

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

California Regional Water Quality Control Board, San Diego Region

July 1, 2014

Certified Mail – Return Receipt Requested
Article Number: 7009 1410 0002 2347 3339

Standard Pacific Homes
Mr. Sean Doyle
15360 Barranca Parkway
Irvine, CA 92618

In reply/refer to:
792699:dbradford

**Subject: Clean Water Act Section 401 Water Quality Certification No. R9-2013-0057
for the Skyridge Development Project**

Mr. Doyle:

Enclosed find Clean Water Act Section 401 Water Quality Certification No. R9-2013-0057 (Certification) issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) in response to the application submitted by Standard Pacific Homes for the Skyridge Development 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.

Standard Pacific Homes 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 Standard Pacific Homes to enforcement actions by the San Diego Water Board including administrative enforcement orders requiring Standard Pacific Homes 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.

In the subject line of any response, please include reference number 792699:dbradford. For questions or comments, 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

HENRY ABARBANEL, CHAIR | DAVID GIBSON, EXECUTIVE OFFICER

2375 Northside Drive, Suite 100, San Diego, CA 92108 | (619) 516-1900 | www.waterboards.ca.gov/sandiego



Enclosure:

Clean Water Act Section 401 Water Quality Certification No. R9-2013-0057 for the Skyridge Development Project

DWG:jgs:db:kd:dlb

cc:

U.S. Army Corps of Engineers, Regulatory Branch
San Diego Field Office
Peggy Bartels
Peggy.J.Bartels@usace.army.mil

California Department of Fish and Game
South Coast Region
Habitat Conservation Planning – South
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U.S. EPA, OWOW, Region 9
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State Water Resources Control Board, Division of Water Quality
401 Water Quality Certification and Wetlands Unit
Stateboard401@waterboards.ca.gov

Sean Gatchel-Hernandez
VCS Environmental
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Tech Staff Info & Use	
Certification No.	R9-2013-0057
Party ID	42002
File No.	R9-2013-0057
WDID	9000002570
NPDES No.	None
Regulatory ID	389616
Place ID	792699
Person ID	539170
Inspection ID	None

**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: Skyridge Development Project
Certification Number R9-2013-0057
WDID: 9000002570**

Reg. Meas. ID: 389616
Place ID: 792699
Party ID: 42002
Person ID: 539170

**APPLICANT: Standard Pacific Homes
15360 Barranca Parkway
Irvine, CA 92618**

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

An application dated March 14, 2013 was submitted by Standard Pacific Homes (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (33 U.S.C. § 1341) for the proposed Skyridge Development Project (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on May 22, 2014. 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-2009-817-FBV).

The Project is located in unincorporated southern Orange County, California along the east side of El Toro Road, north of the SR-241 Toll Road. The Project center reading is located at latitude 33.67127 and longitude -117.62274. The Applicant has paid all required fees for this Certification in the amount of \$13,773.00. On March 18, 2013, the San Diego Water Board provided public notice of the 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 develop a new residential neighborhood, including 84 homes, on approximately 28.5 acres. The Project will remove approximately 10,000 cubic yards of

asphalt pavements, building foundations, ornamental vegetation, and other construction materials.

The Project will convert approximately 8.2 acres of pervious ground cover to impervious surfaces. Runoff leaving the developed Project area would be significantly greater in volume, velocity, peak flow rate, and duration than pre-development runoff from the same area without mitigation. Post-construction best management practices (BMPs) to manage and control the effects of these runoff increases will consist of an underground storage system of HDPE pipes that store the runoff from the site and delay the discharge downstream. In addition, media filters will be utilized as treatment control BMPs. These BMPs will be designed, constructed, and maintained to meet Orange County's Low Impact Development (LID) Capture Volume and hydromodification treatment requirements.

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 0.042 acre (1,359 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 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 0.042 acre (1,359 linear feet) of jurisdictional waters will be achieved through the establishment of 0.39 acres (2,800 linear feet) and preservation of 0.45 acres (1,700 linear feet) 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. Mitigation for discharges of fill material to waters of the United States and/or State will be completed by the Applicant at the 17-acre Mitchell Parker West site in the Middle Trabuco hydrologic sub-area (HSA 901.23).

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 and the *Draft Compensatory Habitat Mitigation and Monitoring Plan for the Skyridge Development Project* (Mitigation Plan), dated May 15, 2014. 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. R9-2013-0057 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 U.S.C. §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/go_wdr401regulated_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 U.S.C §1313.)
- 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 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 the Aliso Creek and Upper Oso Reservoir or their 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 Board to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Resources Control 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 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/paf/>.
- 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 the unnamed tributaries to Aliso Creek and Upper Oso Reservoir. 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.

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 onsite 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 the County of Orange. Post-construction BMPs, including those described in the *Final Water Quality Management for: Skyridge Tract No. 17392 (SWMP)*, must treat 100 percent of the added impervious surface.
- 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 August 21, 2013 and revisions dated December 1, 2013, prepared on behalf of the Applicant by Adams-Streeter Civil Engineers, Inc.; or any subsequent version of the SWMP approved by the County of Orange.

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)¹ 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. Stream Crossing Structures. Bridges, culverts, dip crossings, or other stream crossing structures shall be designed and installed in a manner that 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 the upstream and downstream sections of the affected water body. 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 the unnamed tributaries to Aliso Creek and Upper Oso Reservoir 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:

¹ 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)
Permanent Impacts						
Streambed	0.042	1,359	0.39 Establishment ¹	9.29:1	2,800 Establishment	2.06:1
			0.45 Preservation ²	10.71:1	1,700 Preservation	1.25:1

1. Streambed establishment at the 17 acre Mitchell Parker West site located in the unincorporated eastern Orange County community of Trabuco Canyon.
2. Streambed preservation at the 17 acre Mitchell Parker West site located in the unincorporated eastern Orange County community of Trabuco Canyon.

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 as achieved once it has met the ecological success performance standards contained in the Mitigation Plan to the satisfaction of the San Diego Water Board.

E. Compensatory Mitigation Site Design. The compensatory mitigation site(s) shall be designed, to the maximum extent practicable, 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 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 issuance of this Certification**, 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)² monitoring must be performed to assess the current and potential ecological conditions (ecological integrity) of the impact site and proposed compensatory 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

² 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/>

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 Progress Report. An evaluation, interpretation, and tabulation of all CRAM assessment data shall be submitted with the final Project Annual Project Monitoring Report.

F. Annual Project Progress Reports. The Applicant must submit annual Project progress reports describing status of BMP implementation 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 report must include the following information:

1. The names, qualifications, and affiliations of the persons contributing to the report;
2. 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;
3. A description of Project construction delays encountered or anticipated that may affect the schedule for construction completion;
4. 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; and
5. The results of the California Rapid Assessment Method (CRAM) monitoring required under section VI.E of this Certification.

H. 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/d

[ocs/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) assessment data collected throughout the term of Project construction in accordance with section VI.E of this Certification.
- I. **Annual Compensatory Mitigation Monitoring Report.** The Applicant must submit compensatory mitigation monitoring reports, annually, by **March 1** of each year containing sufficient information to demonstrate how the compensatory mitigation project is progressing towards accomplishing its objectives and meeting its performance standards. Mitigation monitoring reports must be submitted annually 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 monitoring reports must include, but not be limited to, the following information:

1. Names, qualifications, and affiliations of the persons contributing to the report;
2. 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;
3. A description of the following mitigation site(s) characteristics:
 - a. Detritus cover;
 - b. General topographic complexity;
 - c. General upstream and downstream habitat and hydrologic connectivity; and
 - d. Source of hydrology;
4. 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;
5. 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;

6. Qualitative and quantitative comparisons of current mitigation conditions with pre-construction conditions and previous mitigation monitoring results;
 7. 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/StreamPhotoDocSOP.pdf. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced;
 8. A qualitative comparison to adjacent preserved streambed areas;
 9. As-built drawings of the compensatory mitigation project site(s), no bigger than 11"X17"; and
 10. A survey report documenting boundaries of the compensatory mitigation site(s).
- J. **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.
- K. **Electronic and Paper Media Documents.** The Applicant must submit all reports and information required under this Certification in both hardcopy (paper) 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. All paper and electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2013-0057:PIN 792699.
- L. **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.

- M. 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."

- N. Document Submittal Address.** The Applicant 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. R9-2013-0057:PIN 792699
2375 Northside Drive, Suite 100
San Diego, California 92108

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 this Certification in the event that a transferee fails to comply.

- F. **Discharge Commencement.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior** to the start of Project construction.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The City of Mission Viejo 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 January 22, 2013 for the Final Environmental Impact Report (FEIR) titled *Northeast Annexation Area and Skyridge VTTM Environmental Impact Report* (State Clearing House Number 2012061052). 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 section 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

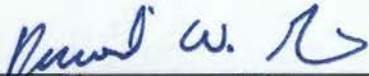
Darren Bradford, Environmental Scientist
California Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, California 92108
Telephone: (619) 521-3356
Email: darren.bradford@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Skyridge Development Project** (Certification No. R9-2013-0057) 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. R9-2013-0057 issued on July 1, 2014.



DAVID W. GIBSON
Executive Officer
San Diego Water Board

27 June 2014

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.

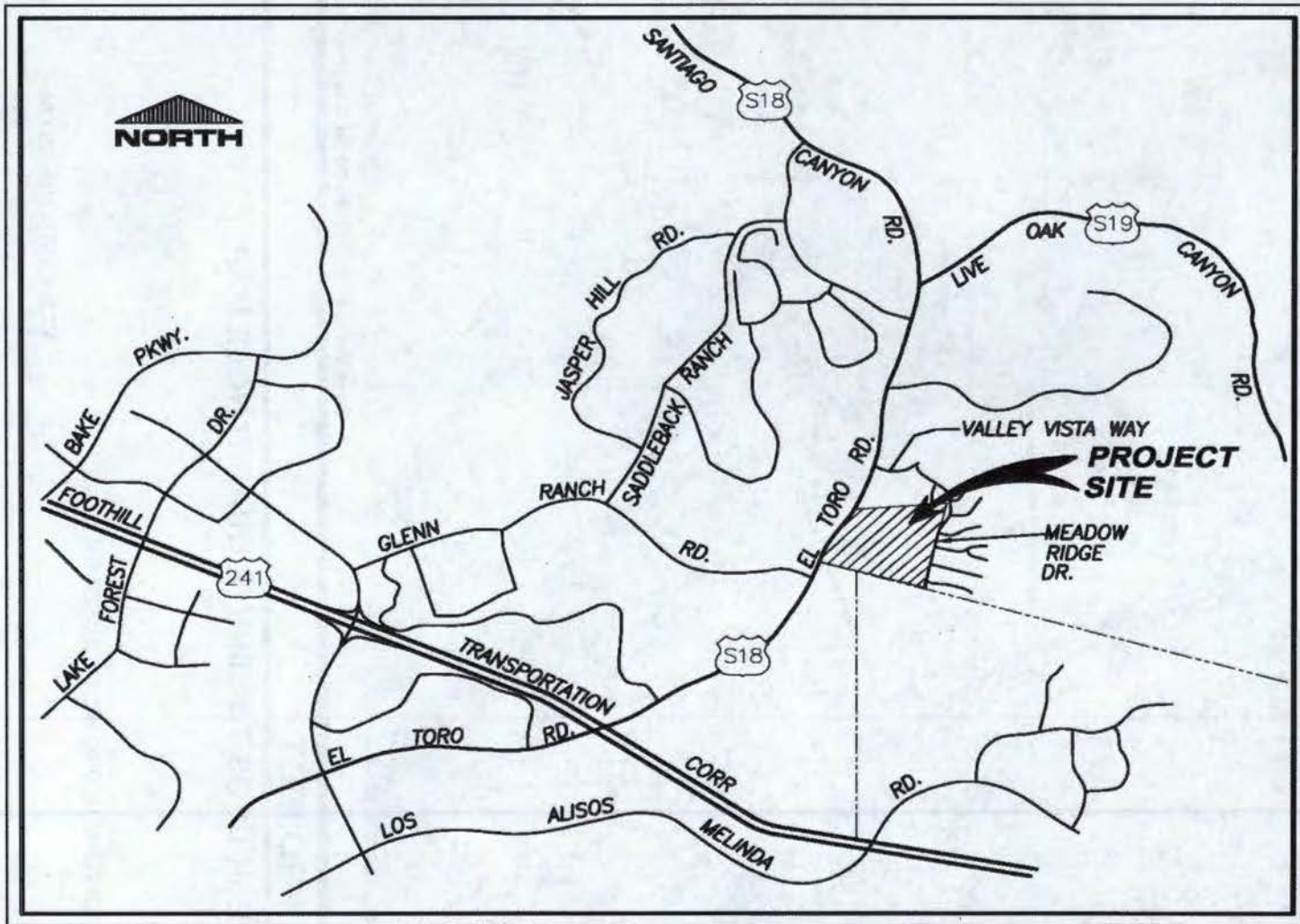
Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically 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.

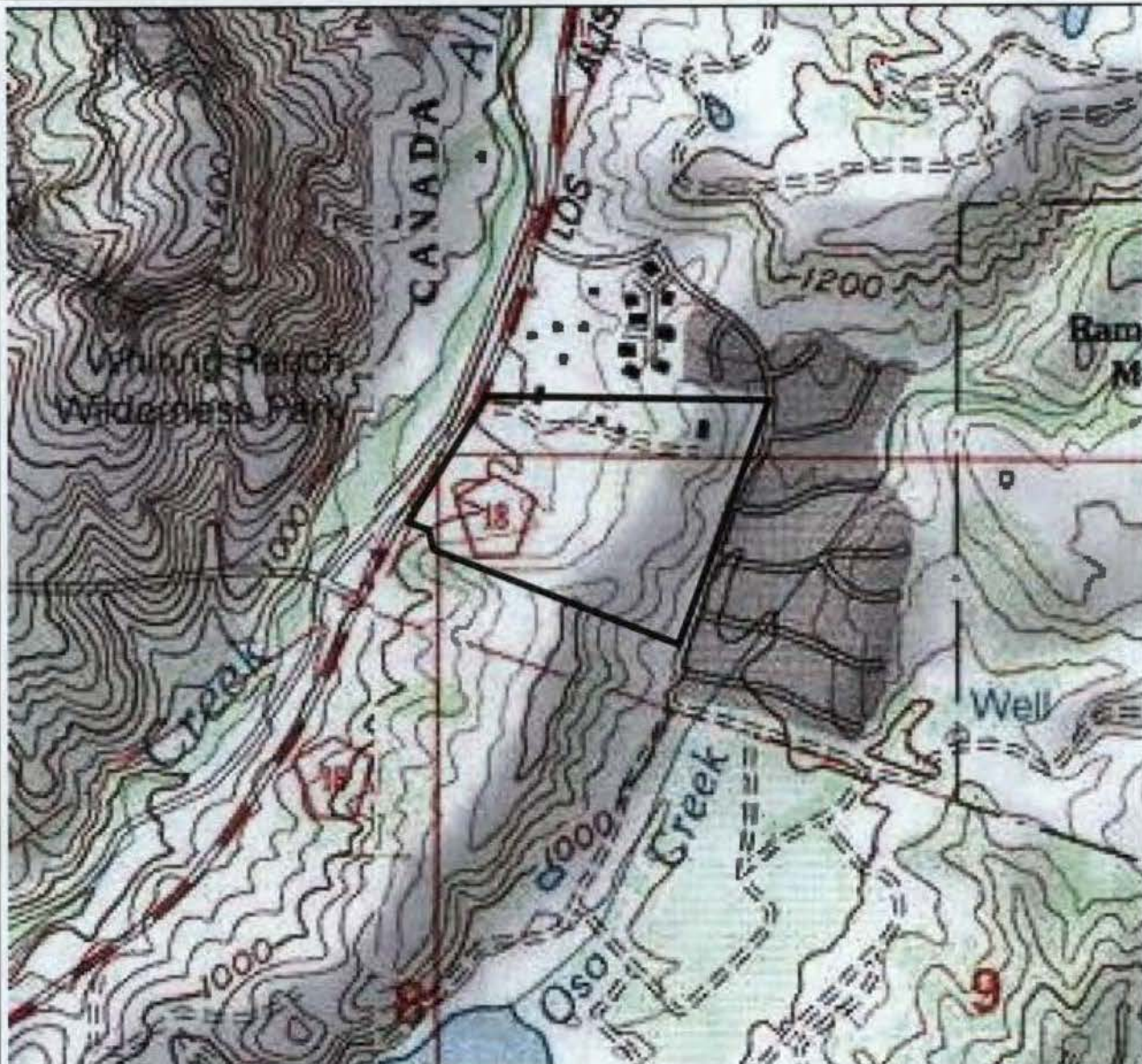
Water quality objectives and other appropriate requirements of state law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate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

