacts. The results of the CRAM assessment must be submitted **each year with the Annual Progress Reports.**

VII. NOTIFICATION REQUIREMENTS:

- A. The San Diego Association of Governments must notify the San Diego Water Board within **24 hours** of any unauthorized discharge, including hazardous or toxic materials, to waters of the United States and/or State; measures that were implemented to stop and contain the discharge; measures implemented to clean-up the discharge; the volume and type of materials discharged and recovered; and additional best management practices (BMPs) or other measures that will be implemented to prevent future discharges.
- B. This Certification is not transferable in its entirety or in part to any person or organization except after notice to the Executive Officer of the San Diego Water Board in accordance with the following terms:

¹ Information on CRAM is available at the California Rapid Assessment Method homepage at <http://www.cramwetlands.org/>

1. **Transfer of Property Ownership:** the San Diego Association of Governments 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 San Diego Association of Governments 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 Executive Officer of 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 Sections V and VII.C. of 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). Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the San Diego Association of Governments will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the San Diego Association of Governments of this Certification in the event that a transferee fails to comply. The San Diego Association of Governments must provide such notification to the Executive Officer of the San Diego Water Board within **10 days** of the transfer of mitigation responsibility.
- C. **Prior to the start of construction**, the San Diego Association of Governments must provide the San Diego Water Board 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 construction, the San Diego Association of Governments must submit proof of a *completed* preservation mechanism that will protect all mitigation areas and their buffers in perpetuity. Construction of the site must not be initiated until a *draft* preservation mechanism is received. The conservation easement, deed restriction, or other legal limitation on the mitigation property must be adequate to demonstrate that the site will be maintained without future development or encroachment on the site which could otherwise reduce the functions and values of the site for the variety of beneficial uses of waters of the United States 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 site. 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.

VIII. REPORTING REQUIREMENTS:

- A. The San Diego Association of Governments must submit annual progress reports describing status of compliance with all requirements of this Certification to the San Diego Water Board prior to **August 1** of each year following the issuance of this Certification until the project has reached completion. San Diego Association of Governments must submit a Final Project Annual Report to the San Diego Water Board **prior to August 1 following completion of the project**. The reports must include the following:
1. Date of construction initiation.
 2. Projected date of construction completion.
 3. Status of BMPs for the project.
 4. Final Project Report: As-built drawings no bigger than 11"X17."
 5. Benthic Macroinvertebrate Community Analysis.
 6. California Rapid Assessment Method Assessment.
- B. Mitigation monitoring reports must be submitted annually until mitigation has been deemed successful. Annual monitoring reports must be submitted **prior to December 1 of each year**. Monitoring reports must include, but not be limited to, the following:
1. Names, qualifications, and affiliations of the persons contributing to the report;
 2. Date of initiation of mitigation installation and date mitigation installation was completed.
 3. Mitigation as-builts, including topography maps and planting locations.

4. Tables presenting the raw data collected in the field as well as analyses of the physical and biological data;
 5. Topographic complexity characteristics at each mitigation site;
 6. Upstream and downstream habitat and hydrologic connectivity;
 7. Source of hydrology;
 8. Width of native vegetation buffer around the entire mitigation site;
 9. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results.
 10. *Stream Photodocumentation, including all areas of permanent and temporary impact, prior to and after project construction, and mitigation areas, including all areas of permanent and temporary impact, 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. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced.*
 11. A Survey report documenting boundaries of mitigation area, including Geographic Information System (GIS) shape files (polygons) of the impact and mitigation areas (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.
- C. All information requested in this Certification is pursuant to California Water Code (CWC) section 13267. Civil liability may be administratively imposed by the San Diego Water Board for failure to furnish requested information pursuant to CWC section 13268.
- D. All reports and information submitted to the San Diego Water Board must be submitted in both hardcopy and electronic format. The preferred electronic format for each report submission is one file in PDF format that is also Optical Character Recognition (OCR) capable.
- E. All applications, reports, or information submitted to the San Diego Water Board must be signed and certified 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.
- F. All applications, reports, or information submitted to the San Diego Water Board must be signed and 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."

- G. San Diego Association of Governments must submit reports required under this Certification, or other information required by the San Diego Water Board, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. 10C-088
9174 Sky Park Court, Suite 100
San Diego, California 92123

VIII. CEQA FINDINGS:

Rail projects related to interstate commerce fall under the jurisdiction of the federal Surface Transportation Board. The Surface Transportation Board has found that federal law preempts state and local regulation of such projects under the Interstate Commerce Clause of the U.S. Constitution. The San Diego Water finds this project is not subject to California Environmental Quality Act.

IX. PUBLIC NOTIFICATION OF PROJECT APPLICATION:

On September 21, 2010, receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received.

X. SAN DIEGO WATER BOARD CONTACT PERSON:

Mike Porter, Engineering Geologist
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Telephone: 858-467-2726
Email: mporter@waterboards.ca.gov

XI. WATER QUALITY CERTIFICATION:

I hereby certify that the proposed discharge from the **Sorrento to Miramar Double Track Project - Phase I** (Certification No. 10C-088) 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 on the attached Project Information Sheet, and (b) on compliance with all applicable requirements of the Water Quality Control Plan for the San Diego Basin Region (9) (Basin Plan).



DAVID W. GIBSON
Executive Officer
Regional Water Quality Control Board

8/25/11

Date

- Attachments:
1. Project Information
 2. Distribution List
 3. Location Map(s)
 4. Site Map(s)
 5. Mitigation Map(s)
 6. Checklist of Required Reports and Notifications

**ATTACHMENT 1
PROJECT INFORMATION**

Applicant: Mr. Rob Rundle, Principal Regional Planner
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101
Telephone: 619-699-6949
Fax: 619-699-4888
Email: rru@sandag.org

**Applicant
Representatives:** Mr. Erich Lathers, President
BRG Consulting
304 Ivy Street
San Diego, CA 92101
Telephone: 619-298-7127
Fax: 619-298-0146
Email: erich@brginc.net

Project Name: Sorrento to Miramar Double Track Project – Phase I

Project Location: The proposed project is located along the Los Angeles to San Diego (LOSSAN) Rail Corridor in the west-central portion of San Diego County, California. The project is located in the City of San Diego, east of Interstate 5 (I-5), near the I-5 and I-805 interchange. The double track starts near Mile Post (MP) 249.8 and ends near MP 251.0. Bridge 249.9, which is located within this segment, spans Soledad Canyon Creek. The railroad right-of-way (ROW) in this location is west of Sorrento Valley Road and east of Los Peñasquitos Creek. Specifically, the project is located in Township 3 West, Range 15 South, Sections 4, 5, and 9 of the U.S. Geological Survey (USGS) 7.5 minute Del Mar, CA.

Type of Project: Rail road improvements.

Project Need: The San Diego Association of Governments (SANDAG) has proposed to construct a second railroad track parallel to an existing track to reduce train traffic. The proposed project

area is located mostly parallel to and over Soledad Valley Creek, parallel and south-west of Sorrento Valley Road, starts at the Sorrento Valley Coaster Station, and ends at confluence of Carroll Canyon and Soledad Canyon Creeks (approximate ½ mile east of I-805). The proposed project contains the following construction elements:

- 1) Construction of a new double track from mile post (MP) 249.8 to MP 251.0 would result in approximately 6,300 feet of new track. The majority of the new double track will be east of the existing track.
- 2) Replacement of the existing wood bridge 249.9 with a steel deck, double track bridge. The new bridge will be supported by three bents and each bent will have eight steel piles for a total of 24 piles. Steel plates will wrap each bent to reduce debris accumulation. The new bridge will be approximately 131 feet long and 33 feet wide. Four culverts and fill will be temporarily placed in the creek bed to provide an equipment platform to facilitate bridge construction.
- 3) A new crossover will be installed north of Bridge 249.9, south of and adjacent to Sorrento Valley Boulevard.
- 4) A 12-foot wide access unpaved road will be located north of the existing track along much of the alignment.
- 5) Control Point (CP) Pines will be relocated from its existing location north of Bridge 249.9 to MP 251.0.
- 6) Removal of existing wooden bridge 249.9.
- 7) Removal of the temporary culverts and fill from the creek.

Temporary impacts to waters (0.10-acre) and wetlands (0.16-acre) of the State and U.S. will be caused by temporary fill and culverts for new bridge construction, existing bridge demolition, and temporary access for equipment crossings over Soledad Canyon Creek and its associated wetlands. Permanent impacts to waters (0.03-acre) and wetlands (0.01-acre) of the State and U.S. will be caused by the new bridge bents and abutments.

Unavoidable impacts will be compensatorily mitigated through the establishment of:

- Alkali meadow habitat (0.68-acre) consisting of Salt grass, San Diego sagewort, Spike rush, and Yerba mansa; and
- Riparian habitat (1.56-acres) consisting of willows (4 species), Fremont's cottonwood, Coast live oak, and Western sycamore, Mulefat, and herbaceous understory.

Project Description:

1) Construction of a new double track from mile post (MP) 249.8 to MP 251.0 would result in approximately 6,300 feet of new track. The majority of the new double track will be east of the existing track.

2) Replacement of the existing wood bridge 249.9 with a steel deck, double track bridge. The new bridge will be supported by three bents and each bent will have eight steel piles for a total of 24 piles. Steel plates will wrap each bent to reduce debris accumulation. The new bridge will be approximately 131 feet long and 33 feet wide. Four culverts and fill will be temporarily placed in the creek bed to provide an equipment platform to facilitate bridge construction.

3) A new crossover will be installed north of Bridge 249.9, south of and adjacent to Sorrento Valley Boulevard.

4) A 12-foot wide access unpaved road will be located north of the existing track along much of the alignment.

5) Control Point (CP) Pines will be relocated from its existing location north of Bridge 249.9 to MP 251.0.

6) Removal of existing wooden bridge 249.9.

7) Removal of the temporary culverts and fill from the creek.

Temporary impacts to waters (0.10-acre) and wetlands (0.16-acre) of the State and U.S. will be caused by temporary fill and culverts for new bridge construction, existing bridge demolition, and temporary access for equipment crossings over Soledad Canyon Creek and its associated wetlands. Permanent impacts to waters (0.03-acre) and wetlands (0.01-acre) of the State and U.S. will be caused by the new bridge bents and abutments.

Federal Agency/Permit:	U.S. Army Corps of Engineers §404, Nation Wide Permit 17, Ms. Meris Bantilan-Smith.
Other Required Regulatory Approvals:	California Coastal Commission, Federal Coastal Consistency Certification, Mr. Larry Simon. California State Parks, Office of Historic Preservation, §106 – Natural Historic Preservation Concurrence, Mr. Milford Donaldson.
California Environmental Quality Act (CEQA) Compliance:	Rail projects related to interstate commerce fall under the jurisdiction of the federal Surface Transportation Board. The Surface Transportation Board has found that federal law preempts state and local regulation of such projects under the Interstate Commerce Clause of the U.S. Constitution. Therefore, this project is not subject to CEQA.
Receiving Water:	Soledad Canyon Creek, Penasquitos hydrologic unit, Miramar Reservoir hydrologic area (906.10).
Impacted Waters of the United States and/or State:	Permanent impacts: 0.01-acre (40-linear feet) for wetland waters and 0.03-acre (235-linear feet) for non-wetland waters Temporary impacts: 0.16-acre (305-linear feet) for wetland waters and 0.10-acre (500-linear feet) for non-wetland waters.
Dredge Volume:	None proposed.
Related Projects Implemented/to be Implemented by the Applicant(s):	There are two related projects that are in the planning phase: Sorrento Valley Double Track Project and the Sorrento to Miramar Double Track Project – Phase II
Compensatory Mitigation:	Project impacts will require the mathematical subtraction of 0.68-acre of Alkali meadow habitat credits and 1.56-acres of Riparian habitat credits from the Deer Canyon Mitigation site mitigation credits ledger.

