

LAGUNA NIGUEL TO SAN JUAN CAPISTRANO PASSING SIDING PROJECT

INITIAL SITE ASSESSMENT

DRAFT TECHNICAL MEMORANDUM

Prepared for:



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TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION.....	1
2.0 PROJECT DESCRIPTION	2
2.1 PROJECT IMPROVEMENTS	2
2.2 AFFECTED ENVIRONMENT	2
3.0 ISA METHODOLOGY	5
3.1 TASK 1 – ENVIRONMENTAL DATABASE SEARCH	5
FEDERAL RECORDS.....	6
STATE AND LOCAL RECORDS	7
3.2 TASK 2 – REVIEW OF HISTORICAL LAND USE.....	8
3.3 TASK 3 – SITE RECONNAISSANCE	9
3.4 TASK 4 – AGENCY RECORDS REVIEW	9
3.5 TASK 5 – DATA ANALYSIS AND REPORT PREPARATION.....	9
3.6 LIMITATIONS	9
4.0 EXISTING CONDITIONS.....	11
4.1 DATABASE REVIEW	11
4.2 HISTORIC LAND USE EVALUATION.....	11
4.2.1 HISTORICAL AERIAL PHOTOGRAPHS.....	11
4.2.2 SANBORN PERRIS MAPS	11
4.3 SITE RECONNAISSANCE	12
4.4 SITE-SPECIFIC AGENCY FILE REVIEWS	17
4.4.1 EDR DATABASE SITES.....	17
4.4.2 ADDITIONAL SITES	18
5.0 ISA RESULTS.....	19
5.1 SITES OF CONCERN	19
5.2 OTHER CONDITIONS OF CONCERN.....	20
5.2.1 ASBESTOS	20
5.2.2 CREOSOTE AND PENTACHLOROPHENOL	20
5.2.3 HERBICIDES	20
5.2.4 POLYCHLORINATED BIPHENYLS AND HEAVY METALS	20
5.2.5 RAILROAD TRACKS AND BALLASTS.....	19
6.0 MINIMIZATION AND MITIGATION MEASURES	23
6.1 DUE DILIGENCE PRIOR TO CONSTRUCTION	23
6.2 STUDIES AND PLANS	23
6.2.1 CONSTRUCTION HEALTH AND SAFETY PLAN	23
6.2.2 CONSTRUCTION CONTAMINANT MANAGEMENT PLAN.....	24
6.2.3 REMOVAL OF STORAGE TANKS DURING CONSTRUCTION	24
6.2.4 CONSTRUCTION CONTINGENCY PLAN	24
6.2.5 ASSESSING OTHER CONDITIONS OF CONCERN	24

6.3	APPROVALS AND PERMITS.....	24
6.4	MINIMIZATION MEASURES	25
7.0	FINDINGS SUMMARY.....	27
8.0	OPINION.....	29
9.0	CONCLUSION	31
10.0	RECOMMENDATIONS	33
11.0	REFERENCES.....	35
12.0	PREPARERS.....	36
APPENDIX A.....		37

LIST OF FIGURES

FIGURE		PAGE
FIGURE 2-1: PROJECT LOCATION MAP		3
FIGURE 2-2: PROJECT STUDY AREA MAP		4
FIGURE 4-1: POTENTIAL HAZARDOUS WASTE/MATERIALS SITES.....		15

LIST OF TABLES

TABLE		PAGE
TABLE 3-1: REGULATORY DATABASE WITH REDUCED SEARCH DISTANCES.....		6
TABLE 4-1: EDR DATABASE-IDENTIFIED HAZARDOUS WASTE SITES		11
TABLE 4-2: SITE RECONNAISSANCE OF EDR DATABASE IDENTIFIED SITES.....		12
TABLE 4-3: SITE RECONNAISSANCE OF VISUALLY IDENTIFIED SITES.....		12

1.0 INTRODUCTION

An Initial Site Assessment (ISA) was conducted for the proposed Laguna Niguel – San Juan Capistrano Passing Siding Project, located within the cities of Laguna Niguel and San Juan Capistrano, Orange County, California. The ISA identifies potential contaminant sources that may affect the proposed project. For purposes of this assessment, potential contaminant sources are defined as facilities that treat, store, or dispose of hazardous waste, use hazardous substances, store petroleum products on-site, or otherwise may present a source of contamination to the project. Construction of the project may be affected by potential contaminant migration from off-site sources.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT IMPROVEMENTS

The Orange County Transportation Authority (OCTA), in coordination with Metrolink (operated by the Southern California Regional Rail Authority), the City of Laguna Niguel, and the City of San Juan Capistrano, proposes the addition of approximately 1.8 miles of new passing siding railroad track adjacent to the existing main track between milepost (MP) 193.9 in the City of San Juan Capistrano (just south of the Laguna Niguel/Mission Viejo Metrolink Station) and MP 195.7 in the City of San Juan Capistrano (approximately 500 feet north of Trabuco Creek). A portion of the project from approximately MP 194.0 to MP 194.2 passes through the City of Laguna Niguel.

The project consists of the following features:

- Construct 1.8 miles of new railroad passing siding railroad track
- Relocation of an existing spur track currently south of the Laguna Niguel/Mission Viejo Metrolink Station with a new spur track within the City of San Juan Capistrano at around MP 194.6
- Construction of new retaining walls Relocation of existing power poles, fiber optic cables, water, and sewer lines
- Extension of existing casing for gas, water, and sewer lines
- Culvert extensions and other drainage improvements and refinements
- Addition of a railroad bridge or box culvert at MP 194.6
- Asphalt paving adjacent to Camino Capistrano to accommodate parking for use by railroad at MP 194.6
- Reprofiling of approximately 600 feet of Camino Capistrano adjacent to Rancho Capistrano in order to improve grades

The new passing siding and switches would be built on a bed of ballast approximately 13 to 15 feet wide and 12 to 14 inches above existing grade, occupying about 3.2 acres within the existing right-of-way.

Construction of the proposed project would occur over a period of 24 months and be confined to the area within the existing right-of-way with the exception of the asphalt paving for parking, which would be located east of the existing right-of-way and south of the crossing at Rancho Capistrano and the reprofiling of approximately 600 feet of Camino Capistrano adjacent to Rancho Capistrano in order to improve grades. Staging areas for personal vehicles, construction equipment and supplies would be established by the contractor. Train schedules would be maintained during construction.