Standard Pacific Homes
Skyridge Development Project
Certification No. R9-2013-0057

ATTACHMENT 2
PROJECT LOCATION MAPS



VICINITY MAP
N.T.S



Data Source: TOPOI National Geographic

SKY RIDGE PROJECT

SANTIAGO PEAK USGS 7.5-MINUTE QUADRANGLE MAP

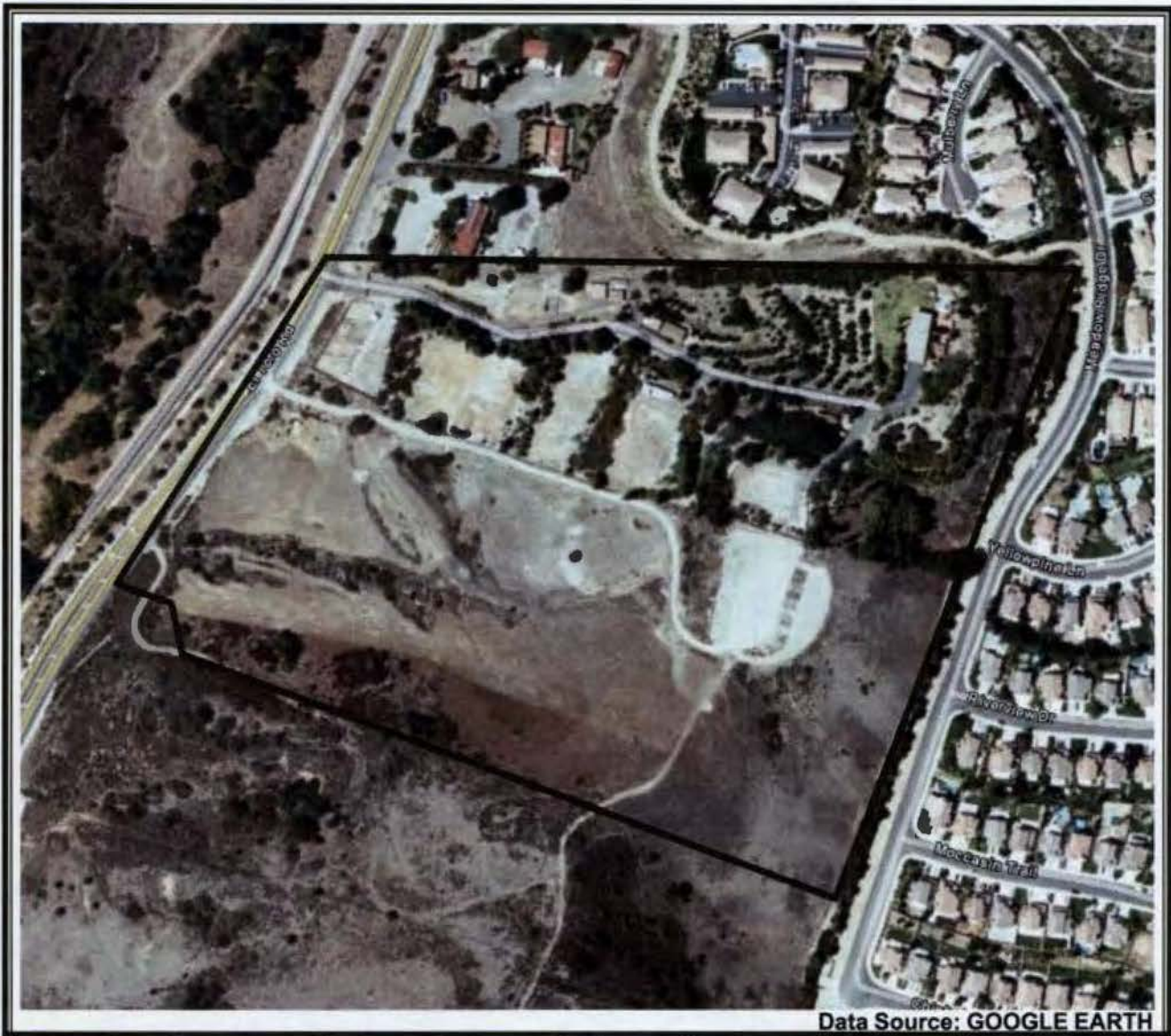


APPROXIMATE PROJECT BOUNDARY



VCS ENVIRONMENTAL
 30900 Rancho Viejo Road, Suite 100
 San Juan Capistrano, CA 92675
 (949) 489-2700
 fax (949) 489-0309

FIGURE 3



Data Source: GOOGLE EARTH

SKY RIDGE PROJECT

SATELLITE PHOTOGRAPH



APPROXIMATE PROJECT BOUNDARY



VCS ENVIRONMENTAL
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675
(949) 489-2700
fax (949) 489-0309

FIGURE 4

Standard Pacific Homes
Skyridge Development Project
Certification No. R9-2013-0057

**ATTACHMENT 3
PROJECT SITE PLANS**



**Exhibit 4.7-3
 Jurisdictional Waters**

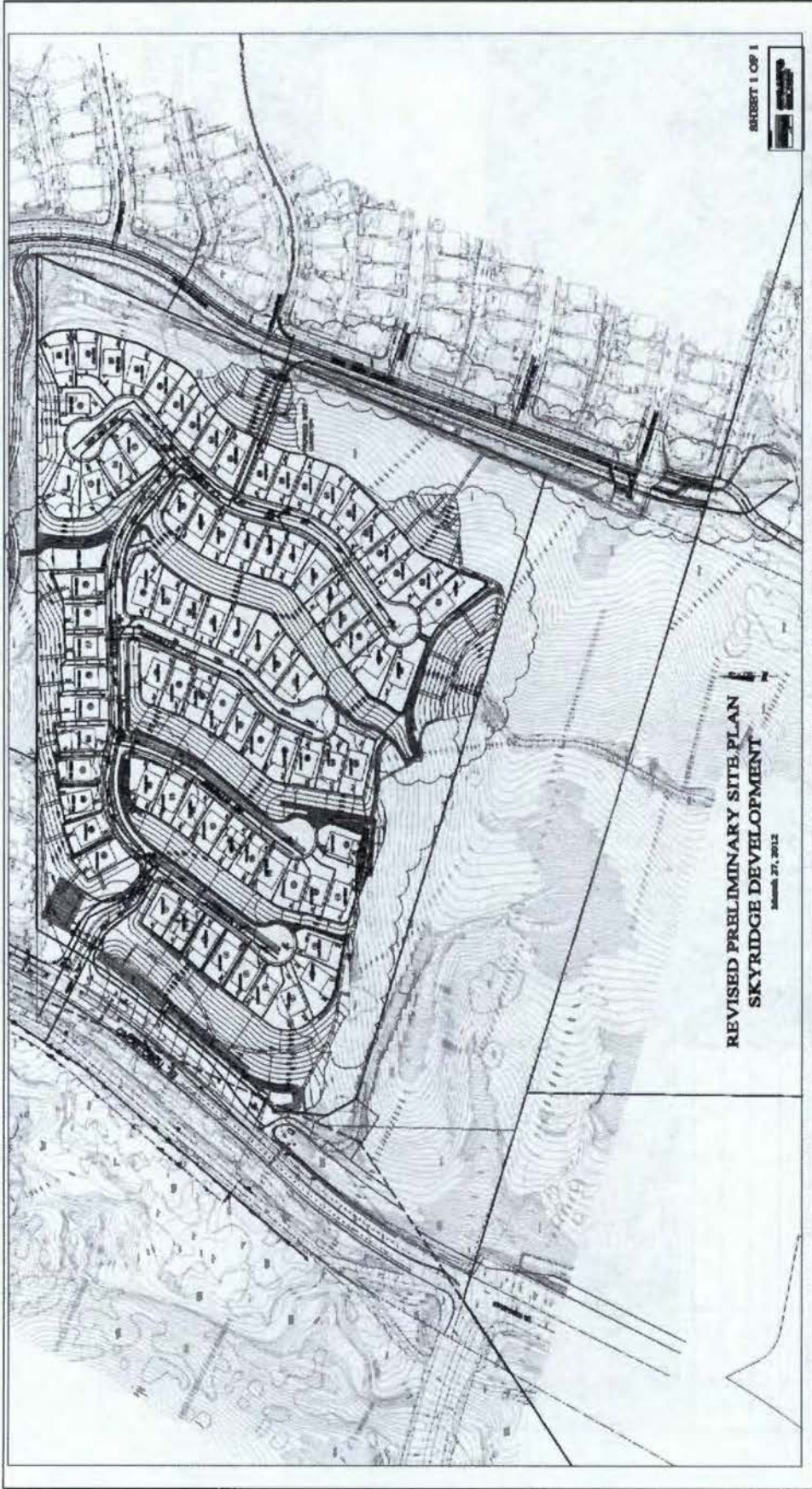


Exhibit 3-6
Conceptual Site Site Plan

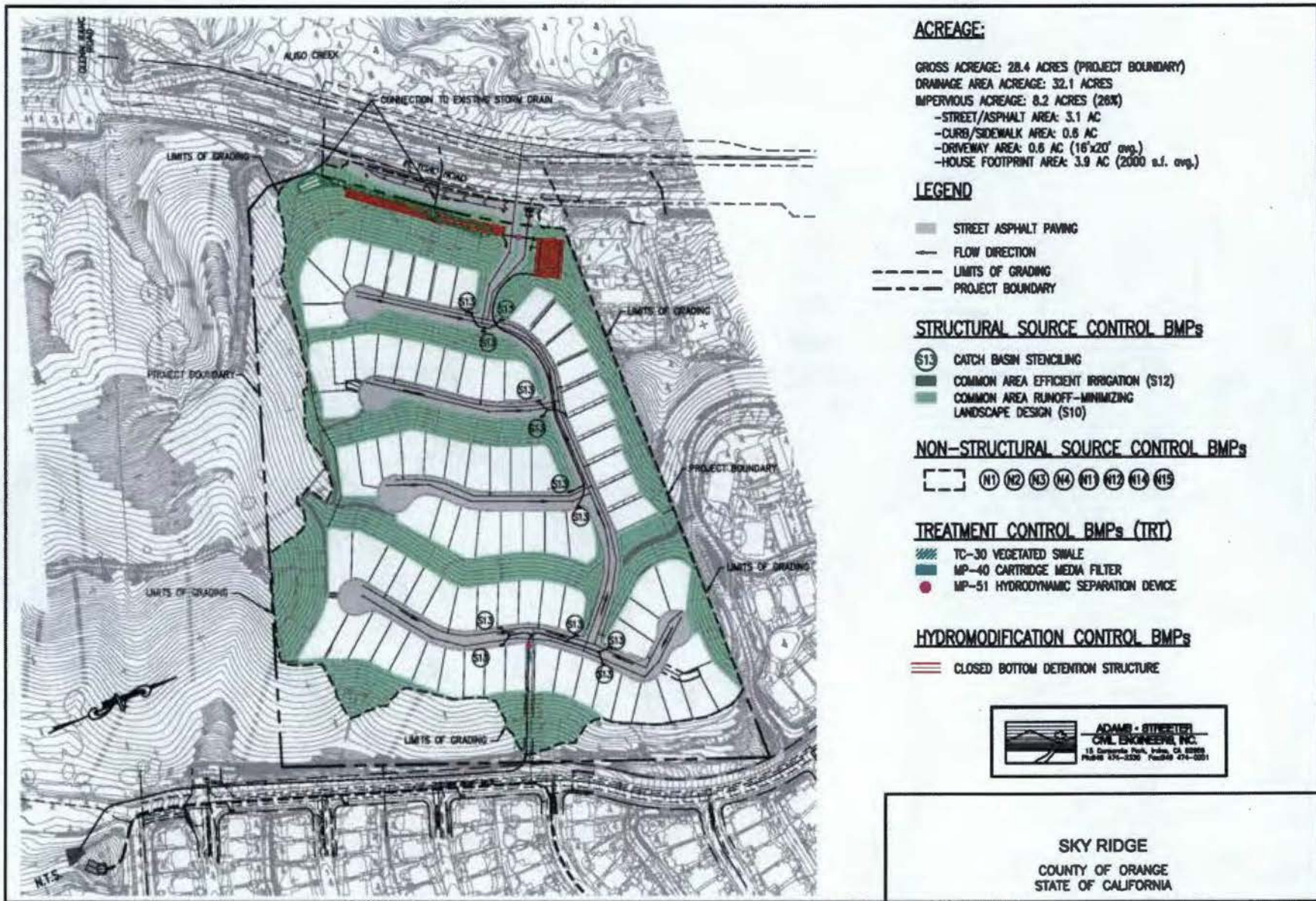
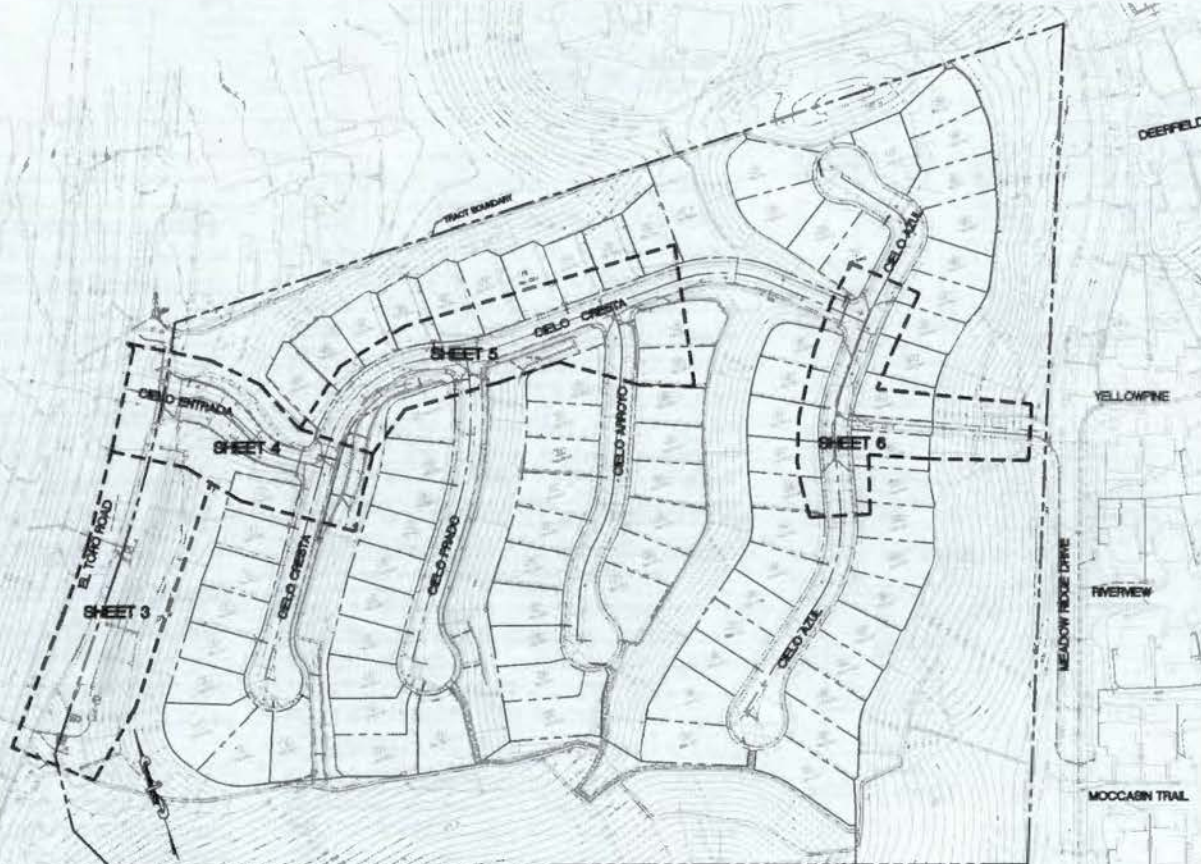
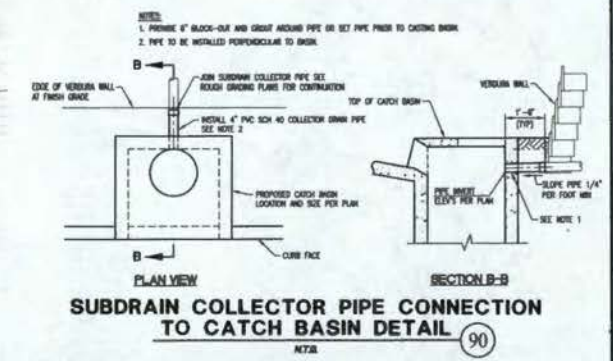
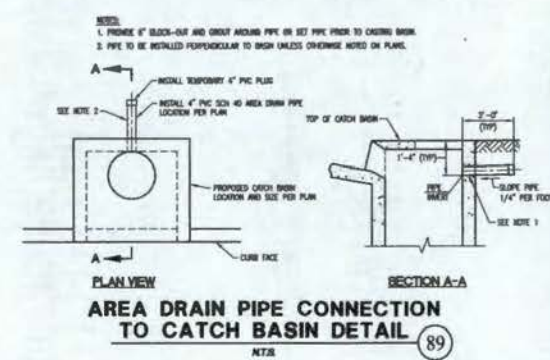