Best Management
Practices (BMPs):

Post-construction BMPs as described in the *Stormwater Pollution Prevention Plan for the Sorrento to Miramar Phase I Double Track Project*, prepared by David Evans and Associates, Inc., dated May 2011, and revised on June 21, 2011. Post-construction BMPs must include:

- Pervious Pavement
- Concrete Lined Ditch
- Articulated Concrete Blocks
- Rock Slope Protection
- Turf Reinforcement Mats
- Hydroseed/Hydraulic Mulch

Public Notice:

On September 21, 2010, receipt of the project application was posted on the San Diego Water Board web site to serve as appropriate notification to the public. No public comments were received.

Fees:

Total Due: \$1,686.00
Total Paid: \$640.00 (Check No. 00828731)
Total Paid: \$1,046.00 (Check No. 00829536)

CIWQS:

Reg. Measure: 375937
Place: 756987
Party: 524619
Person: 524620

**ATTACHMENT 2
DISTRIBUTION LIST**

Ms. Meris Bantilan-Smith
U.S. Army Corps of Engineers
San Diego Field Office
Robert.R.Smith@spl01.usace.army.mil

Mr. Larry Simon
California Coastal Commission
7575 Metropolitan Drive
Suite 103
San Diego, CA 92108-4402

Mr. Eric Raffini
Wetlands Regulatory Office
U.S. Environmental Protection Agency, Region 9
R9-WTR8-Mailbox@epa.gov

State Water Resources Control Board
Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Stateboard401@waterboards.ca.gov

U.S. Department of the Interior
Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92011

Mr. Erich Lathers, President
BRG Consulting
erich@brginc.net

Mr. G. Peter d'Ablaing
San Diego Association of Governments
pda@sandag.org

Certification No. 10C-088

ATTACHMENT 3

LOCATION MAP(S)



Legend

- Deer Canyon Mitigation Site
- I-5/Genesee Interchange Project
- I-805 North Managed Lanes Project
- Carroll Canyon Road Extension
- LOSSAN S2HP1

Figure 1. Project Location



Sorrento To Miramar Phase 1 Project Area Map



ATTACHMENT 4

SITE FIGURE(S)

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Legend

- Survey Area
- Right of Way

Project Impacts

- Permanent Impact
- Excluded **

Biological Resources

- ACOE Wetland
- waters of the US
- Culvert
- Coastal Commission

A	Arundo
CVFM	Coastal and Valley Freshwater Marsh
DCSS	Diegan Coastal Sage Scrub
DH	Disturbed Habitat
MS	Mulefat Scrub
SCLORF	Southern Coast Live Oak Riparian Forest
SCBS	Southern Coastal Bluff Scrub
SCSM	Southern Coastal Salt Marsh
SMTC	Southern Maritime Chaparral
SMC	Southern Mixed Chaparral
SWS	Southern Riparian Scrub
E	Estuary
FWS	Fresh Water Seep
SPM	Salt Pan Mudflat
OW	Open Water
DW	Disturbed Wetland
PG	Pampas Grass
SAWRF	Southern Arroyo Willow Riparian Forest
B	Beach
EW	Eucalyptus Woodland
CBM	Coastal Brackish Marsh
SSRW	Southern Sycamore Riparian Woodland
UD	Urban / Developed
NNG	Non-native Grassland

** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and-SC-16)

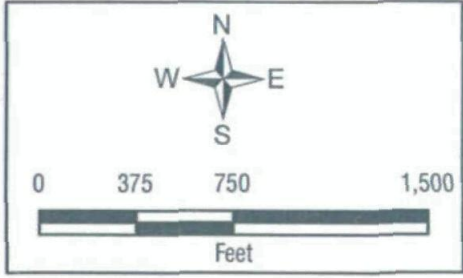
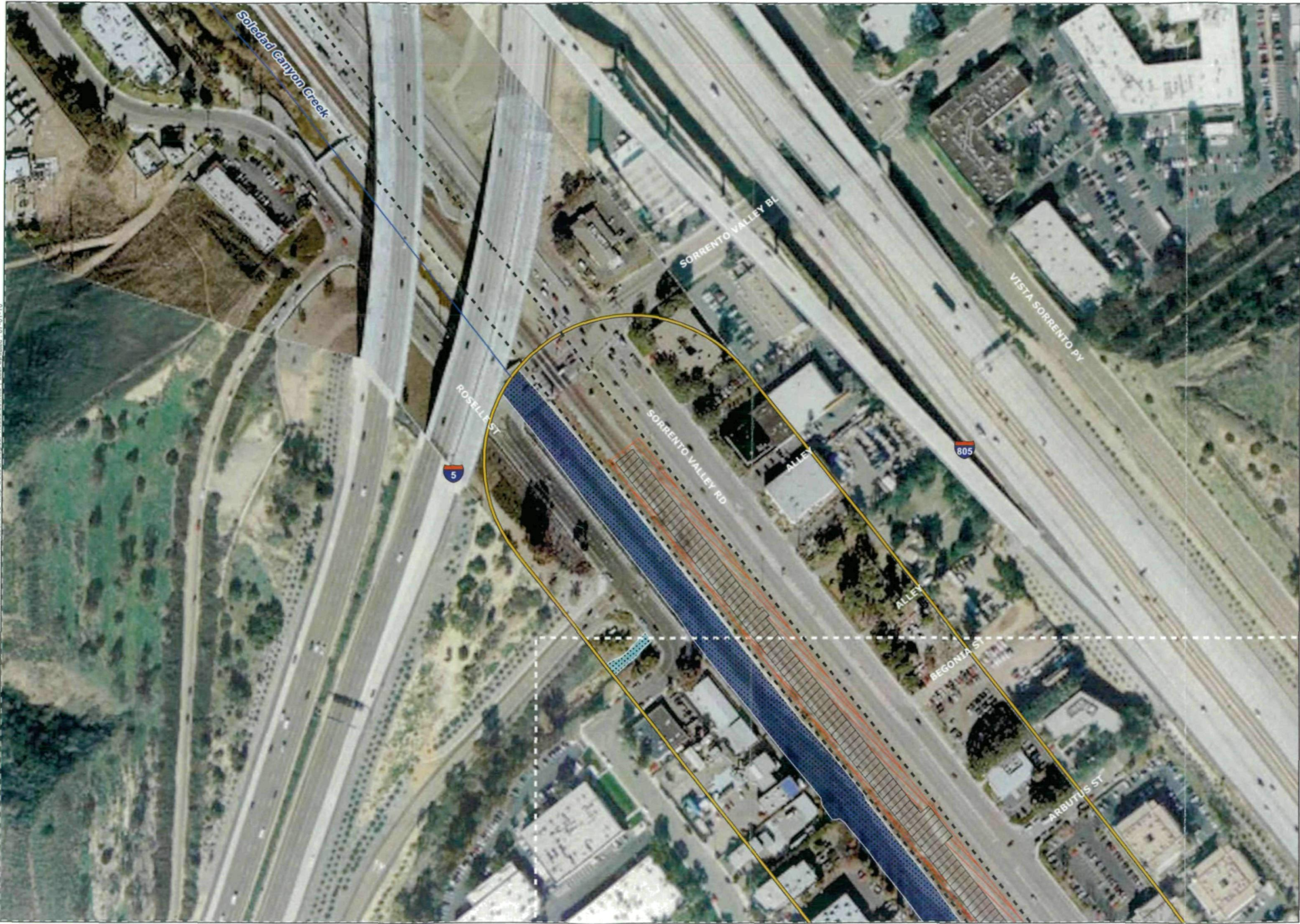


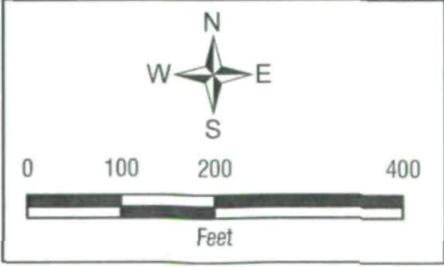
Figure 5. Sorrento to Miramar Phase 1 Project Impacts to Biological Resources

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- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
- Waters of the US
- ACOE Wetland
- Coastal Commission
- Project Components**
- Access Road Alternative (1-5)
- Staging Area (1-2)
- Project Impacts**
- Permanent Impact
- Temporary Impact
- Excluded **

* Existing Culverts not Included in Impacts.
 ** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and-SC-16).

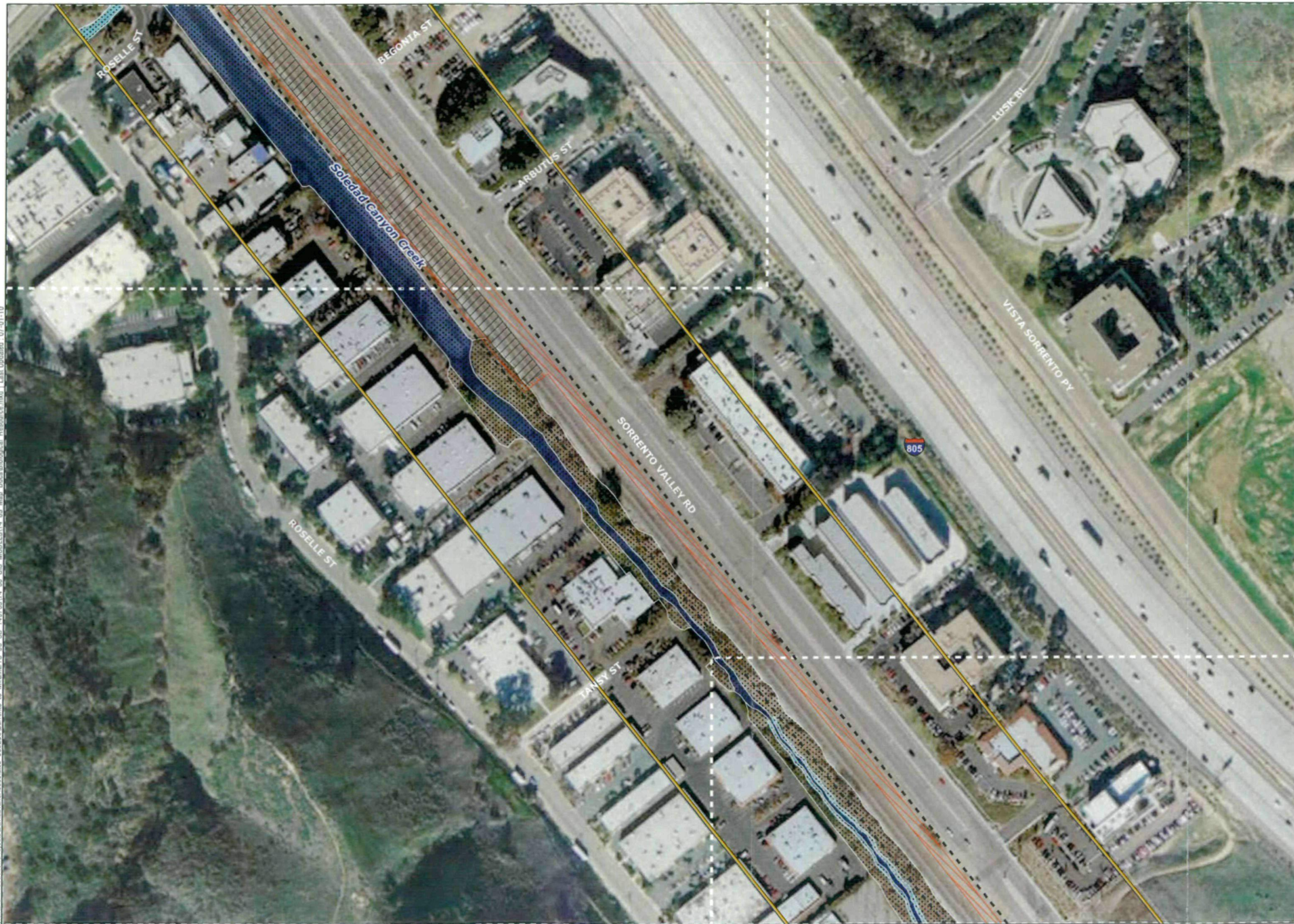


Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7a

SANDAG | Sorrento to Miramar Double Track Phase I | BTR

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Legend

- Survey Area
- Right of Way
- Existing Culvert *

Jurisdictional Area

- Waters of the US
- ACOE Wetland
- Coastal Commission

Project Components

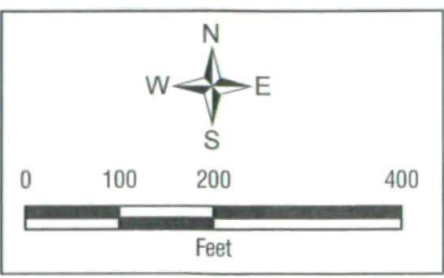
- Access Road Alternative (1-5)
- Staging Area (1-2)

Project Impacts

- Permanent Impact
- Temporary Impact
- Excluded **

* Existing Culverts not Included in Impacts.

** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and-SC-16).

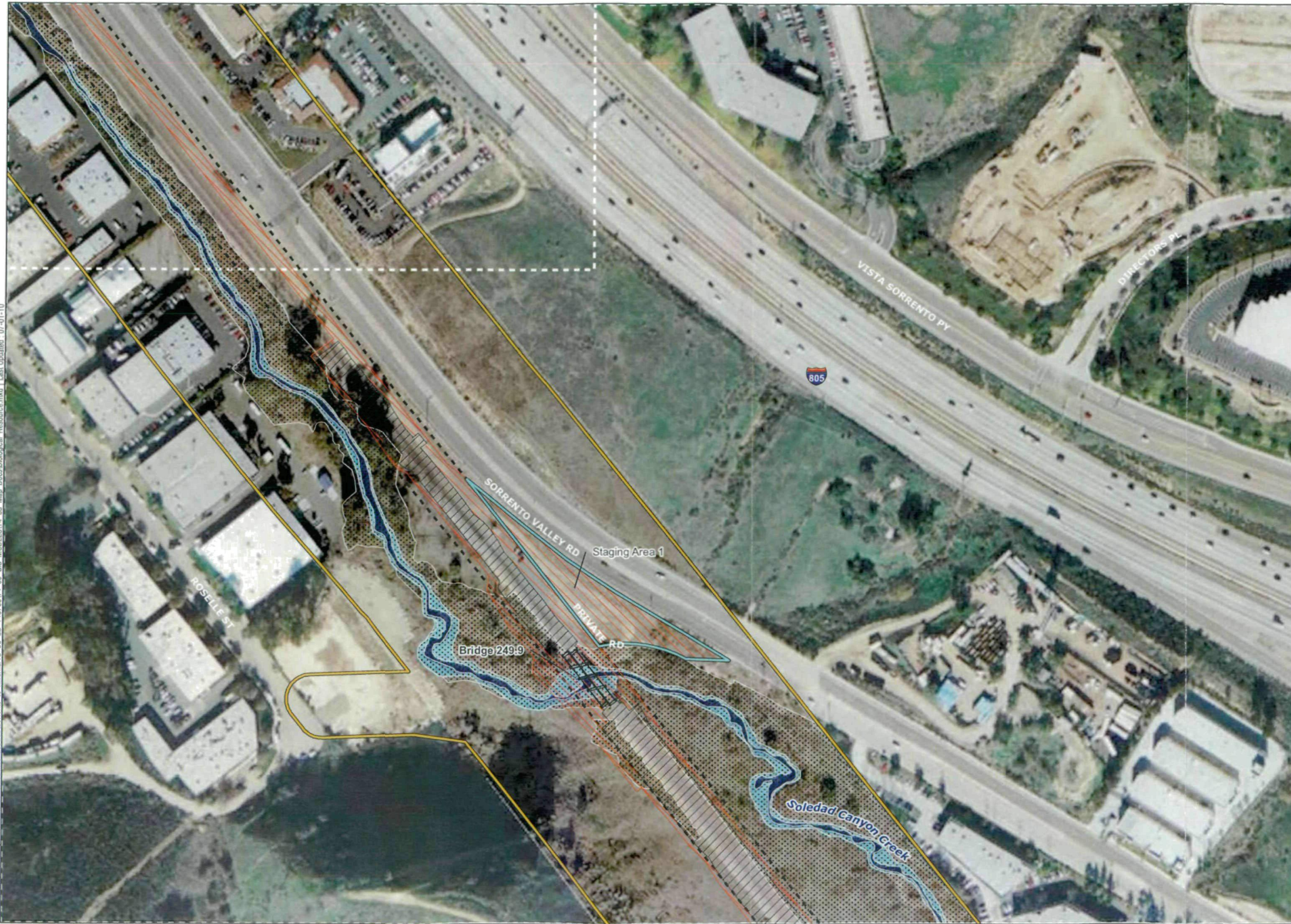


Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7b

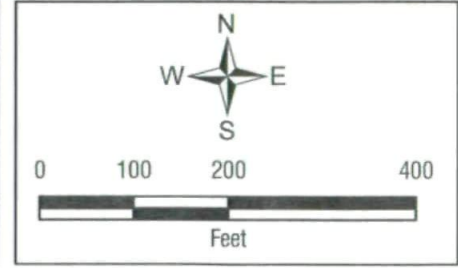
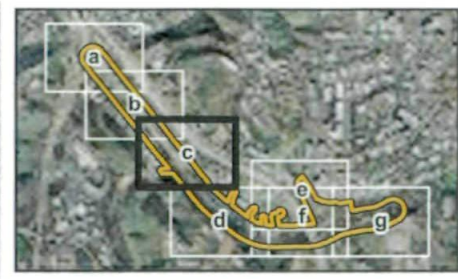
SANDAG | Sorrento to Miramar Double Track Phase I | BTR

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- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
- Waters of the US
- ACOE Wetland
- Coastal Commission
- Project Components**
- Access Road Alternative (1-5)
- Staging Area (1-2)
- Project Impacts**
- Permanent Impact
- Temporary Impact
- Excluded **

* Existing Culverts not included in Impacts.
 ** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and SC-16).



Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7c

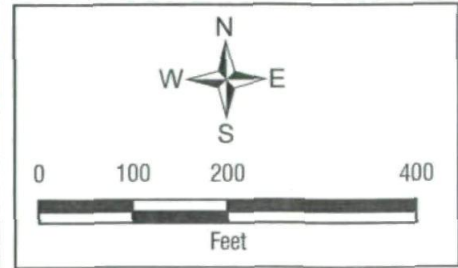
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- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
 - Waters of the US
 - ACOE Wetland
 - Coastal Commission
- Project Components**
 - Access Road Alternative (1-5)
 - Staging Area (1-2)
- Project Impacts**
 - Permanent Impact
 - Temporary Impact
 - Excluded **

* Existing Culverts not Included in Impacts.
 ** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and SC-16).

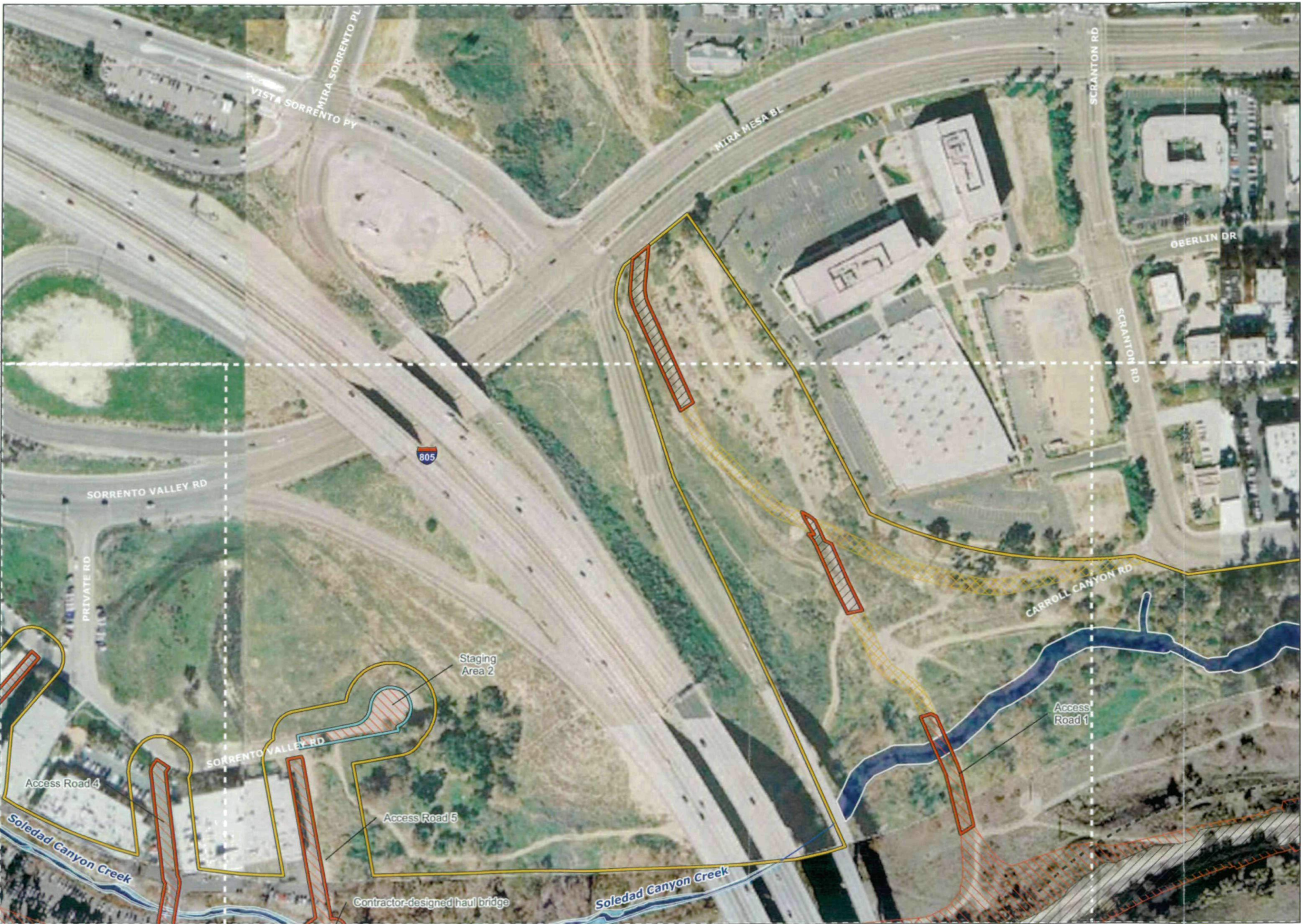


Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7d

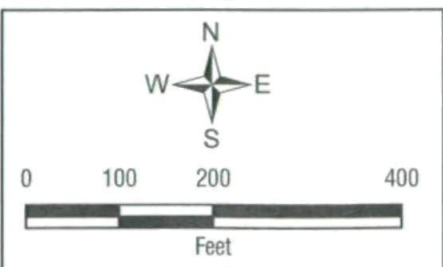
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- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
- Waters of the US
- ACOE Wetland
- Coastal Commission
- Project Components**
- Access Road Alternative (1-5)
- Staging Area (1-2)
- Project Impacts**
- Permanent Impact
- Temporary Impact
- Excluded **