2.2 AFFECTED ENVIRONMENT

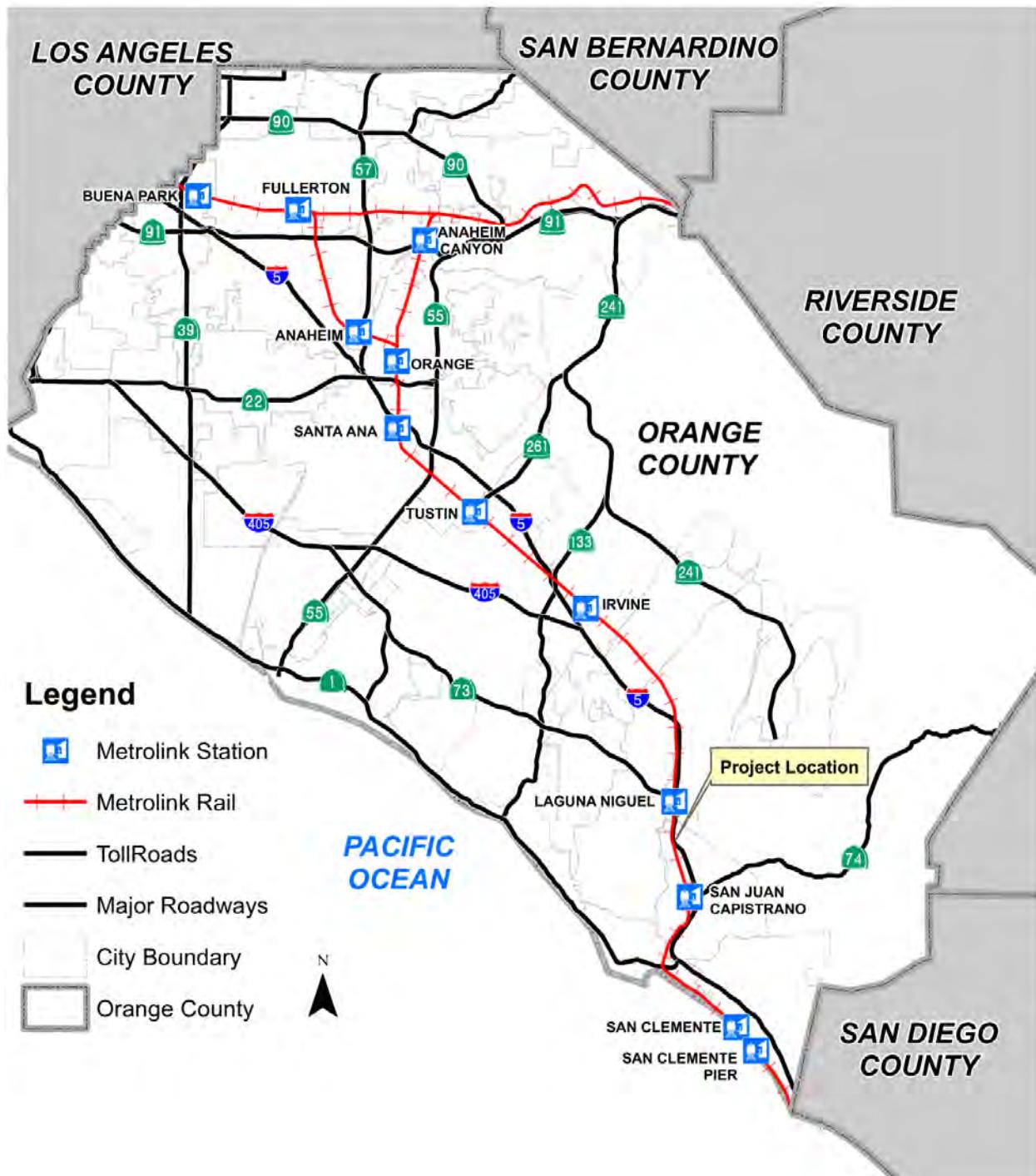
The project is located within the cities of Laguna Niguel and San Juan Capistrano in Orange County, California. The project runs along the Interstate 5 Highway (I-5) and Camino Capistrano. Oso Creek is situated west of project corridor. Regional access to the site is provided by I-5 and State Route 73 (SR-73).

Land use designations directly adjacent to the proposed project in the City of Laguna Niguel are primarily hospitality, commercial, and open space. Automotive and commercial uses occur just northwest of the Laguna Niguel-San Juan Capistrano city line. In the City of San Juan Capistrano, land use designations directly adjacent to the proposed project consists of community park, general open space, medium low density, planned community, and special study.

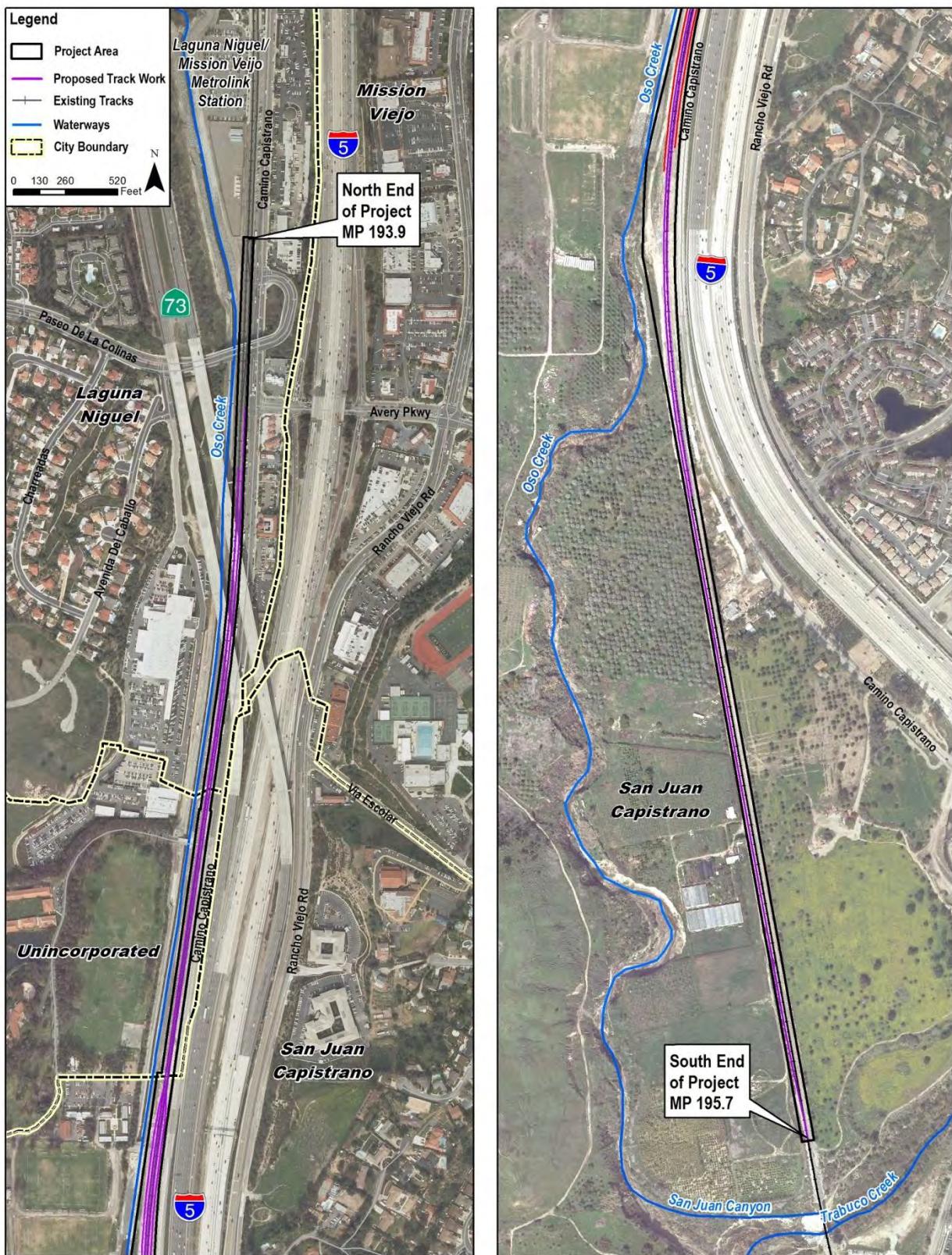
Vegetation within the project area is primarily ruderal, with some ornamentals and street landscaping. There are no designated wild and scenic rivers.