Exhibit 4.6-3
 Water Quality Management Plan – BMP Site Map



INDEX MAP
SCALE: 1"=80'

NO.	PRIVATE STORM DRAIN CONSTRUCTION NOTES and ESTIMATE OF QUANTITIES	UNIT	QUANTITY
1	INSTALL 18" RCP, BEDDING AND BACKFILL PER CITY OF MISSION WELO STD 430	LF	1178
2	INSTALL 24" RCP, BEDDING AND BACKFILL PER CITY OF MISSION WELO STD 430	LF	880
3	CONSTRUCT ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION WELO STD 408	EA	18
4	CONSTRUCT MILE TYPE 1 PER CITY OF MISSION WELO STD 401	EA	3
5	CONSTRUCT MILE TYPE 6 PER CITY OF MISSION WELO STD 402	EA	13
6	12" PVC MILE PER ROUGH GRADE PLANS	EA	1
7	CONSTRUCT CONCRETE PIPE SLOPE ANCHOR PER CITY OF MISSION WELO STD 404	EA	7
8	INSTALL 8" RCP MANHOLE WITH 12" RCP PIPE TO ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION WELO STD 408	EA	3
9	CONSTRUCT STORM DRAIN FLOW CONTROL DEVICE PER DETAIL SHEET 14	EA	2
10	INSTALL 6" RCP STORMWATER BY CONCRETE PER DETAIL SHEET 9	EA	1
11	CONSTRUCT 12" RCP MANHOLE WITH 12" RCP PIPE TO ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION WELO STD 408	EA	1
12	CONSTRUCT EXISTING DRAIN PER ROUGH GRADE PLANS	EA	1
13	INSTALL 12" RCP EXISTING 24" RCP WITH CONCRETE COLLAR PER CITY OF MISSION WELO STD 411	EA	1
14	INSTALL 18" I.G. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10	EA	1
15	CONSTRUCT CONCRETE COLLAR PER CITY OF MISSION WELO STD 414	EA	2
16	INSTALL 30" RCP, BEDDING AND BACKFILL PER CITY OF MISSION WELO STD 430	LF	45
17	INSTALL 6" RCP STORMWATER BY CONCRETE PER DETAIL SHEET 9	EA	1
18	INSTALL 48" I.G. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10	EA	1
19	INSTALL 4" PVC SCH 40 AREA DRAIN PIPE CONNECTION TO CATCH BASIN PER DETAIL SHEET 2	LF	35
20	INSTALL 4" PVC SCH 40 SUBDRAIN COLLECTOR PIPE CONNECTION TO CATCH BASIN PER DETAIL SHEET 2	LF	3



ENCROACHMENT PERMIT:
A SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

NO.	REVISIONS	RECD'D	APPR'D	DATE

CIVIL ENGINEERING FIRM

Adams - Streeter
CIVIL ENGINEERS INC.
8 Corporate Park, Irvine, CA 92618
PH: 949-451-8200 FAX: 949-451-8201

UNDER THE RESPONSIBLE CHARGE OF:

M. M. M. 3-7-14

MUHAMMAD MUHAMMADABADI RCE 42815 GATE



STORM DRAIN IMPROVEMENT PLANS
FOR TRACT 17392

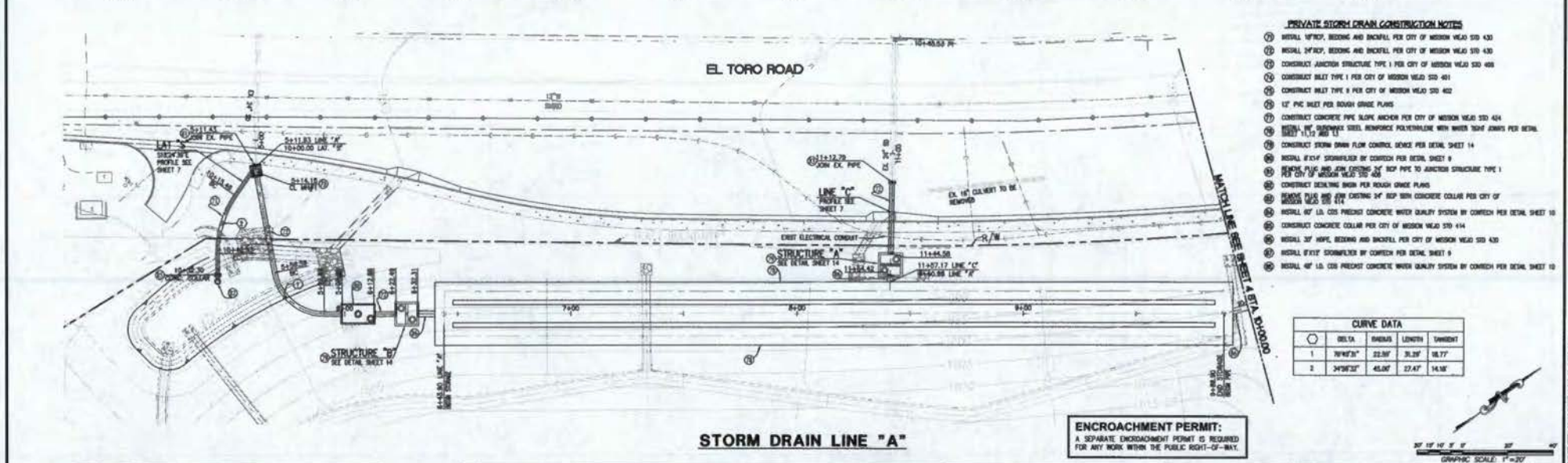
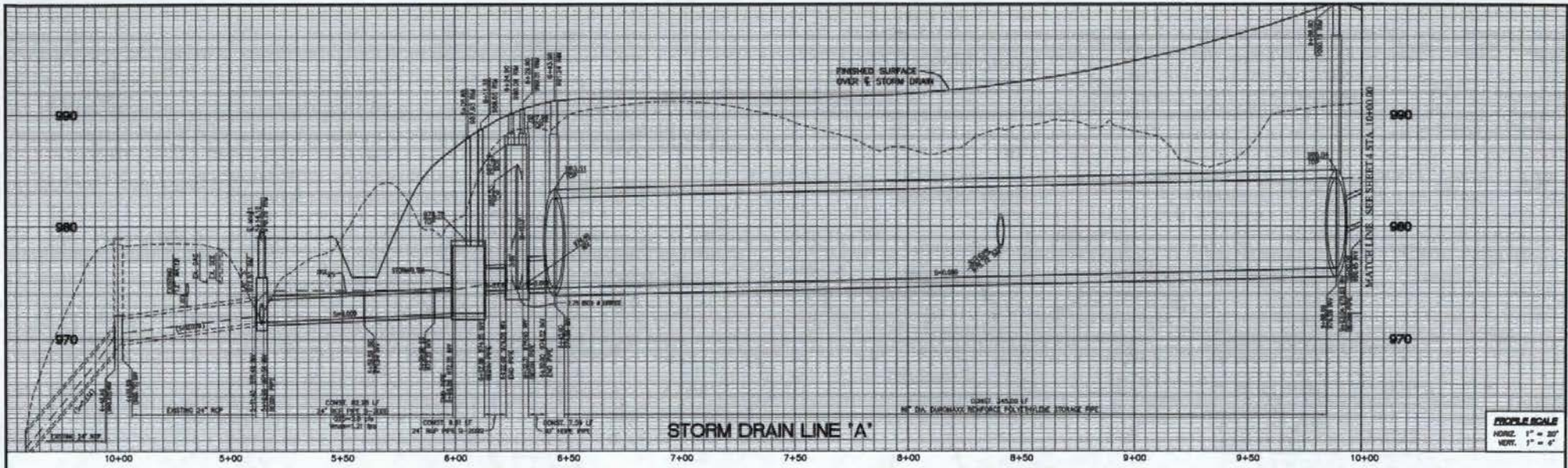
**INDEX MAP AND
CONST. QUANTITIES**

CITY OF MISSION VIEJO
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

PERMIT NO. _____

SHEET 2 OF 17

PLOT DATE: 3-7-14



- PRIVATE STORM DRAIN CONSTRUCTION NOTES**
- INSTALL 12" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
 - INSTALL 24" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
 - CONSTRUCT ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 408
 - CONSTRUCT INLET TYPE 1 PER CITY OF MISSION VIEJO STD 401
 - CONSTRUCT INLET TYPE 2 PER CITY OF MISSION VIEJO STD 402
 - 12" PVC INLET PER ROUGH GROUND PLANS
 - CONSTRUCT CONCRETE PIPE ALONG ANCHOR PER CITY OF MISSION VIEJO STD 424
 - INSTALL 1/2" GALVANIZED STEEL REINFORCE POLYETHYLENE WITH WATER TIGHT JOINTS PER DETAIL SHEET 11, 12, AND 13
 - CONSTRUCT STORM DRAIN FLOW CONTROL PER DETAIL SHEET 14
 - INSTALL 6" x 6" DIMENSIONED BY CORNER PER DETAIL SHEET 9
 - REMOVE PLUG AND JUMP EXISTING 24" RCP PIPE TO ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 408
 - CONSTRUCT BEDDING UNDER PER ROUGH GROUND PLANS
 - REMOVE PLUG AND JUMP EXISTING 24" RCP WITH CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 417
 - INSTALL 60" LB. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CORNER PER DETAIL SHEET 10
 - CONSTRUCT CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 414
 - INSTALL 30" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
 - INSTALL 6" x 6" DIMENSIONED BY CORNER PER DETAIL SHEET 9
 - INSTALL 60" LB. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CORNER PER DETAIL SHEET 10

CURVE DATA

NO.	DELTA	BEARS	LENGTH	TANGENT
1	70°42'31"	22.87'	31.29'	18.77'
2	34°08'32"	45.00'	27.47'	14.10'

ENCROACHMENT PERMIT:
A SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

HYDRAULIC DATA

LINE	STA TO STA	Q_{max}	Q_{min}	H	D	V_c	V_m	V_b	V_e	V_f
LINE A	5+16.80 - 5+66.88	3.80	0.0000	0.053	24"	0.50	0.7	0.68	0.9	1.30
LINE A	8+12.88 - 8+22.90	3.80	0.0000	0.053	24"	0.50	0.7	0.68	0.9	1.30
LINE A	8+31.90 - 8+36.90	3.80	0.0000	0.053	30"	0.40	0.7	0.64	1.0	1.88
LINE C	11+13.79 - 11+45.60	36.30	0.0000	0.053	24"	1.94	12.3	1.38	12.3	1.93
LINE S	10+02.48 - 10+33.30	20.80	0.0000	0.053	18"	1.47	1.7	1.47	1.7	2.38

NO.	REVISIONS	RECD'D	APPR'D	DATE

CIVIL ENGINEERING FIRM

Adams Streater
CIVIL ENGINEERS INC.
90 Corporate Park, Irvine, CA 92606
PH: 949-474-3390 FAX: 949-474-0581

UNDER THE RESPONSIBLE CHARGE OF:
M. M. M.
MOHAMMAD MOHAMMADBAZI RCE 42615

DATE: 3-7-16



STORM DRAIN IMPROVEMENT PLANS FOR TRACT 17392

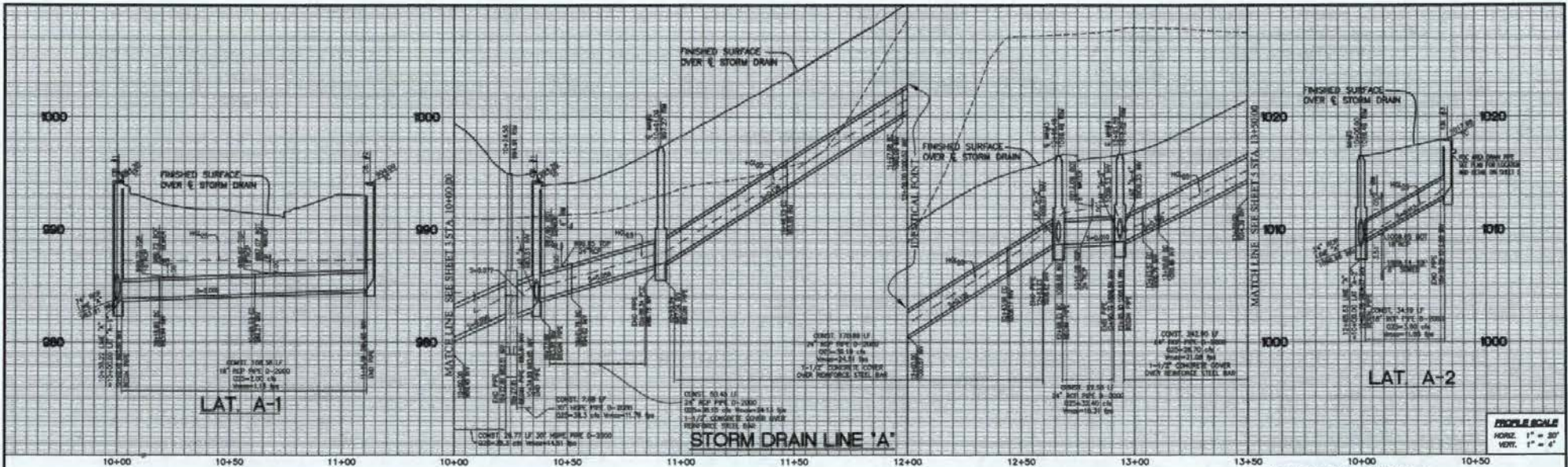
STORM DRAIN LINE "A", "C" AND "S" PLAN AND PROFILE