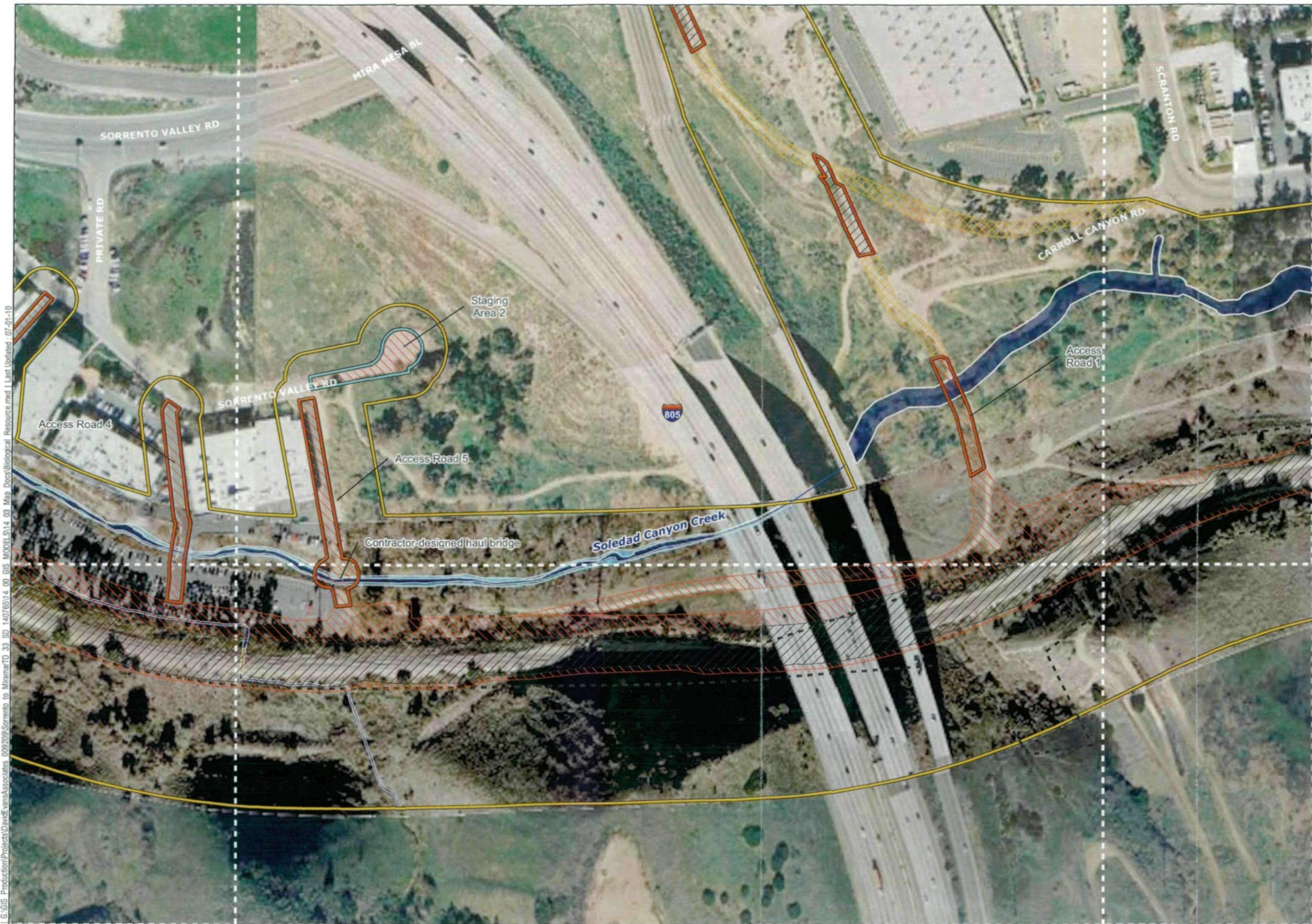
* Existing Culverts not included in Impacts.
 ** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and-SC-16).



Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7e

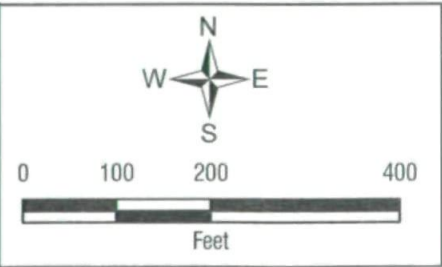
SANDAG | Sorrento to Miramar Double Track Phase I | BTR



- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
- Waters of the US
- ACOE Wetland
- Coastal Commission
- Project Components**
- Access Road Alternative (1-5)
- Staging Area (1-2)
- Project Impacts**
- Permanent Impact
- Temporary Impact
- Excluded **

* Existing Culverts not Included in Impacts.

** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and SC-16).



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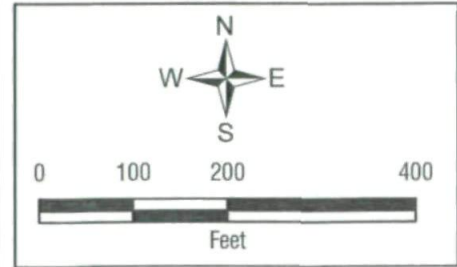
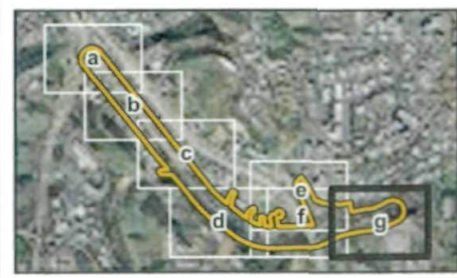
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- Survey Area
- Right of Way
- Existing Culvert *
- Jurisdictional Area**
 - Waters of the US
 - ACOE Wetland
 - Coastal Commission
- Project Components**
 - Access Road Alternative (1-5)
 - Staging Area (1-2)
- Project Impacts**
 - Permanent Impact
 - Temporary Impact
 - Excluded **

* Existing Culverts not Included in Impacts.

** Previously Authorized Impacts (I-805 HOV/Carroll Canyon Rd Extension Project) To Be Mitigated by Caltrans (Plan Sheets L7, L-4 and SC-16).



Impacts to USACE and CCC Jurisdictional Areas

FIGURE 7g

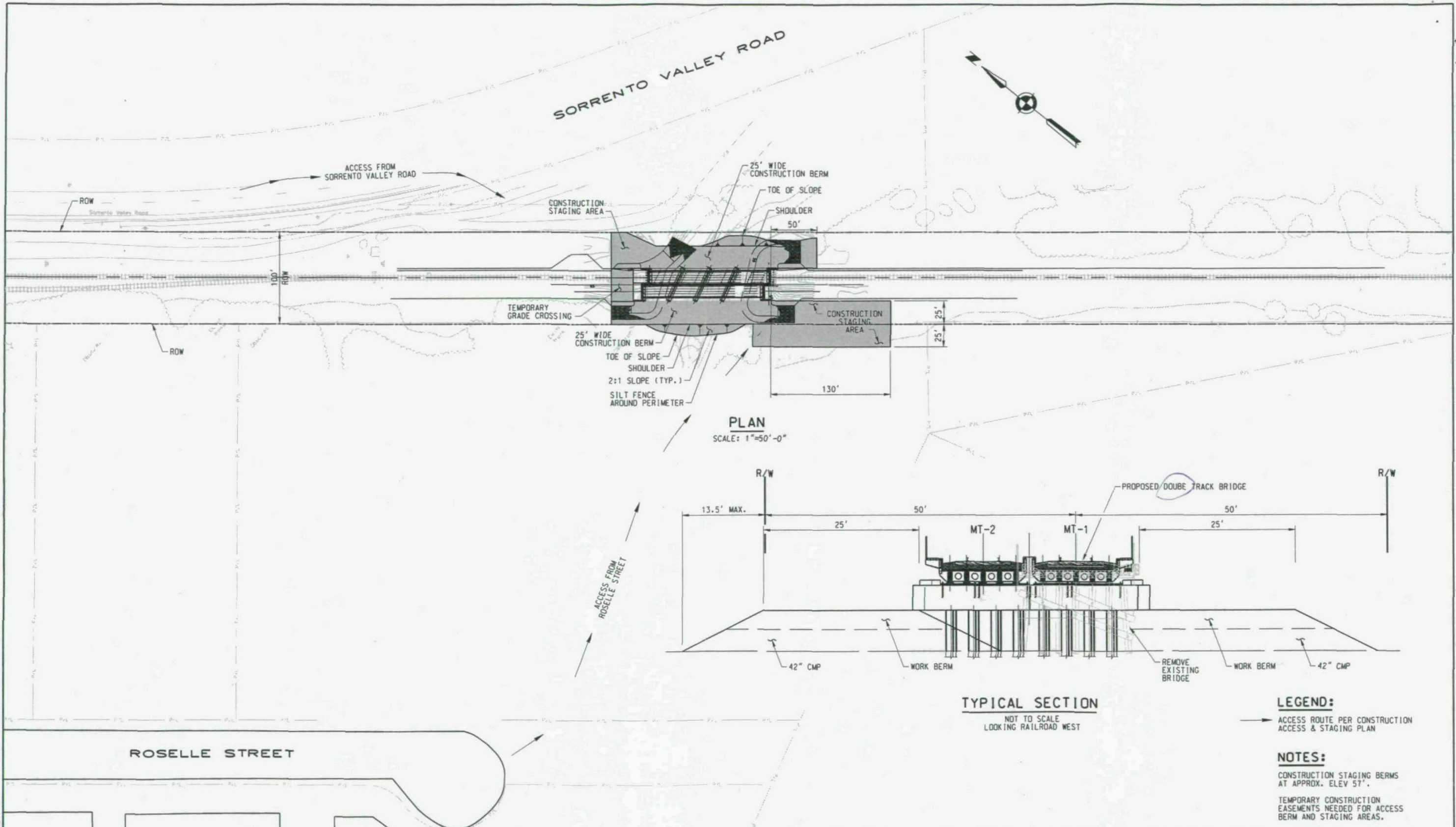
SANDAG | Sorrento to Miramar Double Track Phase I | BTR





PROGRESS PRINT -
NOT FOR CONSTRUCTION

C:\Work\Project\wise\X\jmay\Sorrento to Miramar\dms00187\249.9-BR28.dgn
9/15/2010 4:29:21 PM



PLAN
SCALE: 1"=50'-0"

TYPICAL SECTION
NOT TO SCALE
LOOKING RAILROAD WEST

LEGEND:
→ ACCESS ROUTE PER CONSTRUCTION ACCESS & STAGING PLAN

NOTES:
CONSTRUCTION STAGING BERMS AT APPROX. ELEV 57'.
TEMPORARY CONSTRUCTION EASEMENTS NEEDED FOR ACCESS BERM AND STAGING AREAS.

NO.	DATE	REVISIONS	BY	CHK	APRV

DAVID EVANS AND ASSOCIATES (INC.)
110 West A Street, Suite 1700
San Diego California 92101
Phone: (619) 400-0800

HDR
HDR Engineering, Inc.
3230 EL CAMINO REAL
SUITE 200
IRVINE, CA 92602
PHONE: 714-730-2300
FAX: 714-730-2301

DESIGNED BY	PJG	DATE	08/10
DRAWN BY	JYM	DATE	08/10
CHECKED BY	DEA	DATE	08/10
SANDAG PRJ. ENG.	PD	DATE	08/10

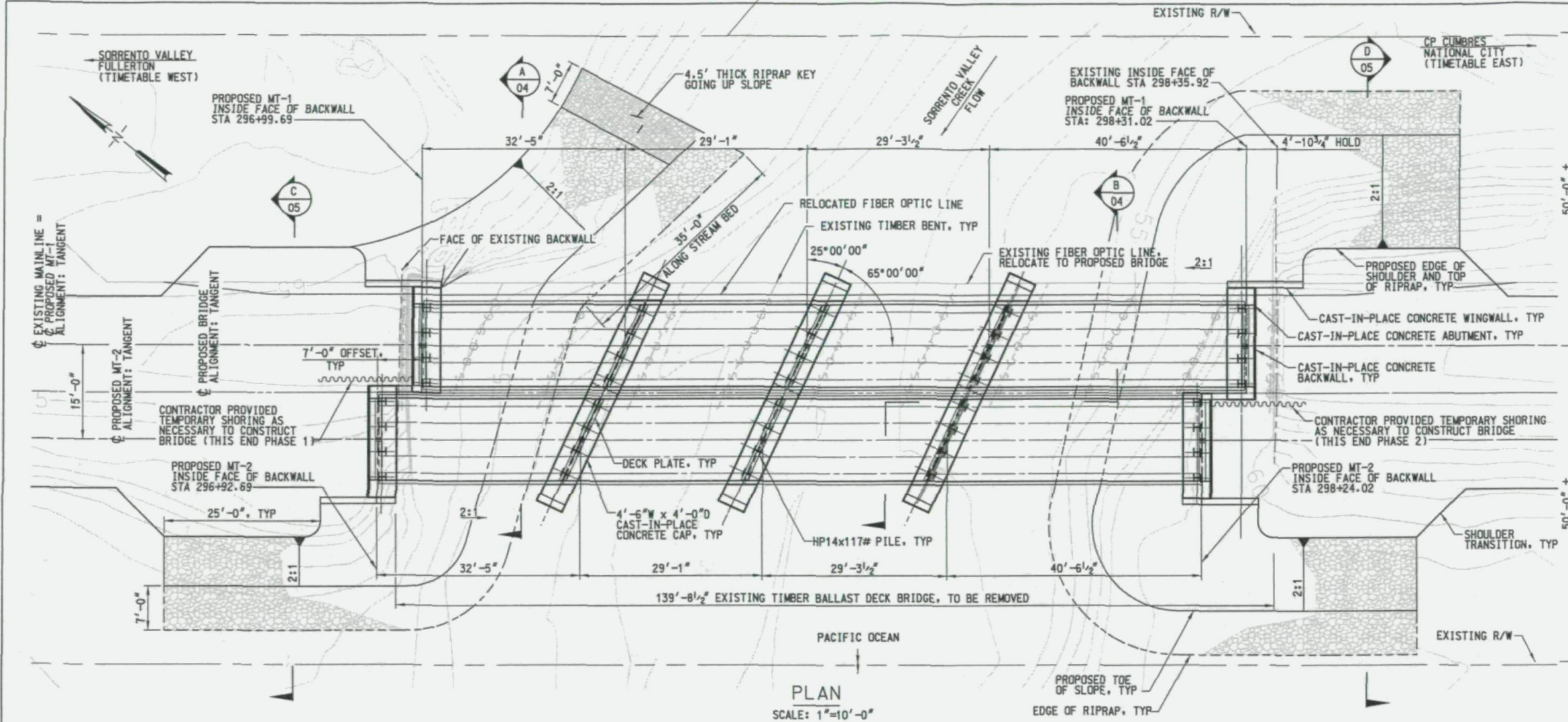
SANDAG
San Diego's Regional Planning Agency