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Figure 2-1: Project Location Map



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Figure 2-2: Project Study Area Map

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3.0 ISA METHODOLOGY

This ISA was conducted to identify, to the extent feasible, potential and known contaminant sources or recognized environmental conditions (RECs) in connection with properties that are located nearby or encroached upon by the proposed project. A REC is defined as the “presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property,” (ASTM E-1527-05, 2005).

An ISA is a screening study conducted to identify potential RECs and determine the appropriate level of any subsequent studies that may be required. This ISA has been prepared in accordance with applicable sections of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments (E-1527-05), applicable sections of Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), and California Public Resources Code Section 21092.6. This ISA does not include sub-surface testing or an environmental audit of the occupant or owner's operations and procedures.

The following steps were taken to establish existing conditions, evaluate the potential for impacts, and determine whether project-related activities have the potential to disturb hazardous materials.

- Task 1 – Environmental Database Search
- Task 2 – Review of Historical Land Use
- Task 3 – Site Reconnaissance
- Task 4 – Agency Records Review
- Task 5 – Data Analysis and Report Preparation

3.1 TASK 1 – ENVIRONMENTAL DATABASE SEARCH

A database search was conducted using an Environmental Data Resources, Inc. (EDR) database; their report is dated January 16, 2009. The search consisted of reviewing existing federal, state, and local environmental databases per ASTM standards for environmental site assessments (E1527-05). EDR indicated that their report “contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources.” Although EDR searched all databases relevant to hazardous waste and materials operations in California, it is important to note that sites appear in these databases only if proper reports are made and recorded.

The goal of the database review was to identify sites or areas that may be a concern based on the database listing and a search distance criterion. The search distance criteria for each database accessed (where available) is provided by EDR with the exception of the following databases: AST, CORTESE, FID, HIST UST, LUST, RCRA-LQG, RCRA-NLR, RCRA-SQG, SCH, SWEEPS UST, SWRCY, UST, and WMUDS/SWAT (Note: Terms for these abbreviations are provided in the sections after Table 3-1). The search distance used for the 13 exception databases was reduced to consider only sites within the project boundaries. For the purpose of this ISA, the project boundary (also known as the project study area) is defined as all properties within 300 feet of the estimated construction limits of the proposed project (also known as the project site). Additional details for the reduction in search distance of the exceptional databases can be found in Table 3-1.

Table 3-1: Regulatory Database with Reduced Search Distances

Regulatory Database	Original Search Distance Criteria (Provided by EDR)	Justification for Reduction in Search Distance
AST	0.25 Mile	Distributor and user listing database. AST can be relocated, if needed.
CORTESE	0.50 Mile	This database is no longer updated.
FID	0.25 Mile	Active UST would be identified by UST regulatory database.
HIST UST	0.25 Mile	Active UST would be identified by UST regulatory database.
LUST	0.50 Mile	Petroleum contamination plume from a leaking underground storage tank is unlikely to travel a distance greater than 300 feet.
RCRA-LQG	0.25 Mile	The proposed project would not impact businesses' ability to generate/store hazardous waste/materials.
RCRA-NLR	0.50 Mile	The proposed project would not impact businesses' ability to generate/store hazardous waste/materials.
RCRA-SQG	0.25 Mile	The proposed project would not impact businesses' ability to generate/store hazardous waste/materials.
SCH	0.25 Mile	Sites would be listed under CALSITES (replaced by ENVIROSTOR) if major contamination concerns.
SWEEPS UST	0.25 Mile	This database is no longer updated or maintained.
SWRCY	0.50 Mile	The proposed project would not impact businesses' ability to recycle materials.
UST	0.25 Mile	ASTM guidelines provided a search distance criteria of within or adjacent to the project boundary.
WMUDS/SWAT	0.50 Mile	User listing database. The proposed project would not impact waste management facilities from operating.

Source: PARSONS BRINCKERHOFF, 2009.

The databases reviewed were:

Federal Records

- Emergency Response Notification System (ERNS) (within the project boundary): This system records and stores information on reported releases of oil and hazardous substances.
- Toxic Release Inventory System (TRIS) (within the project boundary): This database identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 313.
- Federal Insecticide, Fungicide, and Rodenticide Act/Toxic Substances Control Act (FIFRA/TSCA), also known as FTTS (within the project boundary): This system records and stores information from the tracking of administrative cases, pesticide enforcement actions and compliance activities related to FIFRA, TSCA and the EPCRA (Emergency Planning and Community Right-to-Know Act).
- Integrated Compliance Information System (ICIS) (within the project boundary): The ICIS supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.
- Facility Index System (FINDS) (within the project boundary): These records contain both facility information and “pointers” to other sources that contain more detail.
- Resource Conservation and Recovery Information System (RCRIS): large-quantity generators (LQGs) (within the project boundary): This system includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA.

- Resource Conservation and Recovery Information System (RCRIS): small-quantity generators (SQGs) (within the project boundary): This system includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA.
- Resource Conservation and Recovery Information Systems Non Generators (RCRA-NLR/NonGen) (within project boundary): The Resource Conservation and Recovery Information Systems (RCRAInfo) is the EPA's most comprehensive information system, which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. Although the database includes selective information on sites which generate, transport, store, treat, and/or dispose of hazardous waste, RCRA-NLR/NonGen do not presently generate hazardous waste.