CITY OF MISSION VIEJO
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

PERMIT NO. _____

SHEET 3 OF 17

DATE: 3-7-16



HYDRAULIC DATA

LINE	STA	TO STA	Q_c	Q_p	H	D	f	V_1	V_2	V_3	V_4	V_5	V_6	V_7
LINE A	10+43.04	10+52.41	36.70	0.0000	0.03	30"	0.02	2.53	2.10	8.8	5.02			
LINE A	10+52.41	10+54.86	36.70	0.0792	0.02	30"	0.02	2.21	2.10	8.8	4.63			
LINE A	10+54.86	10+56.34	36.70	0.0590	0.03	24"	1.18	18.7	1.93	11.6	3.32			
LINE A	10+56.34	12+43.75	36.70	0.1280	0.03	24"	0.94	24.8	1.93	11.6	3.14			
LINE A	12+43.75	12+46.70	32.40	0.0101	0.03	24"	1.88	10.5	11.80	10.5	1.35			
LINE A	12+46.70	13+38.80	28.70	0.1000	0.03	24"	0.80	21.1	1.80	9.0	4.65			
LAT A-1	10+42.02	11+11.19	2.00	0.0080	0.03	18"	0.47	4.2	0.50	3.6	1.28			
LAT A-2	10+42.02	10+36.89	3.80	0.1000	0.03	18"	0.50	1.51	0.70	4.4	4.74			
LAT A-3	10+42.02	10+31.11	2.80	0.0780	0.03	18"	0.32	10.2	0.64	3.9	3.82			
LAT A-4	10+42.02	10+10.75	3.10	0.0640	0.03	18"	0.30	10.1	0.67	4.1	3.58			
LAT A-5	10+42.02	10+21.20	3.10	0.0650	0.03	18"	0.58	4.0	0.67	4.0	0.98			

STORM DRAIN LINE "A"
CIELO ENTRADA

ENCROACHMENT PERMIT:
A SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

- PRIVATE STORM DRAIN CONSTRUCTION NOTES**
- INSTALL UP/PC, BEDDING AND SHOULDER PER CITY OF MISSION VIEJO STD 430
 - INSTALL 24" RCP, BEDDING AND SHOULDER PER CITY OF MISSION VIEJO STD 430
 - CONSTRUCT ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 430
 - CONSTRUCT INLET TYPE 1 PER CITY OF MISSION VIEJO STD 401
 - CONSTRUCT INLET TYPE 2 PER CITY OF MISSION VIEJO STD 402
 - 12" PVC INLET FOR ROAD GRADE PLANS
 - CONSTRUCT CONCRETE PIPE SLOPE ANCHOR PER CITY OF MISSION VIEJO STD 424
 - INSTALL 1/2" SLOTTED STEEL REINFORCE POLYETHYLENE WITH WELDED JOINTS PER DETAIL SHEET 11.5.5 AND 13
 - CONSTRUCT STORM DRAIN FLOW CONTROL DEVICE PER DETAIL SHEET 14
 - INSTALL #214 STORMWATER BY CONCRETE PER DETAIL SHEET 9
 - REMOVE PILING AND JUMP EXISTING 24" RCP PIPE TO ANCHOR STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 408
 - CONSTRUCT DETAILING BENCH PER ROAD GRADE PLANS
 - REMOVE PILING AND JUMP EXISTING 14" RCP WITH CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 414
 - INSTALL 48" I.D. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10
 - CONSTRUCT CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 414
 - INSTALL 30" HDPE, BEDDING AND SHOULDER PER CITY OF MISSION VIEJO STD 430
 - INSTALL #214 STORMWATER BY CONCRETE PER DETAIL SHEET 9
 - INSTALL 48" I.D. CDS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10
 - INSTALL 4" PVC 50' 4" AREA DRAIN PIPE CONNECTION TO CATCH BASIN PER DETAIL ON SHEET 2

CURB INLET SCHEDULE

CD NO.	L	H	COND.
1	7.0'	10.5'	0.8' FLOW BY
2	3.5'	7.7'	2.0' SLUMP
3	14.0'	5.0'	3.9' FLOW BY
4	14.0'	7.0'	3.0' FLOW BY
5	7.0'	6.8'	1.8' SLUMP

CURVE DATA

CD NO.	DELTA	MINORS	LENGTH	TANGENT
3	54°00'00"	45.00'	48.41'	22.95'
4	103°00'00"	22.50'	38.57'	23.77'
5	203°00'00"	108.00'	58.40'	23.85'
6	192°25'42"	90.00'	48.22'	23.67'
7	89°38'28"	22.50'	25.34'	22.90'
8	205°54'44"	22.50'	11.75'	8.01'
9	72°00'00"	170.00'	288.12'	125.43'

NO.	REVISIONS	RECD/CD	APPR/VD	DATE

CIVIL ENGINEERING FIRM
Adams Streater
 CIVIL ENGINEERS INC.
 18 Corporate Park, Irvine, CA 92606
 PH: 949.444.2300 FAX: 949.444.2051

UNDER THE RESPONSIBLE CHARGE OF:

 MOHAMAD MOHAMMADABADI RICE 42615

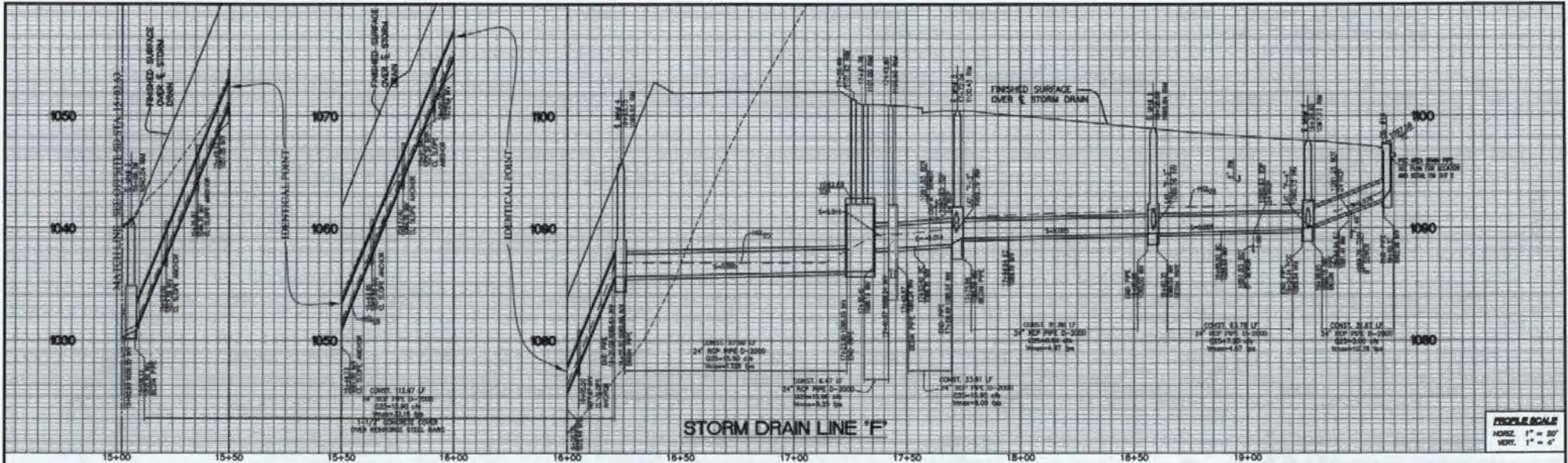
3-7-14

STORM DRAIN IMPROVEMENT PLANS
 FOR TRACT 17392
STORM DRAIN LINE "A"
 PLAN AND PROFILE

CITY OF MISSION VIEJO
 DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

PERMIT NO. _____
 SHEET 4 OF 17

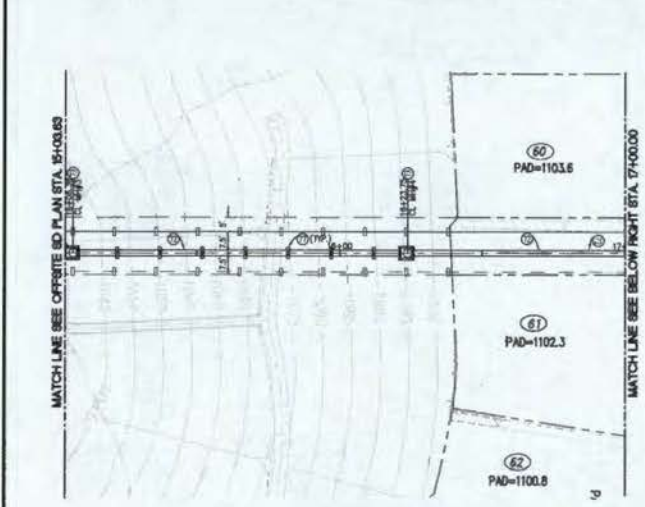
DATE: 3-7-14



VERTICAL POINT

STORM DRAIN LINE "F"

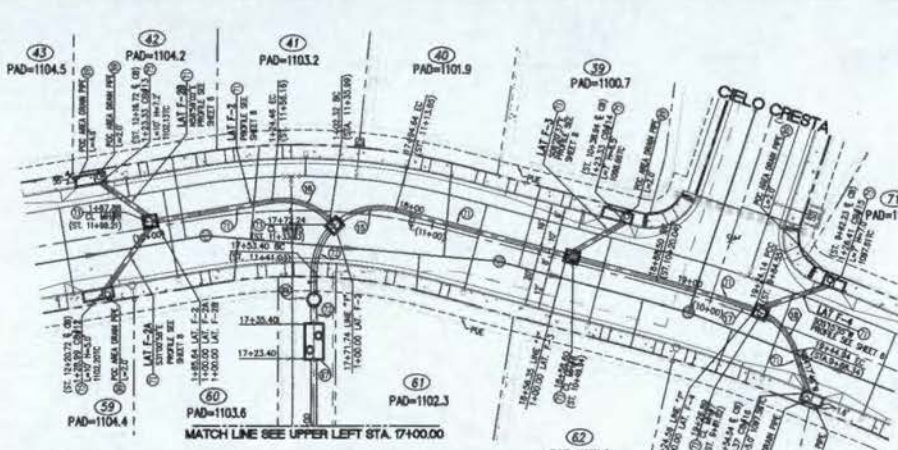
PEOPLE SCALE
HORIZ. 1" = 30'
VERT. 1" = 4'



STORM DRAIN LINE "F"

CURB INLET SCHEDULE

CB. NO.	L.	H.	Q(DFS)	COND.
12	10.0'	5.0'	3.9	FLOW BY
13	10.0'	7.2'	3.8	FLOW BY
14	7.0'	6.5'	2.0	FLOW BY
15	7.0'	7.0'	2.3	FLOW BY
16	7.0'	5.0'	5.44	SUMP



PRIVATE STORM DRAIN CONSTRUCTION NOTES

- INSTALL 18" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
- INSTALL 24" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
- CONSTRUCT JUNCTION STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 400
- CONSTRUCT INLET TYPE 1 PER CITY OF MISSION VIEJO STD 401
- CONSTRUCT INLET TYPE 2 PER CITY OF MISSION VIEJO STD 402
- 12" PVC INLET PER ROAD GRAD PLANS
- CONSTRUCT CONCRETE PIPE SLOPE ANCHOR PER CITY OF MISSION VIEJO STD 404
- INSTALL 6" GALVANIZED STEEL REINFORCED POLYETHYLENE WITH WATER TIGHT JOINTS PER DETAIL SHEET 13.5 AND 15
- CONSTRUCT STORM DRAIN FLOW CONDUIT PER DETAIL SHEET 14
- INSTALL 24" STORMFLOWER BY CONCRETE PER DETAIL SHEET 8
- REMOVE PILING AND CON. EXISTING 24" RCP PIPE TO JUNCTION STRUCTURE TYPE 1 PER CITY OF MISSION VIEJO STD 400
- CONSTRUCT BEDDING UNDER PER ROAD GRAD PLANS
- REMOVE PILING AND CON. EXISTING 24" RCP PIPE TO CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 414
- INSTALL 18" L.D. COS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10
- CONSTRUCT CONCRETE COLLAR PER CITY OF MISSION VIEJO STD 414
- INSTALL 30" RCP, BEDDING AND BACKFILL PER CITY OF MISSION VIEJO STD 430
- INSTALL 24" STORMFLOWER BY CONCRETE PER DETAIL SHEET 8
- INSTALL 18" L.D. COS PRECAST CONCRETE WATER QUALITY SYSTEM BY CONCRETE PER DETAIL SHEET 10
- INSTALL 4" PVC SCH 40 AREA DRAIN PIPE CONNECTION TO CATCH BASIN PER DETAIL ON SHEET 2

HYDRAULIC DATA

LINE	STA TO	STA	Q ₁₀	Q ₅	Q ₂	S	D	n	V ₁₀	V ₅	V ₂	T ₁₀	T ₅	T ₂
LINE F	18+25.00	18+25.00	15.90	0.0000	0.00	24"	0.43	32.1	1.44	6.9	10.33			
LINE F	18+25.00	17+23.40	15.90	0.0000	0.00	24"	1.83	5.8	1.44	6.9	0.77			
LINE F	17+23.40	17+40.87	15.90	0.0000	0.00	24"	0.83	11.1	1.44	6.9	2.29			
LINE F	17+40.87	17+48.00	15.90	0.0000	0.00	24"	1.11	8.9	1.44	6.9	1.65			
LINE F	17+48.00	18+55.85	8.90	0.0000	0.00	24"	1.04	5.2	1.09	5.2	1.00			
LINE F	18+55.85	18+55.85	7.20	0.0000	0.00	24"	0.97	4.9	0.95	4.9	1.02			
LINE F	18+55.85	19+60.37	3.00	0.0000	0.00	24"	0.30	11.9	0.79	4.35	4.08			
LAT F-2	19+60.37	19+60.37	1.30	0.0740	0.00	18"	0.30	13.3	1.05	5.5	3.87			
LAT F-3	19+60.37	19+60.37	3.90	0.0000	0.00	18"	0.30	12.3	0.76	4.4	4.33			
LAT F-3	19+60.37	19+60.37	3.60	0.0000	0.00	18"	0.30	6.9	0.79	4.3	2.01			
LAT F-3	19+60.37	19+60.37	1.80	0.0000	0.00	18"	0.30	10.1	0.96	3.4	4.39			
LAT F-4	19+60.37	19+60.37	2.30	0.0000	0.00	18"	0.40	6.1	0.97	3.7	2.02			

CURVE DATA

Δ	DELTA	RADIUS	LENGTH	TANGENT
15	194°50'45"	22.50'	45.33'	28.33'
16	58°27'33"	22.50'	22.14'	12.06'
17	49°03'03"	300.00'	35.64'	17.82'
18	32°08'47"	22.50'	28.81'	11.21'

STORM DRAIN LINE "F"
CELO AZUL

CIVIL ENGINEERING FIRM
Adams - Streater
CIVIL ENGINEERS INC.
18 Corporate Park, Irvine, CA 92614
PH: 949.261.6200 FAX: 949.261.6201

UNDER THE RESPONSIBLE CHARGE OF:
M.H.S.