SORRENTO TO MIRAMAR - PHASE 1
BRIDGE 249.9 REPLACEMENT
CONSTRUCTION BERMS & STAGING AREAS

SCALE	
AS NOTED	
SANDAG CONTRACT NO.	1239801
DRAWING NO.	ST-28
SHEET NO.	

PROGRESS PRINT - NOT FOR CONSTRUCTION

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES



REFERENCES
 CTP-01 TRACK PLAN AND PROFILE
 ST-02 BRIDGE REMOVAL PLAN AND DETAILS
 ST-04 TYPICAL SECTIONS

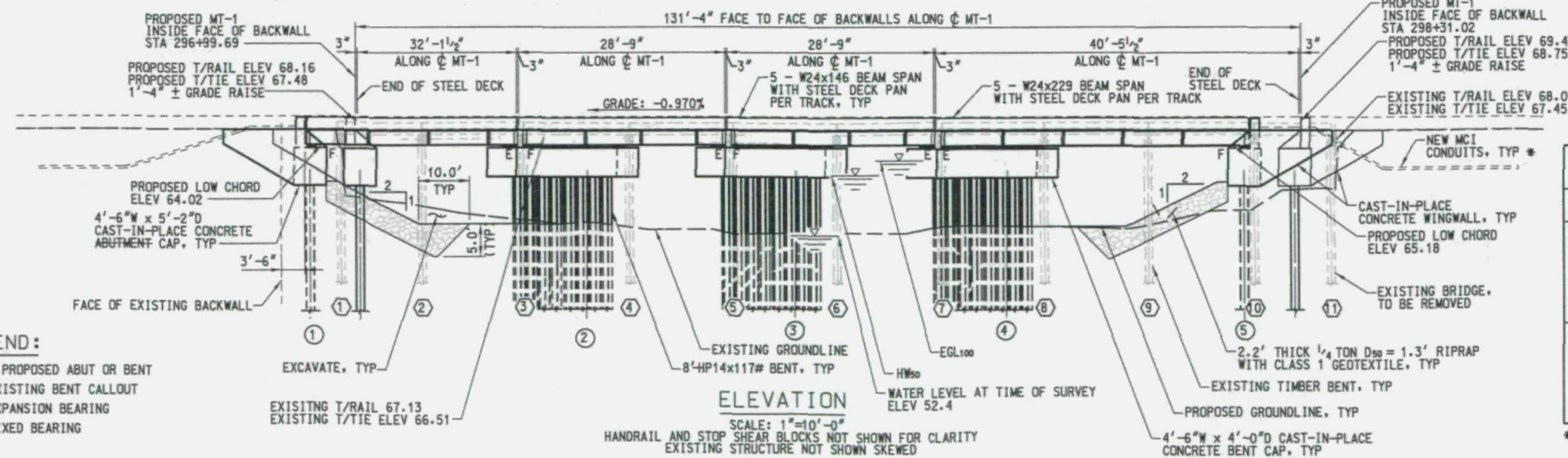
TABLE OF ESTIMATED WEIGHTS

SPAN	DESCRIPTION	WEIGHT
1	2-BEAM GROUP	24,200 LB (12.1 TONS)
	3-BEAM GROUP	36,200 LB (18.1 TONS)
2 OR 3	2-BEAM GROUP	22,100 LB (11.1 TONS)
	3-BEAM GROUP	33,100 LB (16.6 TONS)
4	2-BEAM GROUP	37,000 LB (18.5 TONS)
	3-BEAM GROUP	55,400 LB (27.7 TONS)

PHASE 2 CONSTRUCTION
 PHASE 1 CONSTRUCTION

WSE₁₀₀ = 62.80
 EGL₁₀₀ = 63.23 ft
 WSE₅₀ = 62.20 ft
 VCI₁₀₀ = 7.37 ft/s

PLAN
 SCALE: 1"=10'-0"



*** NOTES:**
 CONTRACTOR SHALL INSTALL TWO CONDUITS AND CONNECTIONS ACROSS BRIDGE, EXTENDING BEYOND END OF WINGWALL, AS SHOWN.
 CONDUIT ENDS SHALL BE CAPPED BY CONTRACTOR PENDING CONNECTIONS BY MCI.
 CONTRACTOR SHALL COORDINATE WITH MCI FOR CONDUIT END CONNECTIONS.

TABLE OF ELEVATIONS - BRIDGE 249.9

TRACK	LOCATION	STATION	TOP/RAIL	TOP/TIE	TOP/DECK	TOP/CAP	TOP/PILE
PROPOSED MT-1	ABUTMENT 1	296+99.69	68.16	67.48	66.23	63.65	62.40
	BENT 2	297+32.11	68.47	67.79	66.54	64.06**	62.81
	BENT 3	297+61.19	68.76	68.08	66.83	64.35**	63.10
	BENT 4	297+90.48	69.04	68.36	67.11	64.53**	63.28
PROPOSED MT-2	ABUTMENT 5	298+31.02	69.43	68.75	67.50	64.92	63.67
	ABUTMENT 1	296+92.69	68.09	67.41	66.16	63.58	62.33
	BENT 2	297+25.11	68.41	67.73	66.48	64.00**	62.75
	BENT 3	297+54.19	68.69	68.01	66.76	64.28**	63.03
	BENT 4	297+83.48	68.97	68.29	67.04	64.46**	63.21
ABUTMENT 5	298+24.02	69.37	68.68	67.43	64.85	63.60	

** T/CAP ELEVATIONS SHOWN AT CENTERLINE OF TRACK. FOR T/CAP ELEVATIONS AT ENDS OF SLOPED BENT CAPS, SEE DRAWING ST-14.

LEGEND:
 (A) PROPOSED ABUT OR BENT
 (B) EXISTING BENT CALLOUT
 E = EXPANSION BEARING
 F = FIXED BEARING

ELEVATION
 SCALE: 1"=10'-0"
 HANDRAIL AND STOP SHEAR BLOCKS NOT SHOWN FOR CLARITY
 EXISTING STRUCTURE NOT SHOWN SKEWED

\$FILES \$DATES 9:00:43 AM

NO.	DATE	REVISIONS	BY	CHK	APRV

DAVID EVANS AND ASSOCIATES INC.
 110 West A Street, Suite 1700
 San Diego California 92101
 Phone: (619) 400-0600

HDR
 HDR Engineering, Inc.
 3230 EL CAMINO REAL SUITE 200
 IRVINE, CA 92602
 PHONE: 714-730-2300
 FAX: 714-730-2301

60% SUBMITTAL

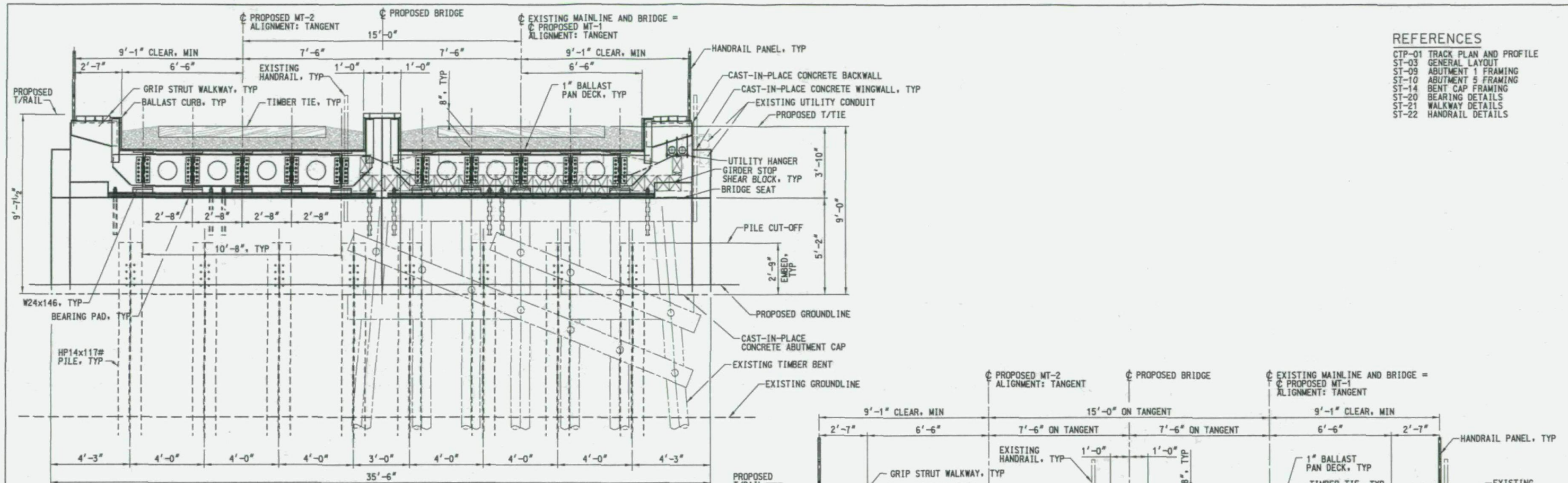
DESIGNED BY P.J.G. DATE 08/10
 DRAWN BY J.Y.M. DATE 08/10
 CHECKED BY DE.A. DATE 08/10
 SANDAG PRJ. ENG. PD DATE 08/10

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 San Diego's Regional Planning Agency