State and Local Records

- School Property Evaluation Program (SCH) (within the project boundary): This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.
- Solid Waste Information System (SWF/LF [SWIS]) (within 0.50 mile): Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.
- Waste Discharge System (CA WDS) (within the project boundary): Sites which have been issued waste discharge requirements.
- Waste Management Unit Database (WMUDS/SWAT) (within the project boundary): This system is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.
- “Cortese” Hazardous Wastes & Substances Sites List (CORTESE) (within the project boundary): The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.
- Recycler Database (SWRCY) (within the project boundary): A listing of recycling facilities in California.
- Leaking Underground Storage Tank (LUST) (within the project boundary): This database contains records of sites with reported release of stored product, usually petroleum hydrocarbons.
- California Facility Inventory Database (CA FID) (within the project boundary): Contains active and inactive underground storage tank locations. The source is the State Water Resources Control Board.
- Statewide SLIC CASES (SLIC) (within 0.50 mile): This program is designed to protect and restore water quality from spills, leaks, and similar discharges.
- Underground Storage Tank (UST) – (within the project boundary): This database provides a listing of active UST facilities gathered from the local regulatory agencies.
- Hazardous Substance Storage Container Database (HIST UST) (within the project boundary) is a historical listing of UST sites.
- Aboveground Storage Tanks (AST) (within the project boundary): Listings are provided by the State Water Resources Control Board’s Hazardous Substance Storage Container Database and identify properties that have ASTs on the premises.

- Statewide Environmental Evaluation and Planning System (SWEEPS) UST (within the project boundary): This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained.
- California Hazardous Material Incident Report System (CHMIRS) (within the project boundary): This database system contains information on reported hazardous material incidents (accidental releases or spills).
- Voluntary Cleanup Program Properties (VCP) (within 0.50 mile): Contains low threat level properties with either confirmed or unconfirmed releases and proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.
- Cleaner Facilities (DRYCLEANERS) (within 0.25 mile): The source is the Department of Toxic Substance Control. This database includes a list of drycleaner related facilities that have U.S. Environmental Protection Agency (EPA) ID numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.
- List of Industrial Site Cleanups (Orange Co. Industrial Site) (within the project boundary): Petroleum and non-petroleum spills.
- Clandestine Drug Labs (CDL) (within the project boundary): A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.
- Facility and Manifest Data (HAZNET) (within the project boundary): The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.
- Emission Inventory Data (EMI) (within the project boundary): This database represents toxics and criteria pollutant emissions data collected by the California Air Resources Board and local pollution agencies. The source is the California Air Resources Board.
- EnviroStor Database (ENVIROSTOR) (within 1.0 mile): DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

3.2 TASK 2 – REVIEW OF HISTORICAL LAND USE

An evaluation was conducted within the vicinity of the proposed project to analyze historic land uses and changes to identify potential historical contaminant sources that may adversely impact the proposed project. Information sources reviewed included:

- Sanborn-Perris Maps (no maps available for the project area)
- EDR – Aerial Photography Print Service (1938, 1946, 1952, 1968, 1977, 1990, 1994, 2002, and 2005)

3.3 TASK 3 – SITE RECONNAISSANCE

A site reconnaissance of the proposed project location and surrounding vicinity was conducted on February 4, 2009, and February 19, 2009, to identify and confirm potential contaminant sources identified during earlier tasks and to identify potential unreported contaminant sources that may adversely impact the proposed project. The site reconnaissance was conducted from public access areas and from within the project site, as feasible. Information was recorded regarding the site locations, the general “housekeeping” of the sites, and other observed conditions that might indicate a potential environmental concern.

3.4 TASK 4 – AGENCY RECORDS REVIEW

Following the gathering of information from the EDR database search, the historic land use review, and the site reconnaissance, the list of potential contaminant sources was then narrowed based on the type of site (e.g., database listing type), the distance from proposed project activities (see Task 1), and the information gathered during the site reconnaissance. A regulatory agency file review was then conducted on the remaining list of potential contaminant sources to develop additional site-specific information on selected properties. The agency files were reviewed for the most recent site status information, the nature and extent of contamination, as well as pertinent land uses, geologic, hydrogeologic, and other information that may be used to assess potential impacts to the project. Files maintained by the Orange County Fire Authority (OCFA), Orange County Health Care Agency (OCHCA), State Water Resources Control Board (SWRCB) Geotracker, Department of Toxic Substances Control (DTSC) EnviroStor database, and the EDR Radius Report were reviewed in February and March 2009. A summary of these records is provided in Section 4.4. No site records were available for review from the San Diego Regional Water Quality Control Board (RWQCB).

3.5 TASK 5 – DATA ANALYSIS AND REPORT PREPARATION

Potential contaminant sources identified during Tasks 1 through 4 were screened to determine their potential impact to the project based on the following criteria:

- The occurrence of a documented release, based on either public records or physical observation;
- The physical, chemical, and toxicological characteristics of suspected contaminants released from potential sources, and the media potentially affected (soil, water, and air);
- Distance from the project alignment;
- Nature of proposed design and construction activities in relation to the location and possible impact from a potential contaminant source; and
- Estimated groundwater flow, direction, and depth.

These criteria were used to eliminate potential sources that were unlikely to affect the project. Potential contaminant sources not eliminated during this screening process are recommended for further evaluation.

3.6 LIMITATIONS

A definitive assessment regarding the actual presence or absence of contamination is not addressed in this ISA. The intent of the assessment is to identify reported and obvious potential hazardous conditions that would need to be addressed or considered before proceeding with project construction. The ISA was not performed to meet “innocent landowner” provisions provided under CERCLA that establish a defense for the purchase of real property. This ISA does not guarantee, imply, or assert that all potential contaminant sources have been located due to the possible presence of an unlisted or unidentified contaminant occurrence.

The presence of creosote and pentachlorophenol in utility poles and railroad ties, and polychlorinated biphenyls (PCBs) in pole-mounted transformers were not assessed as part of this ISA. In addition, the presence of potentially contaminated soils in areas within and adjacent to OCTA Metrolink railroad right-of-way also was not assessed as part of this ISA. Although these issues were not assessed as part of

this ISA, additional testing of directly-affected materials should be conducted to determine whether the materials are contaminated as discussed in Section 5.2. Conditions within the disturbance limits of the proposed project could change, and should be reevaluated during final design and whenever new information becomes available.

4.0 EXISTING CONDITIONS

4.1 DATABASE REVIEW

The EDR database search identified three potential hazardous waste sites that met the criteria listed in Section 3.1. Table 4-1 identifies the site information and the database where the site was referenced.

Table 4-1: EDR Database-Identified Hazardous Waste Sites

Site Name	Site Address	EDR ID	Database(s) ¹
Blue Diamond Materials Asphalt Plant	26772 Avery Parkway Mission Viejo, California	U001577825	HIST UST, ENVIROSTOR, HAZNET, ORANGE CO. INDUSTRIAL SITE, FID, SWEEPS UST
The South Orange County Vet Emergency Group	28832 Camino Capistrano San Juan Capistrano, California	S102820863	HAZNET
Rancho Capistrano Community Church	29251 Camino Capistrano San Juan Capistrano, California	U001577821	UST, LUST, HIST UST, CORTESE

Source: Environmental Data Resources, Inc., January 2009.

Note: ¹Acronyms and abbreviations are defined in Section 3.1.

4.2 HISTORIC LAND USE EVALUATION

4.2.1 Historical Aerial Photographs

Aerial photographs of the project vicinity from 1938, 1946, 1952, 1968, 1977, 1990, 1994, 2002, and 2005 were reviewed.