3-7-14



STORM DRAIN IMPROVEMENT PLANS
FOR TRACT 17392

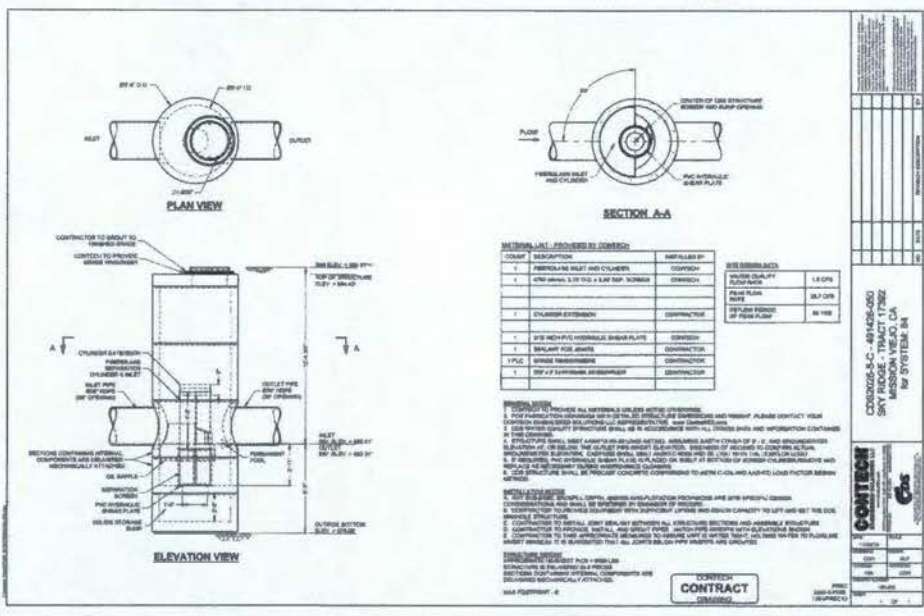
STORM DRAIN LINE "F"
PLAN AND PROFILE

CITY OF MISSION VIEJO
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

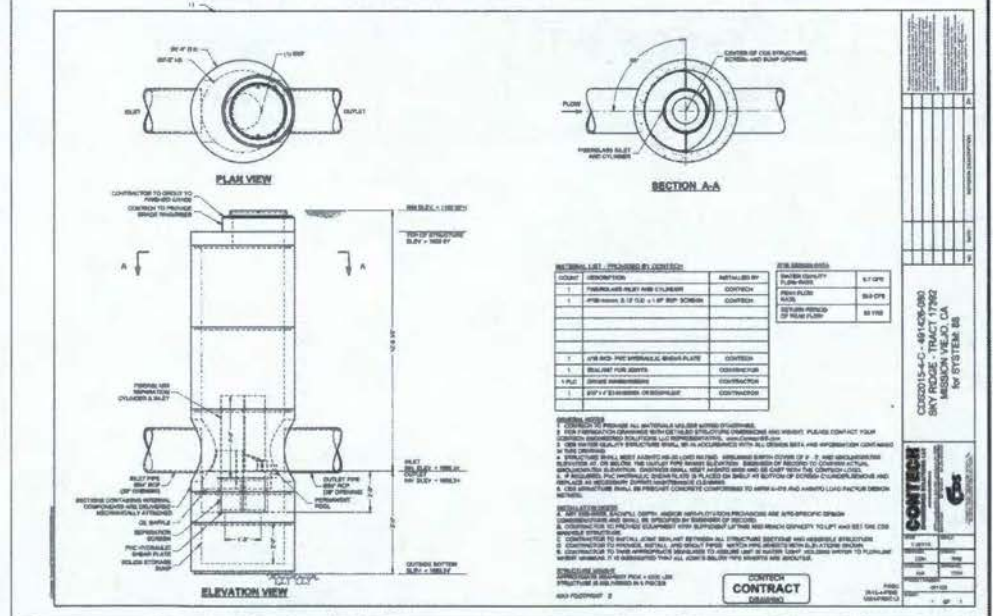
PERMIT NO. _____

SHEET 6 OF 17

DATE: 3-7-14



84 CDS PRECAST CONCRETE WATER QUALITY SYSTEM



87 CDS PRECAST CONCRETE WATER QUALITY SYSTEM

NO.	REVISIONS	RECD'D	APPR'D	DATE



STORM DRAIN IMPROVEMENT PLANS
FOR TRACT 17392
Stormwater BMP Details by
CONTECH Construction Products, Inc.
FOR REFERENCE ONLY

CITY OF MISSION VIEJO
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

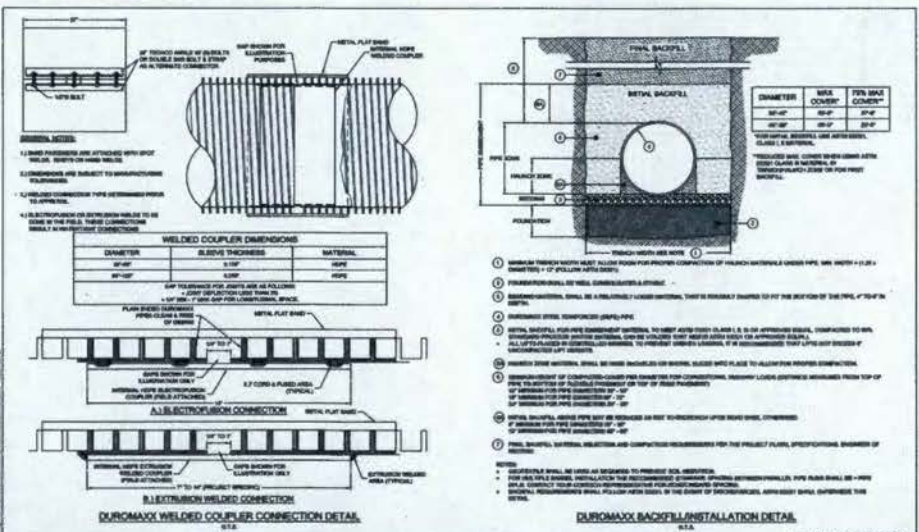
PERMIT NO. _____

JOB NO. _____

SHEET 10 of 17

PLOT DATE: 3-7-14

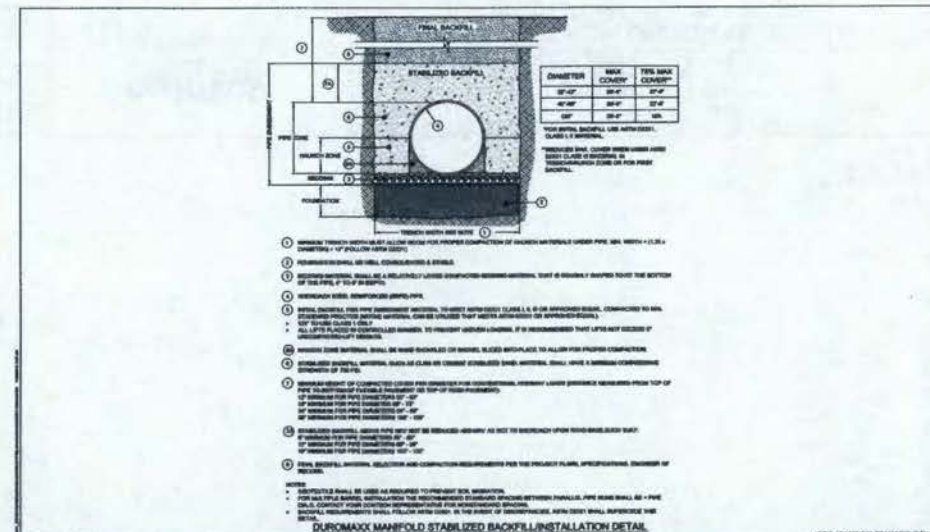
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CONTECH CONSTRUCTION PRODUCTS INC. DUROMAXX - 491428-010 SKY RIDGE - TRACT 17392 MISSION VIEJO, CA SITE DESIGNATION: SITE 78

DUROMAXX WELDED COUPLER CONNECTION DETAIL

DUROMAXX BACKFILL INSTALLATION DETAIL



CONTECH CONSTRUCTION PRODUCTS INC. DUROMAXX - 491428-010 SKY RIDGE - TRACT 17392 MISSION VIEJO, CA SITE DESIGNATION: SITE 78

DUROMAXX MANHOLE STABILIZED BACKFILL INSTALLATION DETAIL

78 DUROMAXX DETAIL

78 DUROMAXX DETAIL

NOTE: IF FIELD MODIFICATION OF DUROMAXX COUPLER WILL BE ALLOWED, UNLESS APPROVED IN WRITING BY THE CITY

NO.	REVISIONS	RECORD	APPROV'D	DATE

CONTECH
CONSTRUCTION PRODUCTS
INC.
801 Progress Street, Suite 100, Lodi, CA 93240
925-335-1100

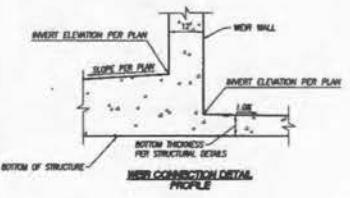
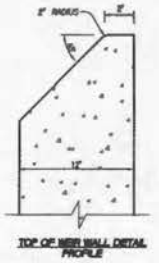
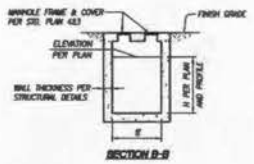
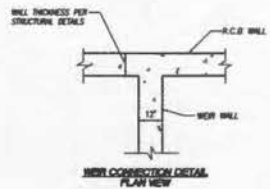
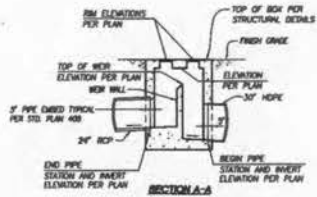
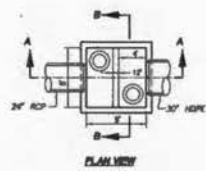
STORM DRAIN IMPROVEMENT PLANS
FOR TRACT 17392
Stormwater BMP Details by
CONTECH Construction Products, Inc.
FOR REFERENCE ONLY

PERMIT NO. -

CITY OF MISSION VIEJO
DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

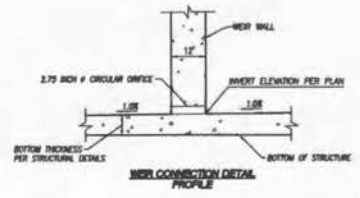
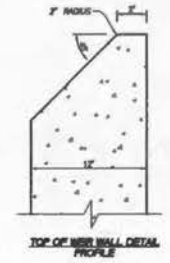
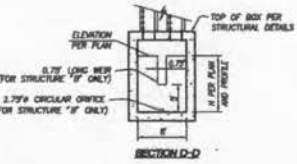
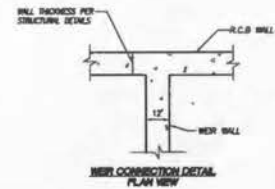
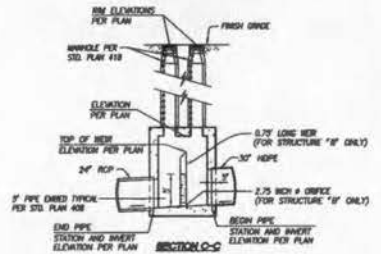
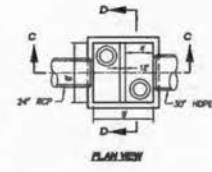
SHEET 12 OF 17

PLAT DATE: 3-7-14



NOTE: SEE STRUCTURAL SHEETS S-1 AND S-2 FOR REINFORCING INFORMATION, CONCRETE SPECIFICATIONS, AND ADDITIONAL DIMENSIONS.

STORM DRAIN FLOW CONTROL DEVICE FOR STRUCTURE A 79



NOTE: SEE STRUCTURAL SHEETS S-1 AND S-3 FOR REINFORCING INFORMATION, CONCRETE SPECIFICATIONS, AND ADDITIONAL DIMENSIONS.

STORM DRAIN FLOW CONTROL DEVICE FOR STRUCTURE B 79

NO.	REVISIONS	REC'D	APP'D	DATE

CIVIL ENGINEERING FIRM
Adams - Streeter
 CIVIL ENGINEERS, INC.
 18 Corporate Park, Irvine, CA 92608
 Phone: 949-261-3300 Fax: 949-261-0291
 UNDER THE RESPONSIBLE CHARGE OF:
 M.H.S.
 MOHAMMAD MOHAMMADBAKH RCE 42615
 3-7-14