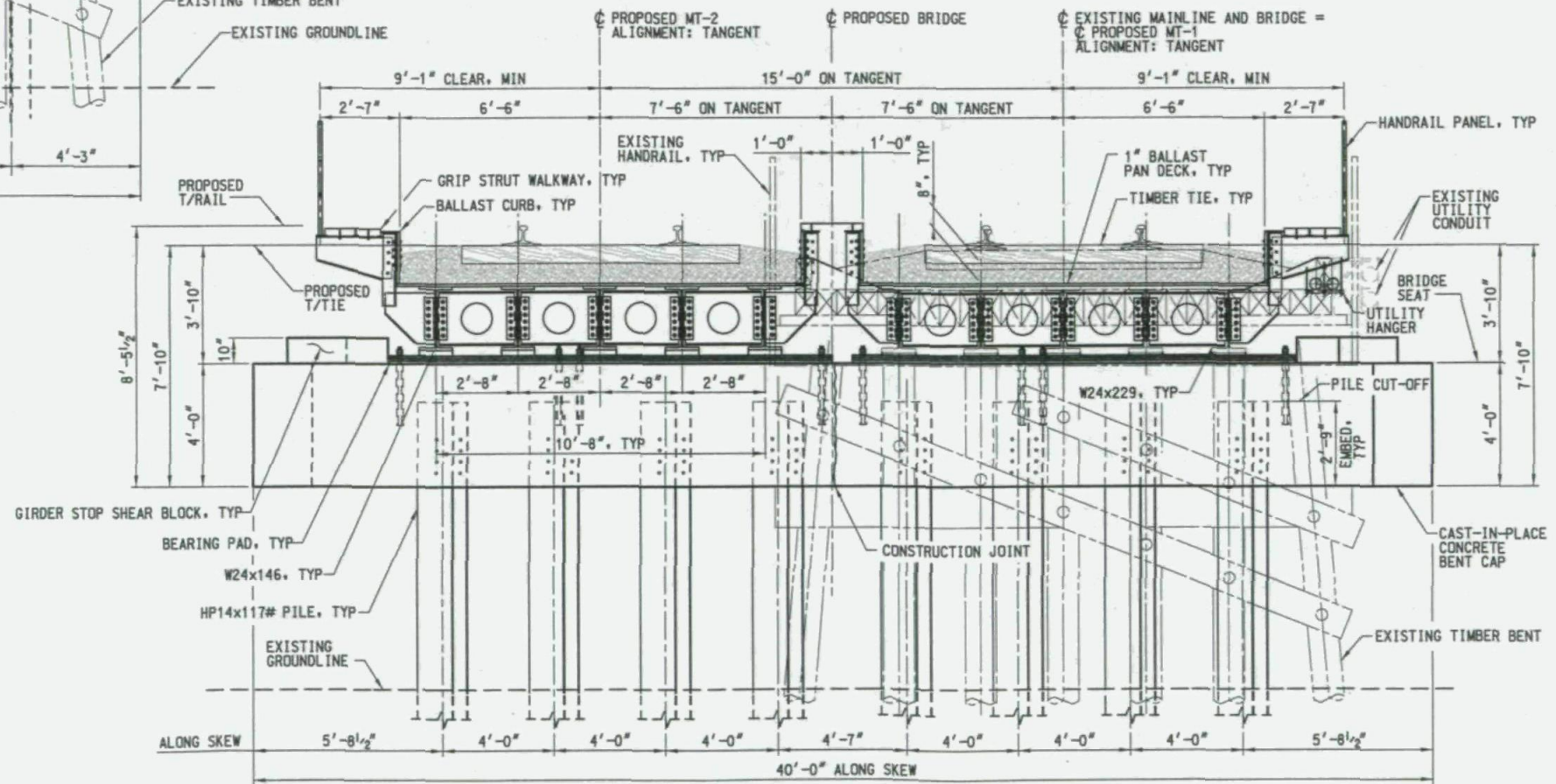
SORRENTO TO MIRAMAR - PHASE 1		SCALE AS NOTED
BRIDGE 249.9 REPLACEMENT		SANDAG CONTRACT NO. 1239801
GENERAL LAYOUT		DRAWING NO. ST-03 SHEET NO.

PROGRESS PRINT -
NOT FOR CONSTRUCTION

FOR REDUCED PLANS ORIGINAL
SCALE IS IN INCHES



SECTION A
SCALE: 3/8"=1'-0"
(TIMETABLE WEST)



SECTION B
SCALE: 3/8"=1'-0"
(TIMETABLE WEST)
EXISTING STRUCTURE NOT SHOWN SKEWED

- REFERENCES
- CTP-01 TRACK PLAN AND PROFILE
 - ST-03 GENERAL LAYOUT
 - ST-09 ABUTMENT 1 FRAMING
 - ST-10 ABUTMENT 5 FRAMING
 - ST-14 BENT CAP FRAMING
 - ST-20 BEARING DETAILS
 - ST-21 WALKWAY DETAILS
 - ST-22 HANDRAIL DETAILS

9:01:08 AM
\$FILES
\$DATES

NO.	DATE	REVISIONS	BY	CHK	APRV

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110 West A Street, Suite 1700
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IRVINE, CA 92602
PHONE: 714-730-2300
FAX: 714-730-2301

60%
SUBMITTAL

DESIGNED BY	DATE
PJG	08/10
DRAWN BY	DATE
JYM	08/10
CHECKED BY	DATE
DEA	08/10
SANDAG PRJ. ENG.	DATE
PD	08/10

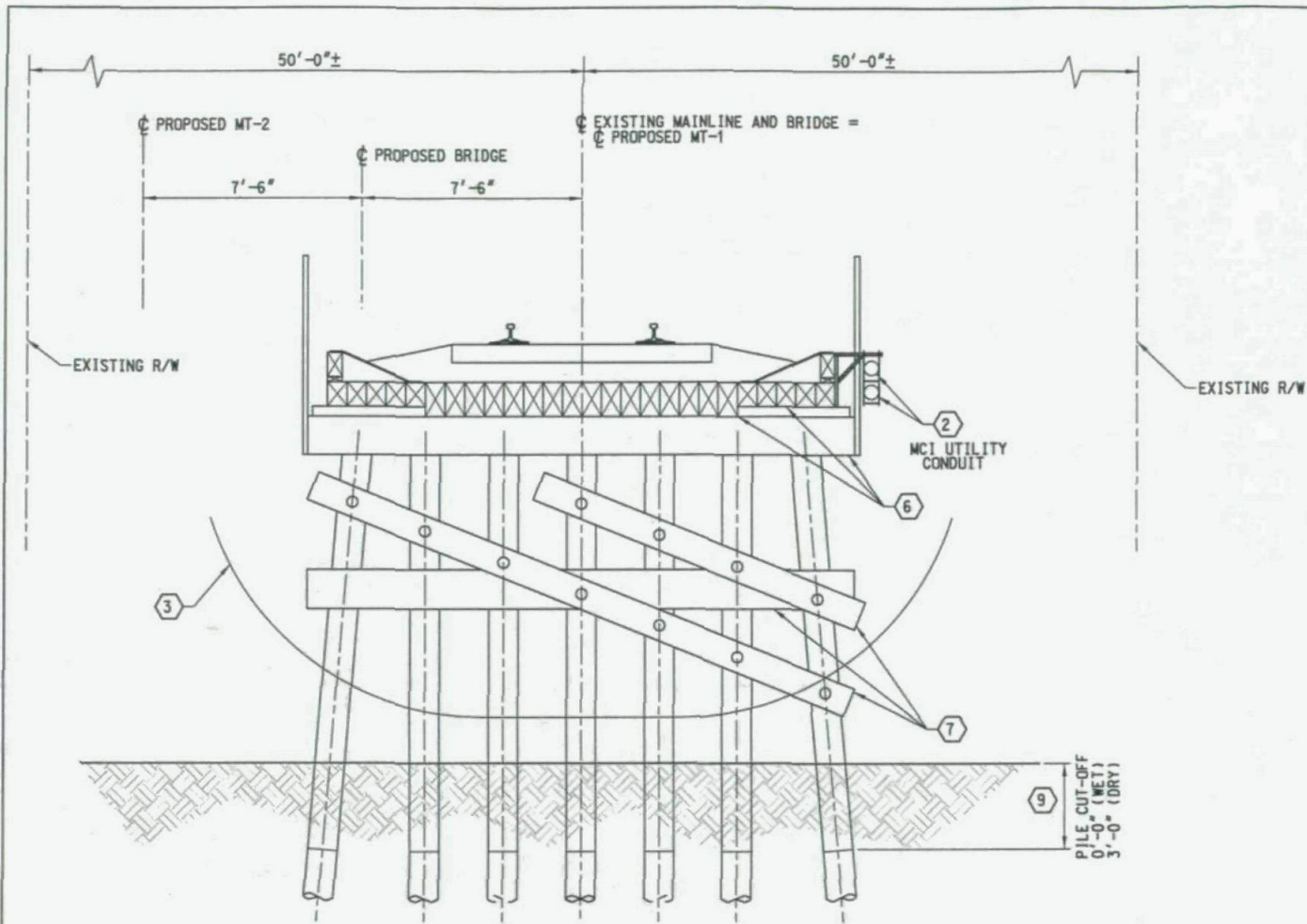
SANDAG
San Diego's Regional Planning Agency

SORRENTO TO MIRAMAR - PHASE 1		SCALE
BRIDGE 249.9 REPLACEMENT		AS NOTED
TYPICAL SECTIONS		SANDAG CONTRACT NO.
		1239801
DRAWING NO.	SHEET NO.	
ST-04		

HONOLULU

PROGRESS PRINT - NOT FOR CONSTRUCTION

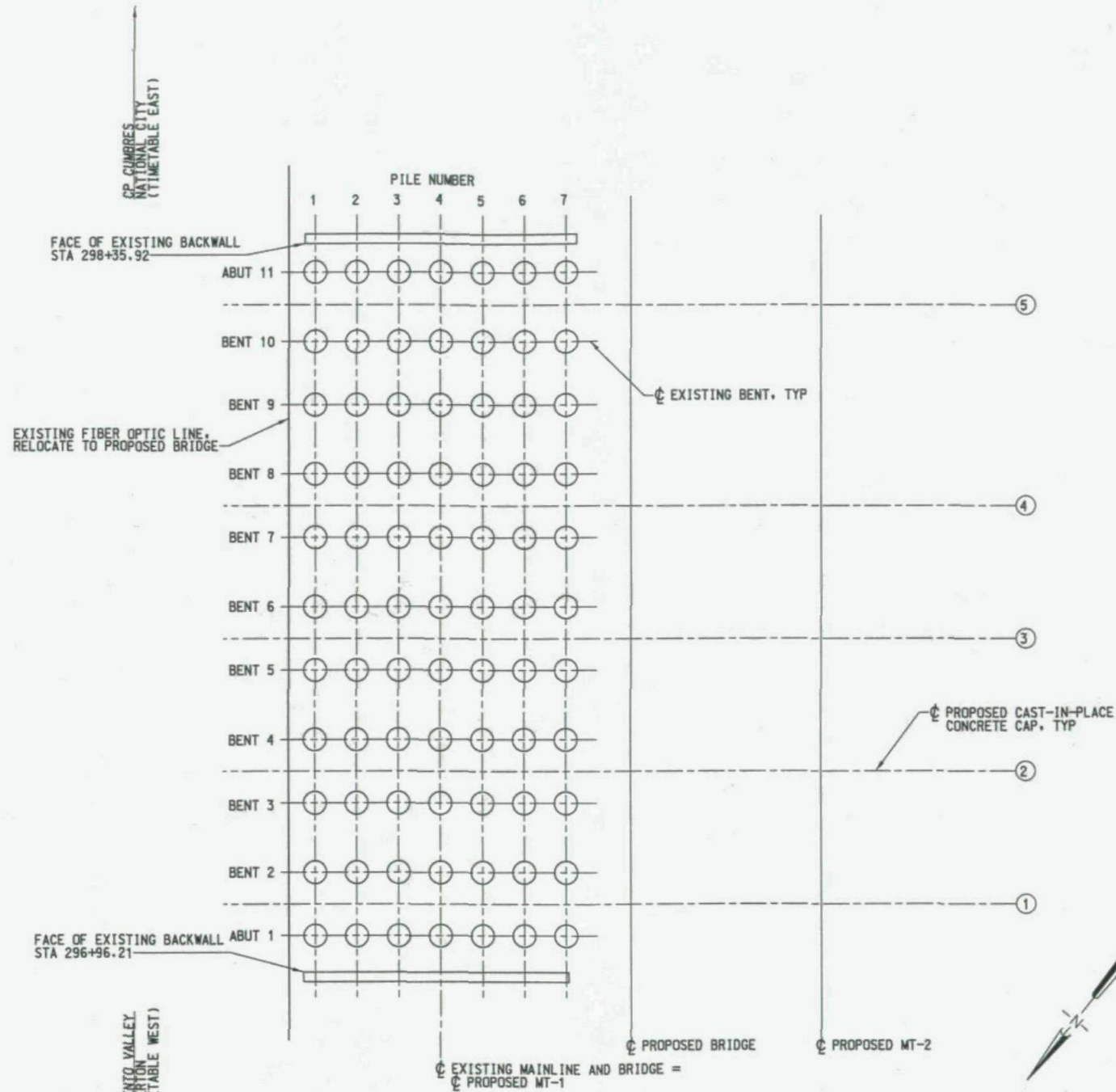
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES



EXISTING BENT TYPICAL SECTION
NOT TO SCALE
(LOOKING TIMETABLE WEST)