The aerials from 1938, 1946, 1952, and 1968 reveal that the project area consisted of primarily open space and agricultural land uses with sparse residential and commercial development at the southern end of the project alignment. The existing Junipero Serra High School appears to have been established by 1952. The existing Camino Capistrano and railroad alignment appears to have been in place and paved at that time.

In the 1968 aerial photographs, the existing I-5 appears to be in place. Aerial photographs in 1977 and 1994 reveal residential properties east of the project study area, primarily between Via Escolar and Trabuco Creek Road.

According to aerial photographs from 2002 and 2005, existing commercial properties appear to have been established north of Oso Road by 2002, as well as the existing Mercedes-Benz of Laguna Niguel automotive dealership (located north of the project alignment at 1 Star Drive, Laguna Niguel). There were no indications of hazardous materials or wastes in the photographs reviewed.

4.2.2 Sanborn Perris Maps

Sanborn Perris maps, which were created for fire insurance purposes, are detailed drawings of cities, including residential and business areas. The Sanborn Perris maps were primarily produced in the early part of the twentieth century and were prepared only for developed areas where insurable structures were present. The Sanborn Perris Map Index for Orange County and San Diego County was reviewed on January 16, 2009. No maps containing the project area were identified. It is assumed that Sanborn Perris maps were not produced for this area due to the scattered nature of development in the early part of the century when the Sanborn Perris maps were produced.

4.3 SITE RECONNAISSANCE

Site reconnaissance was performed on February 4, 2009, and February 19, 2009, in order: to locate potential hazardous materials sites identified during the database search; to locate potential contaminant sources on the identified sites (i.e., underground storage tanks or hazardous waste placards) to note general site conditions; and to identify unlisted sites in the vicinity of the project study area that may use, store, or transport hazardous materials or wastes. The sites examined during the reconnaissance, as identified in the EDR database, are shown in Table 4-2.

Table 4-2: Site Reconnaissance of EDR Database Identified Sites

Map ID	Site Name	Site Address	Site Conditions
1	Blue Diamond Materials Asphalt Plant (now Arroyo Trabuco Golf Club)	26772 Avery Parkway Mission Viejo, California	This site appears to be a golf club with a golf course. No outward signs of hazardous materials were noted at this well-kept site.
--	The South Orange County Vet Emergency Group	28832 Camino Capistrano San Juan Capistrano, California	This site was not found.
2	Rancho Capistrano Community Church (now Saddleback Church Rancho Capistrano)	29251 Camino Capistrano San Juan Capistrano, California	This site appears to be a church. No outward signs of hazardous materials were noted at this well-kept site.

Based on a visual assessment during the site reconnaissance, additional potential hazardous waste sites, which did not appear in the EDR database, were identified. This visual assessment was conducted approximately 300 feet north, east, west, and south of the project boundary. These sites are located within and adjacent to the project boundary and are presented in Table 4-3. All of the sites that were investigated during the site reconnaissance are shown in Figure 4-1.

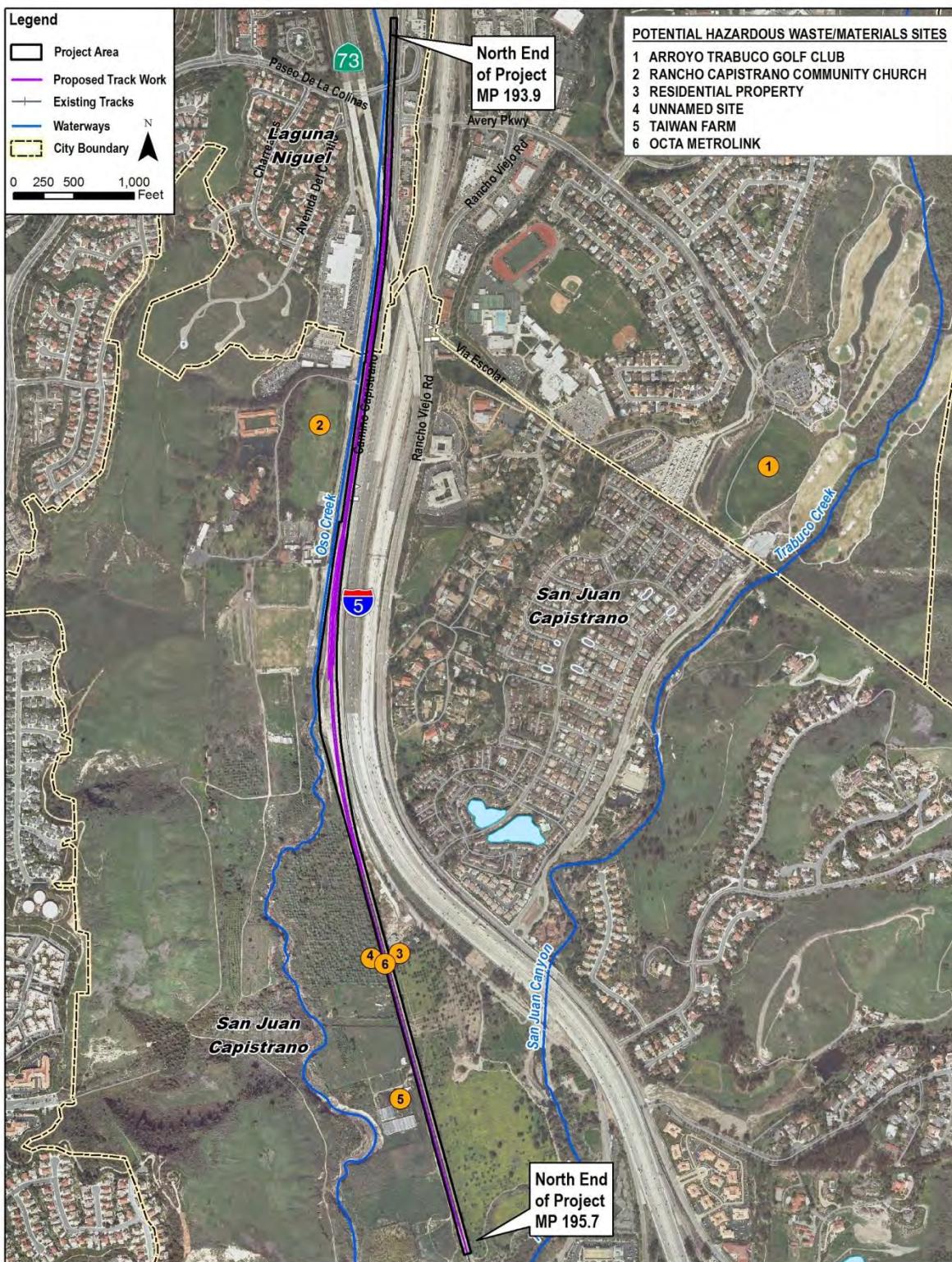
Table 4-3: Site Reconnaissance of Visually Identified Sites

Map ID	Site Name	Site Address	Site Conditions
3	Residential Property	29931 Camino Capistrano San Juan Capistrano, California	This site appears to be a residential property. Four unlabeled 55-gallon metal rusted drums, including one drum with a missing lid, were noted to be stored behind the residential property and near a tool shed.
4	Unnamed Site	APN 637-082-14 San Juan Capistrano, California	This site appears to be primarily open space. Approximately 37 unlabeled 55-gallon metal rusted drums were noted onsite and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids with a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris, and seven abandoned 55-gallon metal rusted drums was observed at the southern end of the parcel. The drums were found to be unlabeled and missing lids.