STORM DRAIN IMPROVEMENT PLANS
 FOR TRACT 17392
FLOW CONTROL DEVICE DETAILS

PERMIT NO. -

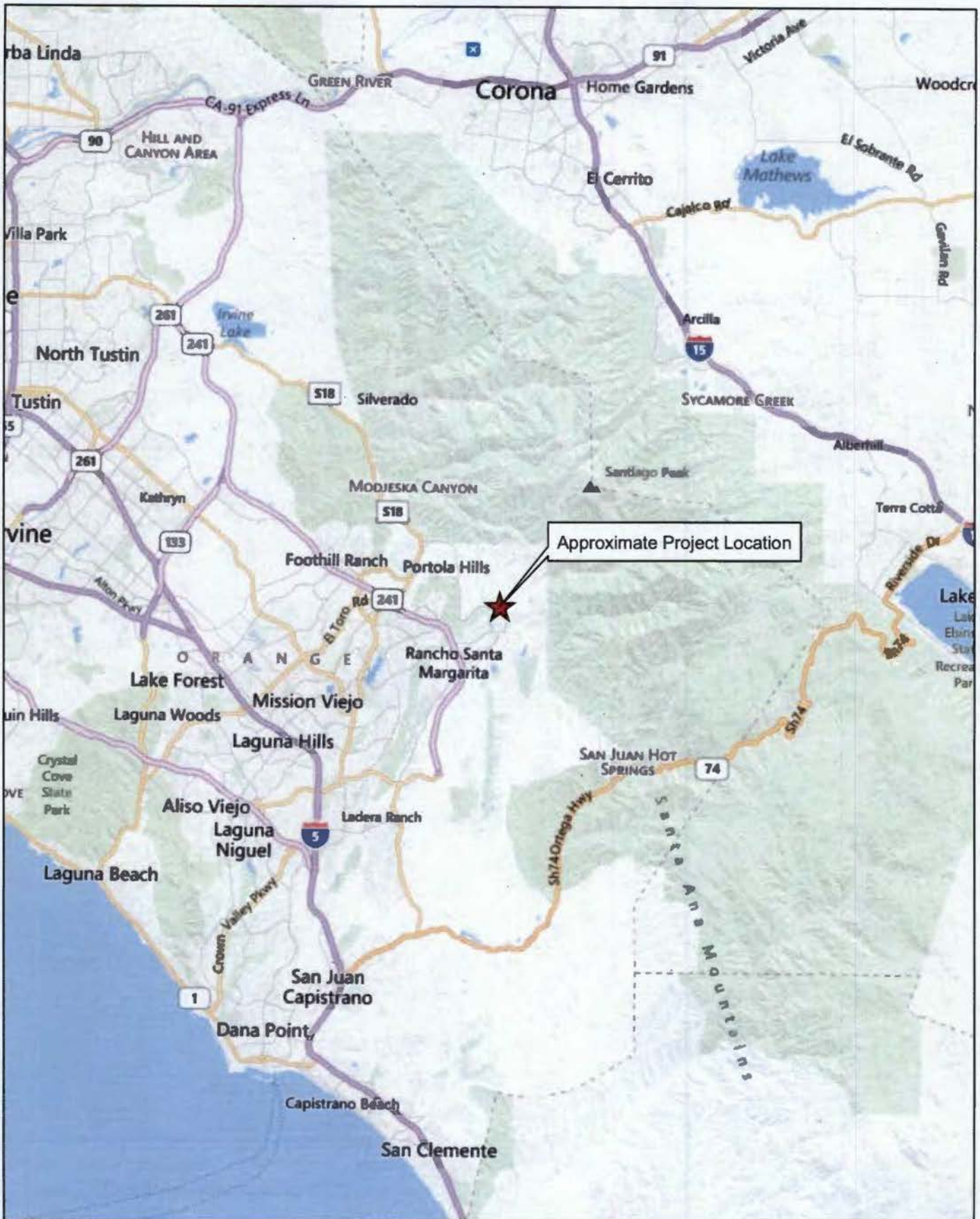
CITY OF MISSION VIEJO
 DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

SHEET 14 OF 17

PLOT DATE: 3-7-14

Standard Pacific Homes
Skyridge Development Project
Certification No. R9-2013-0057

**ATTACHMENT 4
MITIGATION FIGURES**



<p>Prepared By:  VCS Environmental</p> <p>Map Created: 4/3/2014</p>	<p>   1 inch = 20,000 feet </p>	<p>Data Source: Bing Maps</p>	<p>Parker West Regional Location Map</p>
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FIGURE 4

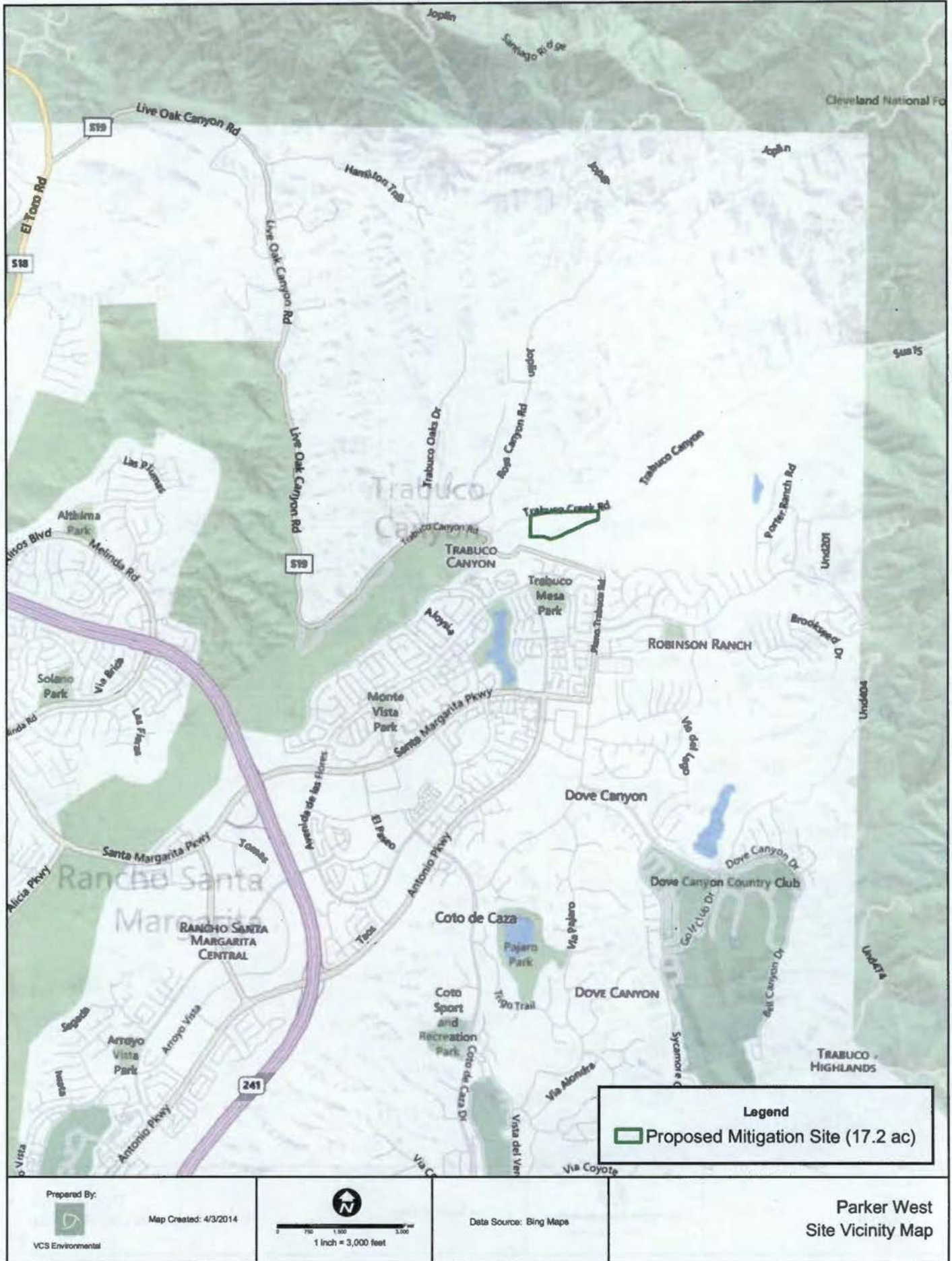
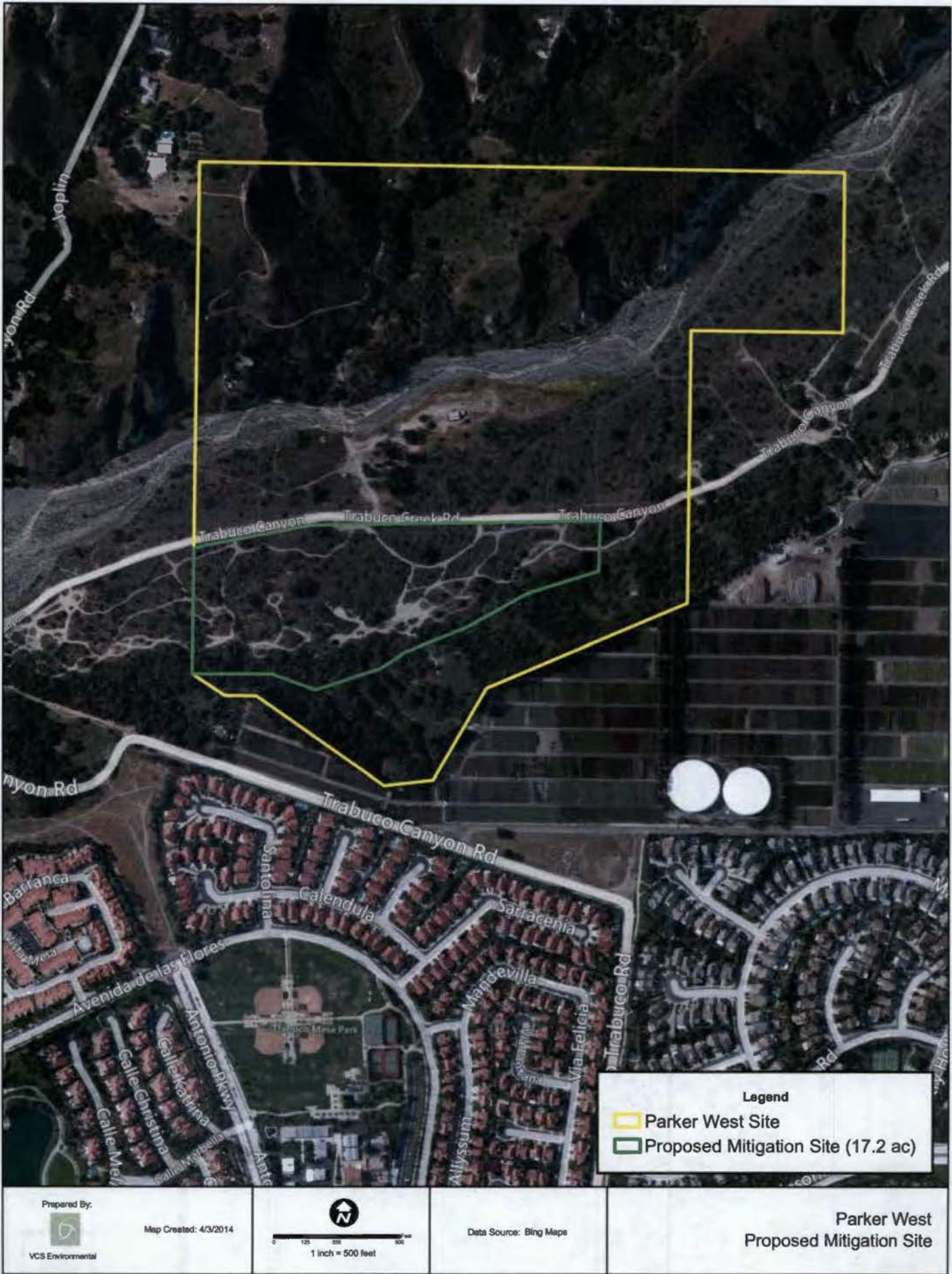


FIGURE 5



Prepared By:

 VCS Environmental

Map Created: 4/3/2014


 0 125 250 500
 1 inch = 500 feet

Data Source: Bing Maps




Legend
 Parker West Site
 Proposed Mitigation Site (17.2 ac)

Parker West
 Proposed Mitigation Site

FIGURE 6



Skyridge Mitigation - Existing Resources

-  Coastal Sage Scrub / Mulefat Scrub
-  Oak Woodland
-  Drainages



VCS ENVIRONMENTAL
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675
(949) 489-2700
fax (949) 489-0309

Figure 7



Skyridge Mitigation - Proposed Creation



Mitigation Site Boundary



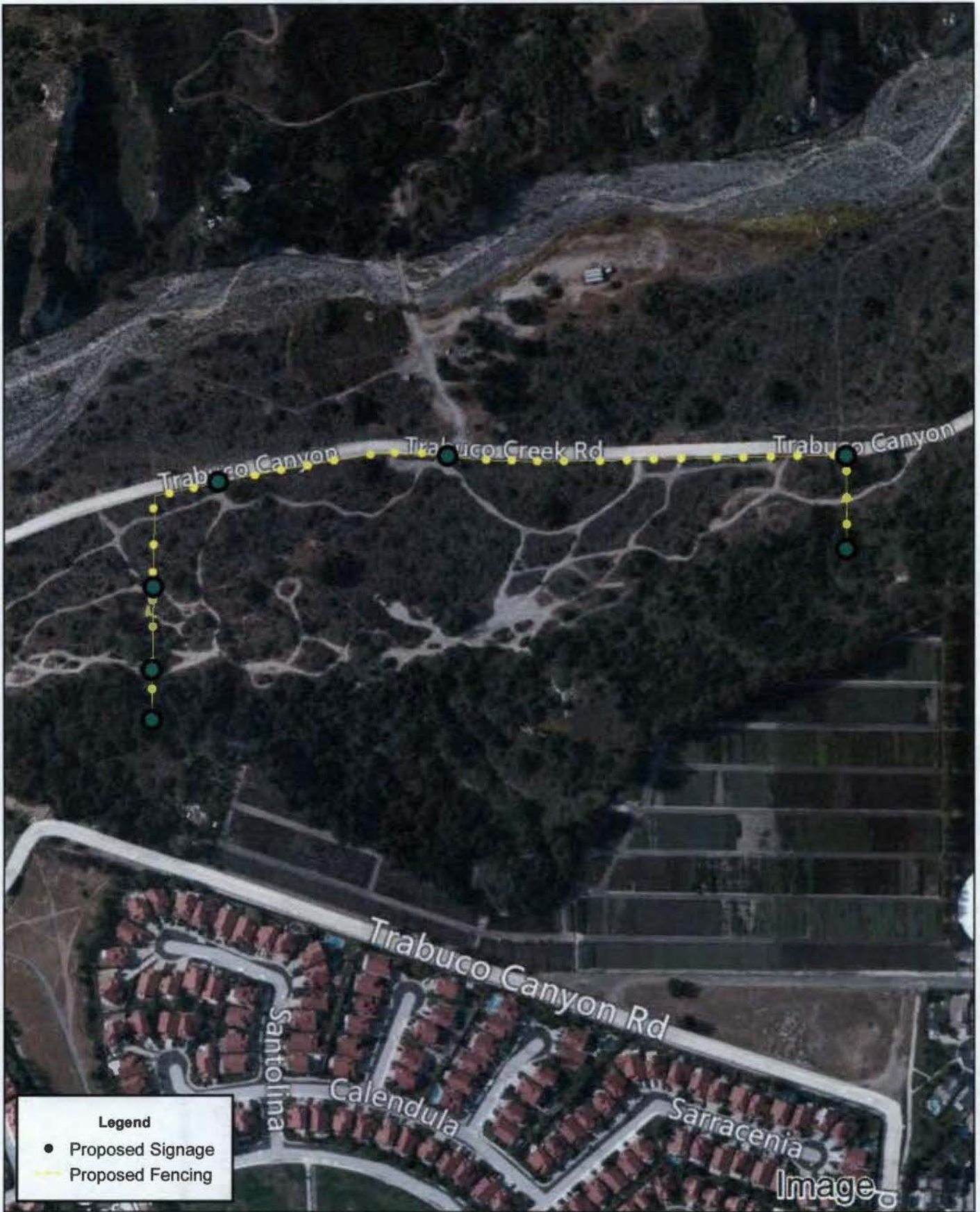
Existing Depressional Features



Proposed Water Feature (~2,800 linear feet/1.01 acre)



VCS ENVIRONMENTAL
 30900 Rancho Viejo Road, Suite 100
 San Juan Capistrano, CA 92675
 (949) 489-2700
 fax (949) 489-0309



Legend

- Proposed Signage
- Proposed Fencing

Prepared By:

 VCS Environmental

Map Created: 6/09/2014



 1 inch = 300 feet

Data Source: Bing Maps

Standard Pacific
 Skyridge Mitigation Site

Standard Pacific Homes
Skyridge Development Project
Certification No. R9-2013-0057