BRIDGE REMOVAL NOTES:

- 1 CONTRACTOR SHALL SUBMIT A BRIDGE REMOVAL AND DISPOSAL PLAN FOR APPROVAL BY NCTD PRIOR TO COMMENCING ANY BRIDGE REMOVAL. THE REMOVAL PLAN SHALL CONFORM TO CONTRACT AND SHOW THE METHODS AND SEQUENCE OF REMOVAL AND EQUIPMENT TO BE USED.
- 2 MCI SHALL TEMPORARILY RELOCATE FIBER OPTIC UTILITIES FROM EXISTING BRIDGE PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO REMOVE UTILITY HANGERS AND CONDUIT. COORDINATE REMOVAL WITH MCI.
- 3 ERECT A PLYWOOD DEBRIS BARRIER AND A FABRIC DEBRIS NET UNDER THE EXISTING BRIDGE PER THE TYPICAL SECTION. NO EXISTING BRIDGE DEBRIS SHALL BE ALLOWED TO FALL ONTO THE EMBANKMENT OR INTO THE EXISTING WATERWAY BELOW THE BRIDGE. ALL DEBRIS FROM THE REMOVAL PROCESS SHALL BE CONTAINED AND REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- 4 CONTRACTOR MAY INSTALL TEMPORARY BALLAST CURB TO ENSURE ADEQUATE CLEARANCE BETWEEN EXISTING AND NEW BRIDGE.
- 5 PRIOR TO COMMENCING ANY REMOVAL OPERATIONS OVER THE WATER, FLOATING SURFACE BOOMS SHALL BE INSTALLED.
- 6 REMOVE EXISTING TIMBER DECK, STRINGERS AND PILE CAPS.
- 7 REMOVE EXISTING TRANSVERSE TIMBER BRACES.
- 8 REMOVE ALL TEMPORARY SUPPORTS, FLOATING BOOMS AND DEBRIS NETS.
- 9 ALL PILES SHALL BE CUT-OFF AND REMOVED A MINIMUM DEPTH OF 3'-0" BELOW GRADE IN DRY SITUATIONS AND REMOVED TO THE EXISTING GROUNDLINE IN WET SITUATIONS.



EXISTING PILE PLAN
NO SCALE
(BENT SKEW ANGLE NOT SHOWN FOR CLARITY)

PILE LEGEND:

- ⊕ PROPOSED ABUTMENT OR HP14x117# BENT
- EXISTING PILE

8:59:36 AM

\$FILES \$DATES

NO.	DATE	REVISIONS	BY	CHK	APRV

DAVID EVANS AND ASSOCIATES INC.
110 West A Street, Suite 1700
San Diego California 92101
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PHONE: 714-730-2300
FAX: 714-730-2301

60%
SUBMITTAL

DESIGNED BY	DATE
PJG	08/10
DRAWN BY	DATE
JYM	08/10
CHECKED BY	DATE
DEA	08/10
SANDAG PRJ. ENG.	DATE
PD	08/10

SANDAG
San Diego's Regional Planning Agency

SORRENTO TO MIRAMAR - PHASE 1
BRIDGE 249.9 REPLACEMENT
BRIDGE REMOVAL PLAN AND DETAILS

SCALE	
AS NOTED	
SANDAG CONTRACT NO. 1239801	
DRAWING NO. ST-02	SHEET NO.

ATTACHMENT 5

MITIGATION FIGURES

AND

MITIGATION TABLES

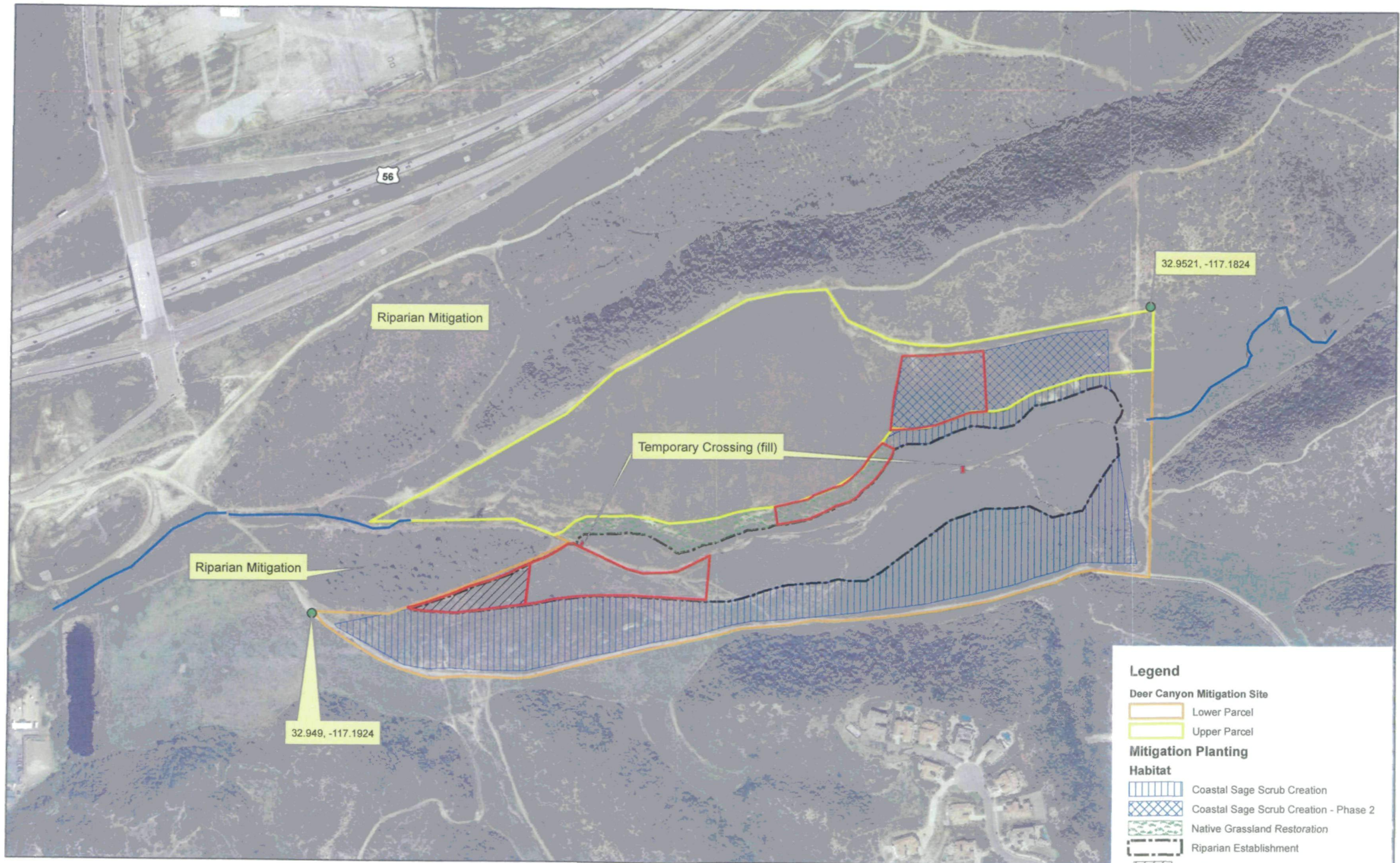


Legend

- Deer Canyon Mitigation Site ←
- I-5/Genesee Interchange Project
- I-805 North Managed Lanes Project
- Carroll Canyon Road Extension
- LOSSAN S2HP1 ←

Figure 1. Project Location












640 320 0 640 Feet
 1 inch = 321 feet

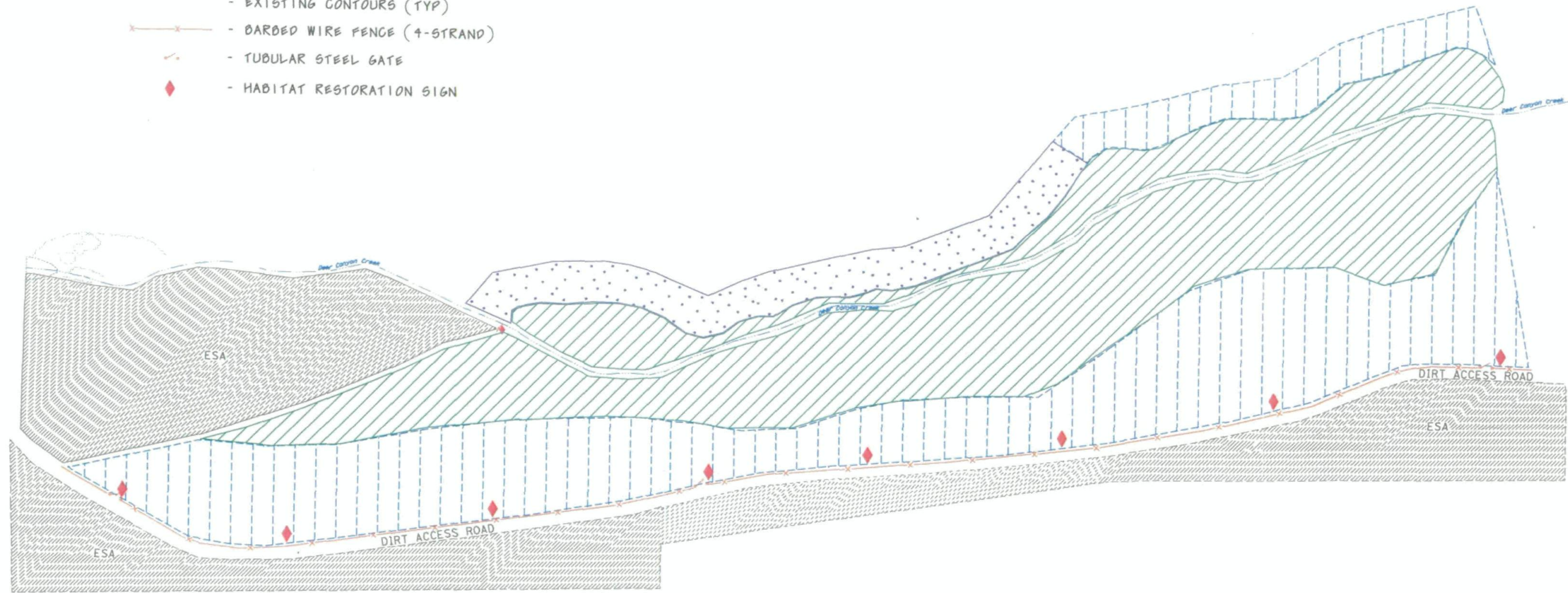
- Legend**
- Deer Canyon Mitigation Site**
- Lower Parcel
 - Upper Parcel
- Mitigation Planting**
- Habitat**
- Coastal Sage Scrub Creation
 - Coastal Sage Scrub Creation - Phase 2
 - Native Grassland Restoration
 - Riparian Establishment
 - 0.68 acre alkali marsh
 - LOSSAN Mitigation Areas

Figure 6. Deer Canyon Mitigation Site



LEGEND

-  - WETLAND PLANTING AREA (12.28 ACRES)
-  - COASTAL SAGE SCRUB PLANTING AREA (12.14 ACRES)
-  - NATIVE GRASSLAND SEEDING AREA (2.18 ACRES)
-  - ENVIRONMENTALLY SENSITIVE AREA (ESA)
NO WORK OR EQUIPMENT STORAGE TO OCCUR IN THIS AREA
- EXISTING CONTOURS (TYP)
-  - BARBED WIRE FENCE (4-STRAND)
-  - TUBULAR STEEL GATE
-  - HABITAT RESTORATION SIGN