Table 4-3: Site Reconnaissance of Visually Identified Sites (Continued)

5	Taiwan Farm	APN 121-050-12 San Juan Capistrano, California	This site appears to be a greenhouse. Two large ASTs were noted to be stored onsite. A worker on the property stated the large ASTs contained only water. Two small ASTs were also noted to be stored onsite; however, the ASTs appear to be propane tanks and do not appear to be active. These small ASTs would not pose a contamination risk to the project.
6	OCTA Metrolink	Approximately 50 feet west of 29931 Camino Capistrano San Juan Capistrano, California	Two 55-gallon metal rusted drums were noted to be located within the disturbance limits of the proposed project (west of the railroad tracks). Both drums were unlabeled and appear to have been abandoned. It is unknown if the drums contain any hazardous waste/materials.

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Figure 4-1: Potential Hazardous Waste/Materials Sites

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4.4 SITE-SPECIFIC AGENCY FILE REVIEWS

Files maintained by the OCFA, OCHCA, SWRCB Geotracker, DTSC EnviroStor database, and the EDR Radius Report, were reviewed in February and March 2009. No site records were available for review from the San Diego RWQCB. Available files were reviewed for the sites presented in Figure 4-1 and in Tables 4-1 through 4-3. Pertinent information contained in these files is presented in Section 4.4.1.

4.4.1 EDR Database Sites

- A. Blue Diamond Materials Asphalt Plant (now Arroyo Trabuco Golf Club), 26772 Avery Parkway, Mission Viejo, California

Site records maintained by the OCHCA, OCFA, and the EDR Radius Report indicate this site was previously owned and operated by Blue Diamond Materials Asphalt Plant. This site was formerly operated as a hot mixing asphalt plant. A truck scale and scalehouse, several storage buildings, an above ground asphalt emulsion tank, and five USTs were previously stored onsite and have all been removed. According to the OCFA site records and the EDR Radius Report, two diesel tanks (installed in 1970), petroleum spirits, acetylene, hydrogen sulfide, hydraulic oil, petroleum hydrocarbon, mineral oil, oxygen, and waste oil were also stored onsite by this operator. Past soil samplings identified the presence of contaminated (fuel oil-impacted) soils in several locations related to the previous asphalt business. Records indicate that the impacted soils were excavated, former UST's were removed from the site and the area was backfilled. Groundwater sampling and monitoring determined that groundwater was not impacted. These activities also established that there was no risk to human health because the source for contamination was removed and fuel oil contamination would continue to diminish due to biodegradation and oxidation.

A case closure (OCHCA Case ID# 01IC17) was issued by the OCHCA on December 10, 2001, for completion of remedial action with conditions that changes in the land use might require further site characterization and/or mitigation. In addition, as a result of a large volume of diesel/oil-impacted soil still remaining on site that is potentially a continuing source for groundwater degradation, the San Diego RWQCB was notified. Any groundwater concerns will be addressed by the San Diego RWQCB.

According to site records maintained by OCHCA, this site is currently operated by Arroyo Trabuco Golf Club and consists of a clubhouse owned by Ranch Mission Viejo and operated by Arroyo Trabuco Golf Club. This business also operates a maintenance yard at 28811 Ortega Highway in San Juan Capistrano where 55-gallon waste oil drums were noted to be stored on the north side of the shop. Based on the latest OCFA site inspection record (January 22, 2009), no site violations were noted, and batteries were identified to be stored onsite.

- B. The South Orange County Vet Emergency Group, 28832 Camino Capistrano, San Juan Capistrano, California

According to the EDR Radius Report, chemicals noted to have been stored onsite by South Orange County Vet Emergency Group were noted to have included photochemicals/photoprocessing waste and metal sludge.

- C. Rancho Capistrano Community Church (now Saddleback Church Rancho Capistrano), 29251 Camino Capistrano, San Juan Capistrano, California

According to site records maintained by the SWRCB GeoTracker and the EDR Radius Report, a LUST site incident involving soil contaminated with diesel fuel was detected in February 1990 during the operation of the site by Rancho Capistrano Community Church. Site remediation activities consisted of excavation and disposal of the contaminated soils. Upon completion of site investigation and remedial

action, a case closure (OCHCA Case ID# 90UT072 and San Diego RWQCB Case ID# 9UT1632) was granted on January 21, 1991.

According to the EDR Radius Report, Rancho Capistrano Community Church was permitted to store USTs onsite; however, OCFA site records indicate no chemicals were found onsite during a routine site inspection conducted on May 7, 2008.

In November 2001, Rancho Capistrano Community Church reorganized, and the business name of the facility was changed to Capistrano Community Church. The property grounds were sold in 2010, and Capistrano Community Church temporarily moved their church operations to Temple Beth-El (located at 2A Liberty, Aliso, Viejo, California) until a church building can be identified for permanent relocation. As of 2011, this site has been operating as another church known as Saddleback Church Rancho Capistrano.

4.4.2 Additional Sites

- A. Residential Property, 29931 Camino Capistrano, San Juan Capistrano, California

No site records were available for this site.

- B. Unnamed Site, APN 637-082-14, San Juan Capistrano, California

No records were available for this site.

- C. Taiwan Farm, APN 121-050-12, San Juan Capistrano, California

No records were available for this site.

- D. OCTA Metrolink, located within the disturbance limits of the proposed project, approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano, California

No records were available for this site.

5.0 ISA RESULTS

5.1 SITES OF CONCERN

Based on the analysis performed as part of this ISA, there are facilities located within the project boundary that handle, use, and/or store hazardous waste and/or materials. Properties identified as being located within the project boundary are considered to be those properties that are within 300 feet of the estimated construction limits of the proposed project.

Acquisition Properties

Acquisition of properties outside of the OCTA Metrolink right-of-way is not anticipated.

Non-Acquisition Properties

- OCTA Metrolink, approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano, California – within the project boundary (west of the railroad tracks)

Status: No site records were available for this site. However, during site reconnaissance, two unlabeled 55-gallon metal rusted drums were observed to be located within the disturbance limits of the proposed project (west of the railroad tracks) and, as a result, construction of the proposed project may affect these two drums. Both drums appeared to have been abandoned. It is unknown if the drums contain any hazardous waste/materials. A Phase II ESA should be performed to characterize the content stored in the drums, and to assess for any possible soil contamination that may have resulted from a leak beneath the drums. Findings from the Phase II ESA will determine the appropriate handling and disposal of the drums and potentially contaminated soils.