ATTACHMENT 5
CEQA MITIGATION MONITORING AND REPORTING PROGRAM

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
Public Health and Safety				
SC 4.5-1	The City of Mission Viejo will require all plans for proposed residential development within the project area to comply with all applicable Federal, State, and local regulations pertaining to the transport, storage, use and/or disposal of hazardous materials on the site.	Plan Check	Prior to Issuance of Building Permit	Public Works Department
MM 4.5-1a	<p>Prior to commencement of grading and construction, the construction supervisor shall provide an orientation to all on-site construction personnel on the identification of potential equipment leaks, spills or potential contamination (e.g., soil staining, odors, etc.). In the event any indication of contamination is observed during site preparation and grading, the following measures shall be implemented immediately:</p> <ul style="list-style-type: none"> ▪ Construction activities shall be halted by any construction personnel if they observe any indication of hazardous materials contamination. ▪ A qualified professional shall be retained to conduct an investigation and recommend the appropriate response to protect human health and the environment as well as identify the agency with oversight responsibility. ▪ If determined necessary, a remedial action plan (RAP) shall be prepared and submitted to the Orange County Health Care Agency and/or Regional Water Quality Control Board for review and approval. ▪ The clean up criteria proposed for the project area in the RAP (if required) will be based on standards accepted by the RWQCB and other agencies having oversight, with consideration given to local site conditions and future land use. ▪ Any contaminated soils that may be encountered shall be remediated in compliance with applicable California environmental regulations. 	Documentation of Meeting	Prior to Issuance of Grading Permit	Engineering Department
MM 4.5-1b	Prior to export of soils from the project site, the soil materials shall be tested to ensure that <u>de minimis</u> levels of contamination are not exceeded.	Documentation of Testing	Prior to Issuance of Grading Permit	Engineering Department
MM 4.5-1c	Prior to issuance of a grading permit, the area of stained soil shall be excavated and transported off site for disposal in accordance with state and federal regulations. In addition, a soil management plan shall be prepared to address the procedures to be conducted if additional areas of stained soil are encountered during future Site grading.	On-Site Monitoring	Prior to Issuance of Grading Permit	Engineering Department
MM 4.5-2	Prior to issuance of a demolition permit, a sampling and analytical testing program shall be undertaken by a certified asbestos consultant (CAC) and certified LBP inspector (unless those materials are handled as ACM and/or LBP). If ACM or LBP are detected, the materials shall be removed	Documentation of Sampling and Testing	Prior to Issuance of Demolition Permit	Public Works Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	by a licensed asbestos or LBP contractor prior to any building demolition or renovation that would disturb the identified ACM or LBP.			
Drainage and Hydrology				
SC 4.6-1	Prior to issuance of a grading permit, the project applicant shall be required to submit a notice of intent (NOI) with the appropriate fees to the State Water Quality Resources Control Board for coverage of such future projects under the General Construction Activity Storm Water Runoff Permit prior to initiation of construction activity at a future site. As required by the NPDES permit, a Storm Water Pollution and Prevention Plan (SWPPP) will be prepared and will establish BMPs in order to reduce sedimentation and erosion.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
SC 4.6-2	Prior to issuance of the grading permit by the City Council, the project applicant shall prepare a Preliminary Water Quality Management Plan (WQMP) for the project and submit the Final WQMP to the City of Mission Viejo for approval with the project improvement plans. The WQMP shall specifically identify Best Management Practices (BMPs) that will be used to control predictable pollutant runoff, including flow/volume-based measures to treat the "first flush." The WQMP shall identify at a minimum the routine structural and non-structural measures specified in the Countywide NPDES Drainage Area Master Plan (DAMP), which details implementation of the BMPs whenever they are applicable to a project, the assignment of long-term maintenance responsibilities, and shall reference the locations of structural BMPs.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
SC 4.6-3	Prior to issuance of a grading permit, the project applicant shall prepare a Storm Water Pollution and Prevention Plan (SWPPP). The SWPPP will establish BMPs in order to reduce sedimentation and erosion and prevent construction pollutants from leaving the site. The project shall also incorporate all monitoring elements as required in the General Construction Permit. The project applicant shall also develop an erosion and sediment control plan to be reviewed and approved by the City of Mission Viejo prior to issuance of grading permit.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
SC 4.6-4	Future site grading and construction shall comply with the drainage controls imposed by the applicable building code requirements prescribed by the City of Mission Viejo.	Plan Check/On-Site Monitoring	During Grading and Construction	Engineering Department
Biological Resources				
SC 4.7-1	Prior to issuance of a grading permit, the applicant shall apply to the U.S. Army Corps of Engineers for a Section 404 Nationwide Permit for impacts to jurisdictional Waters of the U.S. Development of the Additional Annexation Properties may also impact Waters of the State and be subject to the same permitting requirements.	Permit	Prior to Issuance of Grading Permit	U.S. Army Corps of Engineers

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
SC 4.7-2	Prior to issuance of a grading permit, the applicant shall apply for a Section 401 Water Quality Certification for impacts to jurisdictional Waters of the U.S.	Permit	Prior to Issuance of Grading Permit	California Regional Water Quality Control Board
SC 4.7-3	Prior to issuance of a grading permit, the applicant shall submit a notification for lake or stream alteration (1602 permit) and shall submit resulting Department determination to the City Planning Manager for impacts to areas known to support existing fish and wildlife resources associated with stream bed, banks or channels.	Permit	Prior to Issuance of Grading Permit	California Department of Fish & Game
PDF 4.7-1	Specifications for the Project limits will be mapped and clearly flagged or marked prior to the arrival of work crews. Work area limits will be defined and work crews will be restricted to designated work areas.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
PDF 4.7-2	To minimize the amount of new disturbance, the anticipated impact zones, including parking areas, staging areas, storage areas, equipment access, and disposal or temporary placement of spoils, will be restricted to designated areas, specifically existing disturbed areas (parking lots, access roads, and graded areas), to the extent possible. These areas will be clearly flagged or marked prior to construction to avoid natural resources where possible.	On-Site Monitoring	During Grading and Construction	Engineering Department
PDF 4.7-3	Storage of all equipment and hazardous materials will be located at least 50 feet from all drainages.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
PDF 4.7-4	Fueling areas will be protected from storm water run-on and run-off, and will be located at least 50 feet from all drainages. Drip pans or absorbent pads will be used during vehicle and equipment fueling. Absorbent spill clean-up materials and spill kits will be available in fueling areas. Fuels will be stored in containment basins.	On-Site Monitoring	During Grading and Construction	Engineering Department
PDF 4.7-5	No foreign materials, such as petroleum or other fuels, will be released into drainages. All petroleum products chemicals, silt, fine soils, and any substance or material deleterious to listed species will not be allowed to pass into, or be placed where it can pass into a stream channel. There will be no sidcasting of material into any waterway.	On-Site Monitoring	During Grading and Construction	Engineering Department
PDF 4.7-6	Implement appropriate erosion control practices to minimize the amount of land disturbance.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
PDF 4.7-7	Prior to Project implementation, a biologist will conduct a Worker Environmental Awareness Program (WEAP) which will describe the biological constraints of the Project. All on-site personnel who will work within the Study Area will attend the WEAP prior to the commencement of construction activity. The WEAP will be administered to all on-site personnel regarding the sensitive biological resources, restrictions, protection measures, and individual responsibilities associated with the Project.	Plan Check	Prior to Project Implementation	Community Development Department
PDF 4.7-8	A qualified biologist shall be onsite to monitor all activities that result in the clearing of sensitive habitat as well as	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	grading, excavation, and/or other ground-disturbing activities in jurisdictional areas. The biological monitor will halt construction activities if threatened or endangered species are identified and will be directly impacted and notify the appropriate agencies immediately.			
PDF 4.7-9	Work area limits will be defined and respected. All construction/laydown areas will have their boundaries clearly flagged or marked before Project implementation and all disturbances will be confined to the flagged areas. All Project personnel will be instructed that their activities must be confined to locations within the flagged areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys.	On-Site Monitoring	During Grading and Construction	Engineering Department/ Construction Manager
PDF 4.7-10	Removal of any trees, shrubs or any other potential nesting habitat will be conducted outside of the nesting season (February 15 to September 15) to the extent practical. Precautions will be taken to avoid damage to vegetation by people or equipment during the breeding season.	On-Site Monitoring	During Grading and Construction	Community Development Department
PDF 4.7-11	Cleared or trimmed vegetation and woody debris will be disposed of in a legal manner at an approved disposal site.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-12	All unnecessary lights will be turned off at night to avoid attracting migratory birds and insects which would then attract bats.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-13	If any wildlife is encountered during the course of Project activities, said wildlife will be allowed to freely leave the area unharmed.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-14	Wildlife will not be disturbed, captured, harassed, or handled. Animal nests, burrows and dens will not be disturbed without prior survey from a qualified biologist.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-15	Active nests (nests with chicks or eggs) cannot be removed or disturbed from February 15 to September 15, but nests can be removed or disturbed during this period if not active, by a qualified biologist. Nests can be removed or disturbed from September 16 to February 14 and if not active.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-16	To avoid impacts to wildlife, the applicant will comply with all litter and pollution laws and will institute a litter control program during the course of the construction activities. All contractors, subcontractors, and employees shall also obey these laws. Trash removal will reduce the attractiveness of the area to opportunistic predators such as coyotes, opossums, and common ravens.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-17	Employees, contractors, and site visitors will be prohibited from collecting plants and wildlife.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
PDF 4.7-18	The use of broadcast and second-generation rodenticides known to have adverse effects on avian and mammalian species, including those with brodifacoum; bromadiolone; or difethialone as active ingredients, shall be prohibited on the	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	Project site within areas accessible to wildlife (i.e., areas not associated with structures). The Applicant shall include this restriction within its Homeowners' Association Covenants, Conditions, & Restrictions.			
PDF 4.7-19	The applicant shall not plant, seed, or otherwise introduce invasive nonnative plant species to the landscaped areas adjacent to and/or near open space areas and within or adjacent to stream channels (minimum 100 foot setback from open space areas and 150 foot setback from stream channels and wetland/riparian mitigation sites). Invasive nonnative plant species not to be used include those species listed on the "California Invasive Plant Inventory, February 2006" and the "February 2007 Inventory Update." This list includes: pepper trees (<i>Schinus</i> sp.), pampas grass (<i>Cortaderia</i> sp.), fountain grass (<i>Pennisetum setaceum</i>), ice plant (<i>Carpobrotus</i> sp., <i>Mesembryanthemum</i> sp., etc.), myoporum (<i>Myoporum</i> sp.), black locust (<i>Robinia pseudoacacia</i>), capeweed (<i>Arctotheca</i> sp.), tree-of-heaven (<i>Ailanthus altissima</i>), periwinkle (<i>Vinca major</i>), sweet alyssum (<i>Lobularia maritima</i>), English ivy, (<i>Hedera helix</i>), French broom (<i>Genista monspessulana</i>), Scotch broom (<i>Cytisus scoparius</i>), Spanish broom (<i>Spartium junceum</i>), and perennial pepperweed (<i>Lepidium latifolium</i>). A copy of the complete list can be obtained at their website at www.cal-ipc.org .	Plan Check	Prior to Issuance Approval of Final Landscape Plan	Community Development Department
MM 4.7-1	Prior to issuance of the grading permit for the Skyridge project, the applicant shall preserve at least 8.46 acres of coastal sage scrub habitat either by recordation of a conservation easement over existing habitat or purchase of off-site mitigation credits. Recordation of a conservation easement is preferred unless suitable habitat is not available, at which point the applicant may purchase mitigation bank credits: 1. Dedicate a conservation easement permanently preserving 8.46 acres of similar quality coastal sage scrub habitat that is accepted by the City of Mission Viejo. 2. Purchase off-site mitigation credits through a resource agency approved mitigation bank for permanent and temporary impacts to approximately 2.82 acres of sensitive mixed coastal sage scrub habitat at a 3:1 ratio for permanent impacts for a total of no less than 8.46 acres.	Permit	Prior to Issuance of Grading Permit	Community Development Department
MM 4.7-2	Prior to the issuance of a grading permit on the Additional Annexation Properties, the applicant shall mitigate for the loss of mixed coastal sage scrub habitat at a 3:1 ratio for permanent impacts and a 1:1 ratio for temporary impacts by either purchasing credits from an approved mitigation bank or by dedicating a conservation easement over off-site	Permit	Prior to Issuance of Grading Permit	Community Development Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	properties with similar habitat and approved by the City of Mission Viejo.			
MM 4.7-3a	All vegetation removal activities shall be scheduled to occur outside the nesting season to avoid potential impacts to nesting birds. The nesting season is typically from February 15 to September 15, but can vary slightly from year to year. If vegetation must be removed during the period of February 15 through September 15, the applicant shall have a qualified biologist survey all potential nesting vegetation within the site for nesting birds, prior to commencing vegetation removal. Surveys shall be conducted once a day for five days at the appropriate time of day during the breeding season and surveys shall end no more than three days prior to vegetation removal and/or disturbance. Documentation of surveys and findings shall be submitted to the City and, upon Department request, the Department. Based on the submitted information, the City (and Department, if the Department requests) would determine whether to allow initiation of Project activities. If no nesting birds were observed and concurrence was requested by CDFG and received by the City, Project activities may begin. If an active bird nest is located, the nest site shall be fenced a minimum of 100 feet (500 feet for endangered, threatened, and candidate species and all raptors) in all directions, and this area shall not be disturbed until after the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities.	Documentation of Surveys	Prior to Initiation of Grading	Community Development Department
MM 4.7-3b	The applicant shall initiate grading and construction activities outside of CAGN breeding season (February 15 through September 15). If grading and construction activities begin during breeding season, the project biologist shall survey all potential nesting vegetation within and adjacent to the site for nesting birds, prior to commencing grading and construction activities. Surveys shall be conducted once a day for five days at the appropriate time of day during the breeding season and surveys shall end no more than three days prior to the start of grading and construction activities. Documentation of surveys and findings shall be submitted to the City and, upon Department request, the Department. Based on the submitted information, the City (and Department, if the Department requests) would determine whether to allow initiation of Project activities. If no nesting birds were observed and concurrence was received from CDFG, grading and construction activities may begin. If an active bird nest is located, the nest site shall be fenced a minimum of 100 feet (500 feet for endangered, threatened, and candidate species and all raptors) in all directions, and	Documentation of Surveys	Prior to Initiation of Grading	Community Development Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	this area shall not be disturbed until after the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities.			
MM 4.7-3c	If nesting bird surveys are required pursuant to MM 4.7-3b, the surveys shall occur within the buffer area 500 feet from grading and construction activities. If threatened or endangered species, such as the CAGN, are observed in the area, no work shall occur during the breeding season (February 15 through September 15) or until the nest becomes inactive, within 500 feet of the nest to avoid direct or indirect (noise) take of listed species. Documentation of surveys and findings shall be submitted to the City and, upon Department request, the Department. If nesting occurs within the 500-foot buffer area, the City shall confirm grading and construction activities remain set back 500 feet from the active nest.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
MM 4.7-3d	The applicant shall not disturb, capture, handle or move birds or their nests. Active nests cannot be removed or disturbed from February 15 to September 15. Nests can be removed or disturbed during this period if not active, by a qualified biologist.	On-Site Monitoring	During Grading and Construction	Community Development Department/Construction Manager
MM 4.7-4	Prior to issuance of a grading permit, the applicant shall provide mitigation at a ratio of 3:1 for permanent impacts and at a ratio of 1:1 for temporary impacts to waters of the U.S. for a total of 0.133 acre of off-site mitigation. The applicant shall also provide mitigation at a ratio of 3:1 for permanent impacts and at a ratio of 1:1 for temporary impacts to waters of the State for a total of 1.43 acres of off-site mitigation.	Permit	Prior to Issuance of Grading Permit	U.S. Army Corps of Engineers
MM 4.7-5	Prior to the issuance of a grading permit on the Additional Annexation Properties, the applicant shall mitigate for impacts to jurisdictional waters and associated habitat at a 3:1 ratio for permanent impacts and a 1:1 ratio for temporary impacts by either purchasing credits from an approved mitigation bank or by dedicating a conservation easement or a deed restriction over off-site properties with similar habitat and approved by the resource agencies. The Applicant shall also obtain and comply with a Corps permit pursuant to Section 404 of the Federal Clean Water Act, and any associated 401 Water Quality Certification from the RWQCB. As part of the Section 404 permit, the Applicant, along with the Corps, shall consult with the U.S. Fish and Wildlife Service for impacts to the CAGN through Section 7 of the ESA. The applicant will also obtain and comply with a Streambed Alteration Agreement from CDFG pursuant to Section 1602 of the state Fish and Game Code. All mitigation measures required by those permits will be	Permit	Prior to Issuance of Grading Permit	U.S. Army Corps of Engineers/ U.S. Fish & Wildlife Service