DEER CANYON MITIGATION

CONCEPTUAL PLANTING PLAN

1100020036

FIGURE 7

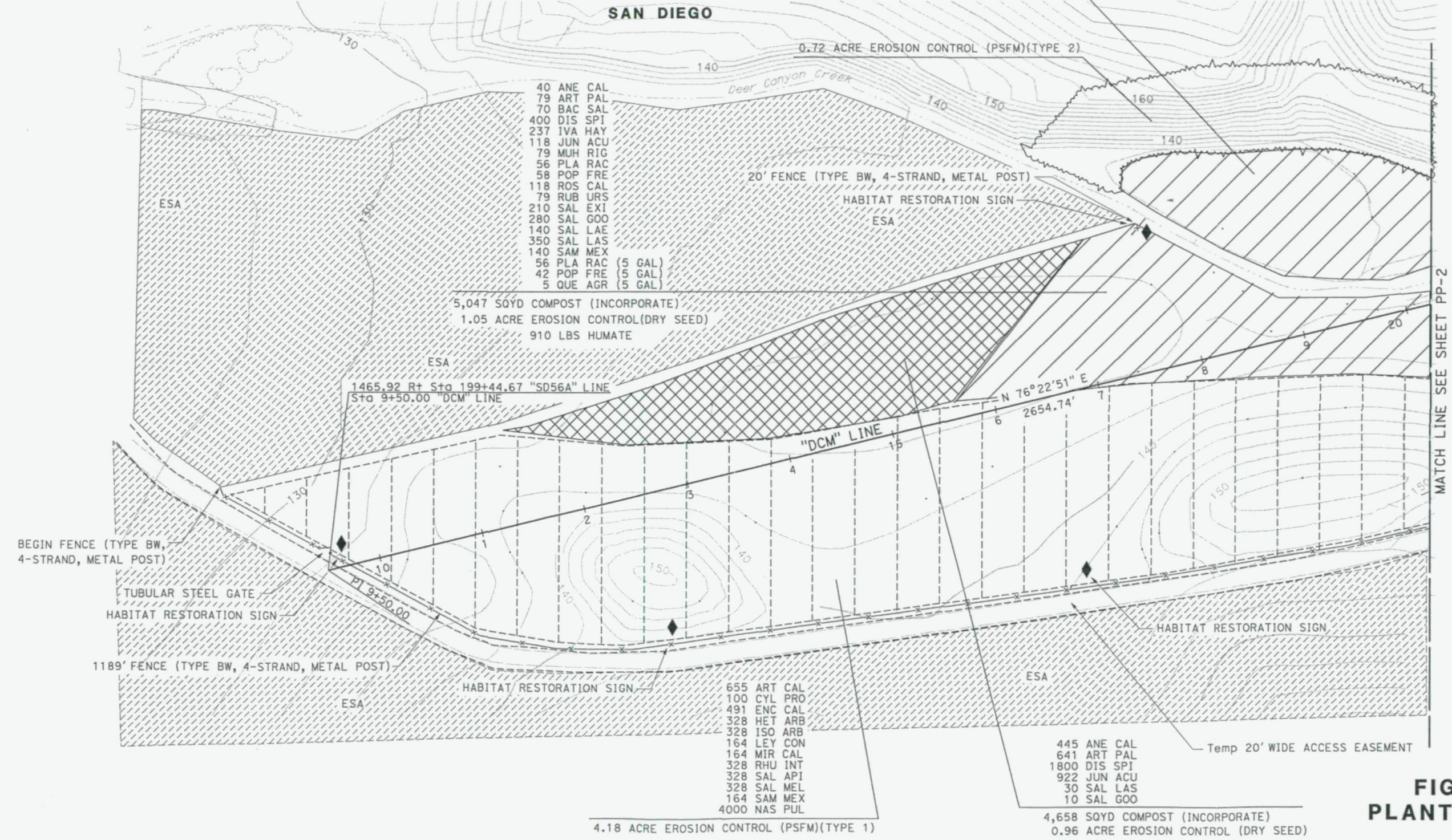
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	56	3.5		

LICENSED LANDSCAPE ARCHITECT	
PLANS APPROVAL DATE	
3-31-12	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	



- 25 ANE CAL
- 51 ART PAL
- 45 BAC SAL
- 250 DIS SPI
- 153 IVA HAY
- 76 JUN ACU
- 51 MUH RIG
- 36 PLA RAC
- 36 POP FRE
- 76 ROS CAL
- 51 RUB URS
- 136 SAL EXI
- 181 SAL GOO
- 91 SAL LAE
- 227 SAL LAS
- 91 SAM MEX
- 36 PLA RAC (5 GAL)
- 27 POP FRE (5 GAL)
- 3 QUE AGR (5 GAL)

- 3,133 SOYD COMPOST (INCORPORATE)
- 0.65 ACRE EROSION CONTROL (DRY SEED)
- 564 LBS HUMATE



- 40 ANE CAL
- 79 ART PAL
- 70 BAC SAL
- 400 DIS SPI
- 237 IVA HAY
- 118 JUN ACU
- 79 MUH RIG
- 56 PLA RAC
- 58 POP FRE
- 118 ROS CAL
- 79 RUB URS
- 210 SAL EXI
- 280 SAL GOO
- 140 SAL LAE
- 350 SAL LAS
- 140 SAM MEX
- 56 PLA RAC (5 GAL)
- 42 POP FRE (5 GAL)
- 5 QUE AGR (5 GAL)

- 655 ART CAL
- 100 CYL PRO
- 491 ENC CAL
- 328 HET ARB
- 328 ISO ARB
- 164 LEY CON
- 164 MIR CAL
- 328 RHU INT
- 328 SAL API
- 328 SAL MEL
- 164 SAM MEX
- 4000 NAS PUL

- 445 ANE CAL
- 641 ART PAL
- 1800 DIS SPI
- 922 JUN ACU
- 30 SAL LAS
- 10 SAL GOO

THIS PLAN ACCURATE FOR PLANTING WORK ONLY

**FIGURE 10
PLANTING PLAN**

SCALE: 1"=50'

PP-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL
Caltrans

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		
BRUCE APRIL		

DESIGNED BY	CHECKED BY
BRUCE APRIL	MIKE CONNELLY

SENIOR ENVIRONMENTAL PLANNER	CALCULATED/DESIGNED BY
BRUCE APRIL	BRUCE APRIL

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

REVISOR	DATE	REVISION
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REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

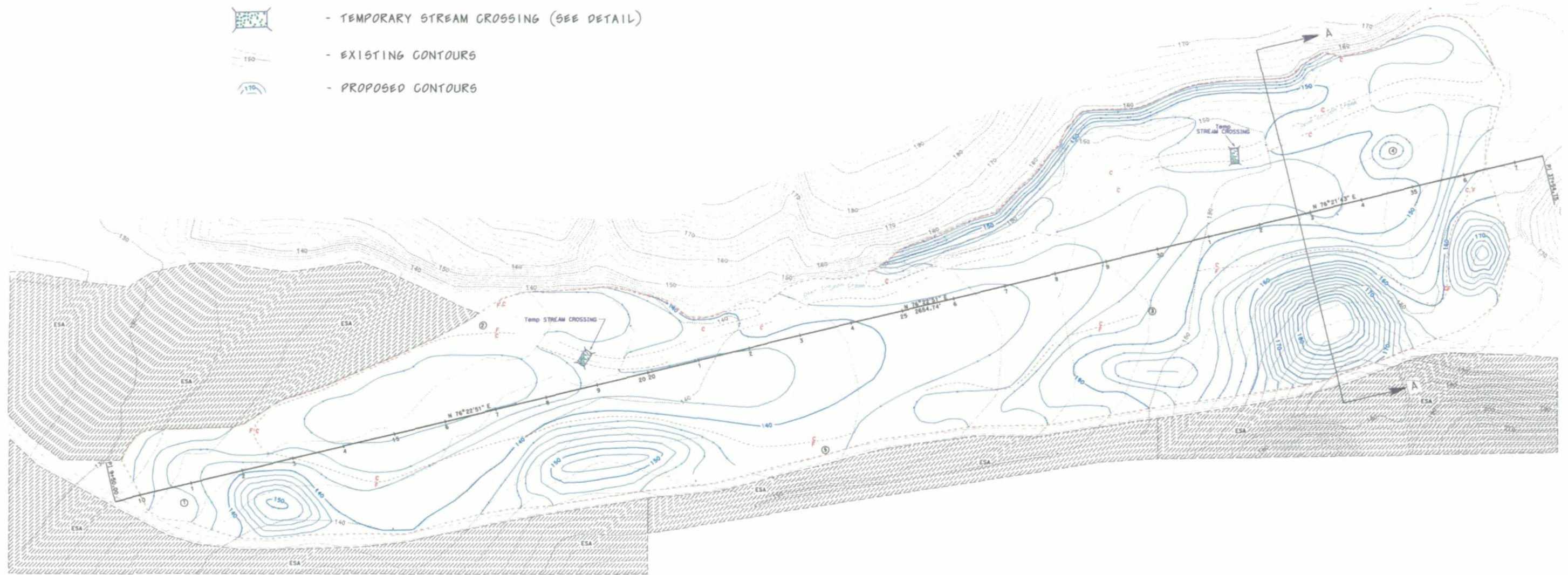
REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

REVISOR	DATE	REVISION
RICH MALLEN		
MIKE CONNELLY		

LEGEND

- (X) - MONITORING WELL
- ESA - ENVIRONMENTALLY SENSITIVE AREA
- Temp STREAM CROSSING (SEE DETAIL)
- EXISTING CONTOURS
- PROPOSED CONTOURS



DEER CANYON MITIGATION

CONCEPTUAL GRADING PLAN

1100020036

FIGURE 8

Table 3. Project Mitigation Totals to be Used at Deer Canyon

Habitat	Permanent (ac)	Ratio	Total Perm	Temporary (ac)	Ratio	Total Temp	Total
I-5/Genesee Interchange							
Riparian Habitat	1.17	3:1	3.51	0	0	0	3.51
I-805 North Managed Lanes							
Unvegetated Channel	0.09	1:1	0.09	0.20	1:1	0.20	0.29
Riparian Habitat	1.25	3:1	3.75	0.85	1:1	0.85	4.6
Disturbed Riparian Habitat	0.12	2:1	0.24	0.33	1:1	0.33	0.57
Oak Woodland*	0.15	2:1	0.3				0.3
Carroll Canyon Road Extension							
Riparian Habitat	0.18	3:1	0.54	0	0	0	0.54
Sorrento to Miramar Phase 1							
Alkali Meadow	0.17	4:1	0.68				0.68
Southern Riparian Scrub	0.05	3:1	0.15				0.15
Southern Arroyo Willow Riparian Forest	0.09	3:1	0.27				0.27
Southern Coast Live Oak Riparian Forest	0.10	3:1	0.3				0.3
Southern Willow Scrub	0.25	3:1	0.75				0.75
Non-Native Vegetation	0.03	3:1	0.09				0.09
Total Mitigation Needed							12.05
LOSSAN Projects							
Remaining Wetland available							0.25

} establishment } 1.56

* Coast live oak woodland is an upland habitat within the I-805 North Managed Lanes Project that will be mitigated through oaks planted in wetland.

Table 4. Total Mitigation Required by Each Jurisdiction (acres).

Project	ACOE	CDFG	CCC
I-5/Genesee Interchange	0.09	3.51	3.51
I-805 North	0.56	5.76	--
Carroll Canyon Road Extension	--	0.18	--
Sorrento to Miramar Phase 1	0.09	--	1.73
Total	0.74	9.45	5.24

ATTACHMENT 6

REQUIRED REPORTS AND NOTIFICATIONS CHECKLIST

Attachment 6

Checklist of Required Reports and Notifications

Required Notifications: 401 Certification No. 10C-088

Notification Requirement	Required Notification Period	Required Condition(s) To Be Met	Date Received
Unauthorized Discharge	Within 24 Hours of Discharge	VII.A	
Transfer of Property Responsibility	Within 10 Days of Transfer	VII.B.1	
Transfer of Mitigation Responsibility	Within 10 Days of Transfer	VII.B.2	
Mitigation Preservation Mechanism	Prior to construction commencement	VII.C	

Required Reports and Submittals: 401 Certification No. 10C-088

Required Report	Due Date	Required Condition(s) To Be Met	Date Received
Benthic Macroinvertebrate Report	Prior to August 1 st , Annually	V.I.A	
California Rapid Assessment Report	Prior to August 1 st , Annually	V.I.B.	
Annual Project Report	Prior to August 1 st , Annually	VIII.A	
Final Annual Project Report	August 1 st After Project Completion	VIII.A	
Annual Mitigation Monitoring Report	Prior to December 1 st , Annually	VIII.C	