- Rancho Capistrano Community Church (now Saddleback Church Rancho Capistrano), 29251 Camino Capistrano, San Juan Capistrano, California – within the project boundary

Status: Based on the site reconnaissance and records review, no open incidents were noted for this site, and no hazardous waste/materials were noted to be stored on site. There was formerly some contamination on the property, but it was remediated and a closure obtained from the regulating agency. As a result, this site does not pose an environmental concern to the proposed project.

- Residential Property, 29931 Camino Capistrano, San Juan Capistrano, California – within the project boundary

Status: No site records were available for this site. However, during site reconnaissance, four unlabeled 55-gallon metal rusted drums, including one drum with a missing lid, were noted to be stored behind the residential property and near a tool shed. Although there may be a potential for hazardous waste/materials to be stored on site, construction of the proposed project is not anticipated to affect the 55-gallon metal drums. As a result, this site does not pose an environmental concern to the proposed project.

- Unnamed Site, APN 637-082-14, San Juan Capistrano, California – within the project boundary

Status: No site records were available for this site. However, during site reconnaissance, approximately 37 unlabeled 55-gallon metal rusted drums were noted onsite and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids, with a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris,

and seven abandoned 55-gallon metal rusted drums, was observed at the southern end of the parcel. Although the 55-gallon metal drums are not located within the disturbance limits of the proposed project, given the close proximity of the drums and the odor resonating from them, there is the potential that hazardous waste/materials may have spilled or leaked from the drums and migrated onto the proposed project site. A Phase II ESA should be performed for this site to determine if any site contamination may have migrated onto the proposed project site. Findings from the Phase II ESA will determine the appropriate handling and disposal of any contaminated soils.

- Taiwan Farm, APN 121-050-12, San Juan Capistrano, California – within the project boundary

Status: No site records were available for this site. However, during site reconnaissance, two large and two small ASTs were noted to be stored on site. A worker on the property stated the large ASTs contained only water. The small ASTs looked to be propane tanks and did not appear to be active. The ASTs do not appear to contain any hazardous waste/materials, and construction of the proposed project is not anticipated to affect these ASTs. As a result, the ASTs do not pose a potential contamination risk and this site does not pose an environmental concern to the proposed project.

5.2 OTHER CONDITIONS OF CONCERN

5.2.1 Asbestos

Disturbed soils surrounding railroad tracks should be analyzed for asbestos-containing materials (ACMs) since disc brake pads for railroad use may have been manufactured with ACMs. All sampling and testing for ACMs shall be done prior to any ground disturbing activity.

5.2.2 Creosote and Pentachlorophenol

Utility poles and railroad ties that would be removed for construction of the proposed project should be tested for creosote and pentachlorophenol. In addition, disturbed soils surrounding railroad ties should be tested for creosote and pentachlorophenol. All sampling and testing for creosote and pentachlorophenol shall be done prior to any ground disturbing activity. All treated wood waste must be disposed of in an approved treated wood waste facility approved by the DTSC. Any personnel that handle treated wood waste will follow all applicable requirements according to Titles 8 and 22 of the California Code of Regulations and have proper training regarding identification, disposal, and safe handling of treated wood waste.

5.2.3 Herbicides

Herbicides may have been used around railroad tracks and ballasts for weed control. Ballasts and soils surrounding railroad tracks that may be disturbed should be tested for herbicides prior to any ground disturbing activity. The analytical results of the sampling will determine the appropriate handling and disposal.

5.2.4 Polychlorinated Biphenyls and Heavy Metals

Disturbed ballasts and soils surrounding railroad tracks should be analyzed for concentrations of heavy metals and PCBs. Utility pole-mounted transformers that will be relocated or removed as part of the project should also be considered for PCBs, as well as soils surrounding leaking transformers that will be disturbed. Leaking transformers should be considered PCB hazards, unless tested and confirmed otherwise, and handled accordingly. All sampling and testing for PCBs and heavy metals shall be done prior to any ground disturbing activity.

5.2.5 Railroad Tracks and Ballasts

Although no cases of accidental spills associated with the OCTA Metrolink railroad tracks in the project disturbance limits were revealed in the records search, soils along the railroad tracks within the project disturbance limits should be assumed to be impacted by polynuclear aromatic hydrocarbons (PNAs). Sources of PNAs include diesel fuel spills from trains, kerosene used to heat rails during rail replacement activities, and wood preservatives used for switch ties. Ballasts and soils surrounding railroad tracks may also be contaminated with chlorinated hydrocarbons (e.g., perchloroethylene [PCE] and trichloroethylene [TCE]) from cargo spills, and creosote and pentachlorophenol, which are used as a wood preservative for switch ties. Disturbed ballasts and soils surrounding railroad tracks should be analyzed for PNAs, kerosene, and chlorinated hydrocarbons. All sampling and testing for PNAs, kerosene, and chlorinated hydrocarbons shall be done prior to any ground disturbing activity.

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6.0 MINIMIZATION AND MITIGATION MEASURES

6.1 DUE DILIGENCE PRIOR TO CONSTRUCTION

Illegal storage and/or dumping on some of the properties identified within the project boundary should be further reviewed for the presence or absence of contamination prior to construction. During final design, a Phase II ESA should be conducted for hazardous waste/materials sites identified in the ISA to determine the presence and/or absence of contaminated soil and/or groundwater or to characterize the extent of contamination on site. It is not prudent to conduct these site investigations prior to completion of the Final Initial Study since new contamination may occur if the investigations are completed too far in advance of construction, and access to properties to be sampled may not be obtained until the final design of the project. These site investigations would be conducted in compliance with applicable federal, state, and local regulations. If contaminants are determined to be present during the site investigation, one or more of the following specialized reports may be necessary: Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report.

6.2 STUDIES AND PLANS

According to the *Draft Geotechnical Investigation Report* (Kleinfelder, 2011), groundwater is anticipated to be approximately 5 to 20 feet below the ground surface which is not expected to be encountered during construction since the water table is below the area of effect. However, soils that potentially contain hazardous materials may be encountered and disturbed during project construction. This could threaten worker health and safety and the environment and impact the proposed project's schedule and cost. Steps would be necessary to mitigate this impact. Additional and more in-depth assessments will be performed during the proposed project's design phase to identify soil and groundwater conditions in the project area. It is appropriate to perform additional studies during the design or even construction phase, because subsurface conditions can change dramatically over the years between project planning and construction.

The affected environment, as outlined in Section 4.0, provides a current snapshot of the conditions within the project study area. Based on these conditions, it would be appropriate to perform sampling and analysis at select locations prior to construction (e.g., down-gradient from sites with illegal storage and/or dumping of hazardous waste/materials). However, the appropriate location for sampling prior to construction may be different than it is today, due to the presence of new release sites or additional information.

Regardless of current conditions, the contractor should be prepared to encounter and appropriately manage and/or dispose of impacted soil and groundwater. The following plans and safeguards would be required prior to the start of construction.