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	incorporated into the Project design or operating procedures as appropriate.			
Cultural/Scientific Resources				
MM 4.8-1a	Prior to issuance of a grading permit on the Skyridge project site, the Applicant shall conduct archaeological test excavations based on the Research Design included in Appendix J or an updated version of the Research Design based on further comments from the State Historic Preservation Officer and/or Advisory Council on Historic Preservation.	Testing	Prior to Issuance of Grading Permit	Community Development Department
MM 4.8-1b	Prior to the issuance of a grading permit on the Additional Annexation Area, the Applicant shall prepare and conduct archaeological test excavations and a Research Design for review and approval by the U.S. Army Corps of Engineers, State Historic Preservation Officer, and Advisory Council on Historic Preservation.	Testing	Prior to Issuance of Grading Permit	Community Development Department
MM 4.8-1.5b (Revised)	Prior to the issuance of a discretionary or grading permit for the Additional Annexation Area, the Applicant shall prepare and conduct a Research Design and Phase II archaeological test excavations and report for grading operations that impact ORA-507. The reports shall be submitted to and approved by the appropriate lead agencies, which could include U.S. Army Corps of Engineers, State Historic Preservation Officer, and Advisory Council on Historic Preservation, depending on jurisdiction. If resources are found in the disturbance area and if feasible, preservation in place and avoidance of historical artifacts will be the preferred method of mitigation. Future development applications on the Additional Annexation Area shall adhere to and comply with Mitigation Measures 4.8-1c through 4.8-3b.	Testing	Prior to Issuance of Grading Permit	Community Development Department
MM 4.8-1c	Prior to initiating archaeological test excavations, the Applicant shall provide notice to the Gabrielino and Juaneno tribal representatives and offer to hire one representative from each tribe to monitor the archaeological test excavations.	Notice	Prior to Initiation of Testing	Community Development Department
MM 4.8-1d	If, during the subsurface exploration associated with the archaeological test excavations, Native American artifacts are found, the following actions shall be implemented: <ul style="list-style-type: none"> ▪ Per the Research Design, if artifacts are discovered during the archaeological test excavations they will be analyzed and cataloged. ▪ If the portion of ORA-507 within the Skyridge project yields further materials that do not contribute to the overall eligibility of ORA-507, then a report documenting the 	On-Site Monitoring	During Grading and Construction	Community Development Department/ Construction Manager

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	Agency, and the Natural History Museum of Los Angeles County, and shall accompany any curated fossils. Disposition of the resources shall be at the discretion of the City of Mission Viejo.			
Soils and Geology				
SC 4.9-1	All activities associated with the implementation of the residential development project shall comply with the City's Excavation and Grading Ordinance.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
SC 4.9-2	The project shall comply with all applicable City Building Code requirements as well as those prescribed in the California Building Code (CBC).	Plan Check	Prior to Issuance of Building Permit	Engineering Department/ Public Works Department
MM 4.9-1a	The upper three to approximately 30 feet of undocumented fill, loose and potentially compressible colluvial, alluvial and upper landslide materials shall be completely removed and replaced with engineered fill within the limits of grading.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-1b	In areas of planned grading or improvements, the site shall be cleared of existing site improvements, structures, foundations, utility lines, vegetation, roots and debris, and properly disposed of off-site. Any existing on-site septic disposal fields or pits shall be completely removed and replaced as determined by the project Geotechnical Engineer.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-1c	In general, engineered fills and processed natural ground shall be compacted to a minimum relative compaction of 90 percent as determined by ASTM Test Method D 1557. Fills below 40 feet from finish grade and fills that will exist below subdrain/backdrain elevations shall be compacted to a minimum of 93 percent of the laboratory maximum dry density. Engineered fills shall be placed at or above optimum moisture content.	Plan Check	During Grading	Engineering Department
MM 4.9-2a	In accordance with Section 6.2.3 of the preliminary geotechnical report, the upper three to approximately 30 feet of unsuitable soils shall be completely removed and recompacted within the limits of grading in order to support the proposed improvements on engineered fill that is underlain by dense bedrock materials and reduce the potential for adverse effects of excessive short- or long-term differential settlement.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-2b	A minimum of five feet of engineered fill (or three feet beneath the bottom of the proposed residential foundations, whichever is deeper) shall be placed beneath footprint areas for all proposed residential structures.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-2c	Street bedrock areas not overexcavated as a result of the landslide/unsuitable material removal, shear key construction, etc., shall be overexcavated to a minimum of three feet below subgrade elevation.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-2d	Remedial removals adjacent to the northern and southern edges of the property shall extend down at a maximum	Plan Check/On-Site Monitoring	During Grading	Engineering Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	gradient of 1:1 (horizontal to vertical) projection to the pertinent recommended removal depth or as determined necessary if off-site constraints limit the ability to achieve remedial grading within these projections. If the remedial grading with the recommended 1:1 gradient projections is not accomplished, additional design considerations, such as deepened foundations, will be required to reduce the potential effects of settlement.			
MM 4.9-2e	Temporary cuts along the northern and southern property lines shall be excavated in an east-west orientation, perpendicular to bedrock strike orientation and roughly parallel to the prevalent landslide dip direction. Specifications identified in the Preliminary Geotechnical Report prepared by GeoTek shall be followed.	Plan Check/On-Site Monitoring	Prior to Issuance of Grading Permit/During Grading	Engineering Department
MM 4.9-2f	Temporary excavations/keyways shall be left open only for the shortest possible time frames. Heavy equipment or other activities shall be restricted in the area(s) near the tops of temporary slopes. Nuisance water shall not be permitted to pond in temporary excavations.	On-Site Monitoring	During Grading	Engineering Department/ Construction Manager
MM 4.9-2g	Potential "blocks" of Vaqueros and/or landslide material created during remedial excavation shall be broken down (to less than six inches in diameter) prior to placement into structural fill areas (refer to Section 6.2.4 of the preliminary geotechnical report).	On-Site Monitoring	During Grading	Engineering Department/ Construction Manager
MM 4.9-2h	Grading should adhere to the parameters established in the preliminary geotechnical report for shrinkage, bulking, subsidence, etc., to ensure that earthwork quantities associated with grading are accurately determined (refer to Section 6.2.5 of the preliminary geotechnical report).	On-Site Monitoring	During Grading	Engineering Department/ Construction Manager
MM 4.9-2i	Adequate subdrainage shall be provided to reduce the potential for saturation of the engineered fill and reduce long-term loading conditions in accordance with the recommendations presented in the preliminary geotechnical report (refer to Section 6.2.6).	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
MM 4.9-2j	Settlement monitoring in accordance with Section 6.2.7 of the preliminary geotechnical report shall be provided in all fill areas greater than 40 feet in vertical thickness. The limits of areas subject to settlement monitoring shall be determined based on actual removal geometries.	On-Site Monitoring	During Grading	Engineering Department
MM 4.9-3a	Prior to the issuance of any grading permit, the applicant shall prepare an Erosion Control Plan, which shall be approved by the City Engineer or his designee.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
MM 4.9-3b	Prior to the issuance of any grading permit, the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) that identifies specific construction and operational BMPs, which shall be approved by the City Engineer.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
MM 4.9-4a	Prior to issuance of the grading permit, the applicant shall prepare and submit a grading plan reviewed by a licensed geotechnical engineer. The proposed structures shall be designed based on applicable geotechnical parameters for residential structures in accordance with the 2010 California Building Code and other applicable regulations.	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
MM 4.9-4b	The proposed Skyridge residential project shall be designed in accordance with the design recommendations prescribed in Section 6.2 of the preliminary geotechnical report prepared by GeoTek (refer to Section 6.3), concrete construction (Section 6.4), retaining wall design and construction (Section 6.5) other design and construction recommendations (Section 6.6), and post-construction considerations (Section 6.7).	Plan Check	Prior to Issuance of Grading Permit	Engineering Department
MM 4.9-5	Prior to approval of any residential development on the 10-acre property located within the limits of the Additional Annexation properties south of the Skyridge property, the applicant shall submit a preliminary geotechnical report to the City of Mission Viejo. The report shall identify any appropriate measures intended to ensure that the grading, design, and construction of such future development address each relevant geotechnical constraint.	Plan Check	Prior to Project Approval	Engineering Department
Public Services				
MM 4.10.1-1a	Prior to the issuance of a grading permit, the project applicant shall submit the site plan for review and approval by the Orange County Sheriff's Department/Police Services Department to ensure that it is designed in accordance with all applicable requirements of the Police Service Department, including but not limited to parking, security, lighting, and access.	Plan Check	Prior to Issuance of Grading Permit	OC Sheriff Department/ Police Services Department
MM 4.10.1-1b	Prior to issuance of a grading permit, the project applicant shall prepare and submit a Construction Security Plan to the OCSD/Police Services Department for review and approval. The Construction Security Plan shall identify the provision of fencing, lighting and/or other measures (e.g., security patrols, etc.) that will be incorporated to minimize demands on law enforcement services.	Plan Check	Prior to Issuance of Grading Permit	OC Sheriff Department/ Police Services Department
MM 4.10.1-2	The contractor shall notify the OCSD/Police Services Department in advance of any lane and/or roadway closures necessitated by construction activities. Written notification to the OCSD/Police Services Department shall identify the roadway location/segment and the duration of the closure.	Notification	During Grading and Construction	OC Sheriff Department/ Police Services Department
SC 4.10.2-1	Prior to the issuance of any grading or building permits, the project plans shall be subject to review and approval by the Orange County Fire Authority for compliance with all applicable OCFA standard conditions, including those for	Plan Check	Prior to Issuance of Building Permit	OC Sheriff Department/ Police Services Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
SC 4.12-2	Prior to approval by the City, the proposed project shall be submitted for architectural and design review by the City's Design Review Committee pursuant to Section 9.43 of the Mission Viejo Municipal Code.	Plan Check	Prior to Final City Approval	Community Development Department/Design Review Committee
SC 4.12-3	As prescribed by Section 9.20.015(l) of the Mission Viejo Municipal Code, exterior lighting shall be energy-efficient and shielded or recessed so that direct glare and reflections are confined to the maximum extent feasible within the boundaries of the parcel, and shall be directed downward and away from adjoining properties and public rights-of-way. No lighting shall blink, flash, or be of unusually high intensity or brightness. All lighting fixtures shall be appropriate in scale, intensity, and height to the use they are serving. Security lighting shall be provided at all entrances/exits.	Plan Check	Prior to Issuance of Building Permit	Community Development Department
SC 4.12-4	Prior to issuance of building permits, lighting & photometric plan(s) shall be subject to City review and approval to assure that they comply with the City's lighting standards prescribed in Section 9.20.015(l) of the Municipal Code for permitted illumination as well as demonstrate that illumination does not create off-site light and glare, to the satisfaction of the Director of Community Development or his/her designee.	Plan Check	Prior to Issuance of Building Permit	Community Development Department
MM 4.12-1	Equipment staging and/or stockpile areas shall be located as far away from existing development as possible to minimize visual impacts. If not possible, screening fences shall be utilized to minimize visual impacts in those areas having direct views of the staging and/or stockpile area(s).	Plan Check/ On-Site Monitoring	Prior to Issuance of Grading Permit/ During Grading and Construction	Community Development Department
MM 4.12-2	Where determined to be feasible, existing mature native trees that will be lost as a result of the proposed project shall be relocated within the project site in accordance with the proposed Landscape Concept Plan to the maximum extent practicable.	Plan Check	Prior to Issuance of Grading Permit	Community Development Department
Climate Change/Greenhouse Gas				
SC 4.13-1	The proposed project shall comply with Title 24 energy-efficient design requirements as well as the provision of window glazing, wall insulation, and efficient ventilation methods in accordance with the requirements of the California Building Code.	Plan Check	Prior to Issuance of Building Permit	Public Works Department
PDF 4.13-1	The Skyridge residential project will incorporate a variety of project design features (PDFs) in accordance with the City's "Green Building Program" to ensure that greenhouse gas (GHG) emissions are minimized. These measures are identified below. With the incorporation of these PDFs, no mitigation measures are required. <ul style="list-style-type: none"> ▪ Recycle Job Site Construction & Demolition Waste ▪ Salvage Reusable Building Materials ▪ Implement construction Site Stormwater Practices 	Plan Check	Prior to Issuance of Building Permit	Public Works Department/ Community Development Department/ Engineering Department

SC/PDF/MM No.	Mitigation Measure/Standard Condition	Method of Verification	Timing of Implementation	Responsibility
	<ul style="list-style-type: none"> ▪ Protect Water Quality with Landscape Design ▪ Design Resource-Efficient Landscapes and Gardens ▪ Install High-Efficiency Irrigation Systems ▪ Provide for On-Site Water Catchment/Retention ▪ Use Wood I-Joints for Floors and Ceilings ▪ Use OSB ▪ Subfloors and Sheathing ▪ Use Treated Wood that does not contain Chromium/Arsenic ▪ Install House Wrap Under Siding ▪ Use Fiber-Cement Siding Materials ▪ Insulate Hot Water Pipes ▪ Install Faucets and Showerheads with Flow Reducers ▪ Install Gas Tankless Water Heater ▪ Install On-Demand Hot Water Circulation Pump ▪ Install IC-AT Recessed Fixtures with CFLs ▪ Install Lighting Controls ▪ Install Energy Star Dishwasher ▪ Install Energy-Efficient Windows Double-Paned; Low Emissivity (Low E) and Low Conductivity Frames ▪ Vent Range Hood to the Outside ▪ Install Sealed Combustion Units on Furnaces and Water Heaters ▪ Install 13 SEER/11 EER or Higher AC with a TXV ▪ Install AC with Non-HCFC REFRIGERANTS ▪ Select Safe and Durable Roofing Materials ▪ Install Radiant Barrier ▪ Use Low/No VOC Paint ▪ Use Low VOC, Water-Based Wood Finishes ▪ Use Low/No VOC Adhesives ▪ Use Engineered Sheet Goods with no added Urea Formaldehyde ▪ Use Finger-Jointed or Recycled-Content Trim ▪ Install Recycled Content Carpet with low VOCs (standard carpet only) ▪ Install Solar Pre-plumbing 			