6.2.1 Construction Health and Safety Plan

A Health and Safety Plan would be developed to guide all construction activities. A certified industrial hygienist would prepare this plan based on evaluations of proposed construction activities, the potential hazards identified in this report, and any future assessment prepared for the proposed project. This plan would contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. The plan would meet the requirements of 29 CFR 1910, 29 CFR 1926, and all other applicable federal, state, and local regulations and requirements.

6.2.2 Construction Contaminant Management Plan

A soils and groundwater Contaminant Management Plan would be implemented. This plan would include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials in accordance with applicable federal, state, and local regulations and requirements.

6.2.3 Removal of Storage Tanks during Construction

Removal of aboveground and underground storage tanks, if present, may also be required. All procedures for removing tanks, including sampling procedures, must be in accordance with all applicable federal, state, and local regulations. Old abandoned tanks that are not registered can also be present within the construction limits. Therefore, the contractor must be prepared to encounter such tanks during construction, as discussed in the contingency plan, addressed below.

6.2.4 Construction Contingency Plan

Before construction begins, a Construction Contingency Plan would be developed and implemented for handling and dealing with encountered unknown hazards. This plan would include provisions for responding to events during construction such as the discovery of unidentified USTs, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes. This plan would address UST decommissioning, field screening, and material testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. Underground Service Alert must be notified at least two days prior to excavation by calling 811 to ensure that utility owners mark the locations of underground transmission lines and facilities. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies.

6.2.5 Assessing Other Conditions of Concern

Other Conditions of Concern listed in Section 5.2 will be subject to further analysis as described in Section 6.3 (Approvals and Permits) and Section 6.4 (Minimization Measures).

6.3 APPROVALS AND PERMITS

Certain permits would require that the results of this report and any subsequent studies are included and addressed in project planning. The National Pollutant Discharge Elimination System (NPDES) general construction permit requires a construction site characterization, including a description of any pollution source(s). The contractor also must provide pollution-source corrective measures in the permit application.

Excavated soils for construction of the proposed project may be contaminated. Proper treatment or disposal of contaminated soils will be required. A variety of techniques (e.g., covering the material or transporting it off site to approved landfills or treatment facilities) could be used to prevent contaminated material from reentering the environment or exposing humans or animals to harmful materials. The removal or treatment of existing contaminated soils would be a potential benefit to the environment.

Dewatering activities are not anticipated during construction of the proposed project. However, should dewatering activities be required, a dewatering permit from the San Diego RWQCB for construction dewatering activities would also be required. This permit requires background information similar to the general construction permit, but also requires collecting representative samples of the dewatering effluent before construction can begin. Treatment of contaminated water is required prior to discharge into nearby storm sewers, streams, or marine waters. Further measures to protect surface and groundwater are described in the Water Quality Assessment Report (Parsons Brinckerhoff, 2011). Additional coordination with the OCHCA may be required when groundwater dewatering will occur in the vicinity of

contaminated soils or contaminated groundwater sites. The removal or treatment of contaminated groundwater would be a potential benefit to the environment.

The contractor would obtain advance approval from landfills to accept any impacted soil that requires disposal.

6.4 MINIMIZATION MEASURES

The measures described below would be implemented to minimize the potential for hazardous waste/materials to be exposed to the public or environment.

HAZ-1. Prior to construction, testing for the following potential contaminant sources to determine specific measures needed to handle hazardous waste/materials (testing may be considered only for directly-affected items or materials as a cost-effective measure). All assessment, handling, and removal of hazardous materials should be conducted by a hazardous waste technical specialist:

- ACM – Soils surrounding railroad tracks that may be disturbed would be sampled and tested for ACMs prior to ground disturbance.
- Creosote and Pentachlorophenol – Utility poles and railroad ties that would be removed as part of construction would be tested for creosote and pentachlorophenol. In addition, disturbed soil surrounding railroad ties would be tested for creosote and pentachlorophenol. All sampling and testing for creosote and pentachlorophenol will occur prior to ground-disturbing activity. All treated wood waste would be disposed of at a facility approved by the Department of Toxic Substances Control (DTSC). Any personnel that handle treated wood waste will follow all applicable requirements according to Titles 8 and 22 of the California Code of Regulations and will have proper training regarding identification, disposal, and safe handling of treated wood waste. Any existing utility poles that extend beyond the limits of the proposed development and are to be abandoned in place should be appropriately assessed and disposed of by a hazardous waste technical specialist.
- Herbicides – Soils surrounding railroad tracks that may be disturbed would be sampled and tested for herbicides prior to any ground disturbance.
- PCBs and Heavy Metals – Soils and ballast disturbed during construction would be analyzed for concentrations of heavy metals and PCBs. Utility pole-mounted transformers that would be relocated or removed as part of the project, as well as soils surrounding leaking transformers that would be disturbed, will be considered sources of PCBs. Leaking transformers will be considered a PCB hazard unless tested and confirmed otherwise, and handled accordingly. All sampling and testing for PCBs and heavy metals will occur prior to any ground-disturbing activity.
- Railroad Tracks and Ballasts – Soil disturbance surrounding railroad tracks and ballasts will be analyzed for PNAs, kerosene, and chlorinated hydrocarbons. All sampling and testing for PNAs, kerosene, and chlorinated hydrocarbons will be done prior to any ground disturbing activity.
- OCTA Metrolink (approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano) – During site reconnaissance, two unlabeled 55-gallon metal rusted drums were observed within the disturbance limits of the proposed project (west of the railroad tracks); project construction may affect these two drums. There is also a potential for encountering contaminated soil that may have resulted from a leak beneath the drums. Both drums appeared to have been abandoned, and it is not known if the drums contain any hazardous waste/materials. A Phase II ESA should be performed prior to any ground

disturbing activity to characterize the contents of the drums and to assess the potential for soil contamination that may have resulted from a leak beneath the drums.

- Unnamed Site (APN 637-082-14, San Juan Capistrano) – During site reconnaissance, approximately 37 unlabeled 55-gallon metal rusted drums were noted and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids with a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris, and seven abandoned 55-gallon metal rusted drums was observed at the southern end of the parcel. Although the 55-gallon metal drums are not located within the disturbance limits of the proposed project, given the close proximity of the drums and the odor resonating from the drums, it is possible that hazardous waste/materials have spilled or leaked from the drums and migrated onto the disturbance area. A Phase II ESA should be performed prior to any ground disturbing activity to determine if contamination from this site may have migrated into the area proposed for construction disturbance.

HAZ-2. Potential impacts from construction-related hazardous waste and materials would be addressed through implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will be developed in compliance with the National Pollutant Discharge Elimination System (NPDES) general construction permit. The SWPPP will include Best Management Practices (BMPs) to address potential impacts related to the use and potential discharge of construction-related hazardous waste and materials.

HAZ-3. To reduce potential impacts associated with hazardous waste/materials during construction, a Health and Safety Plan will be developed prior to the commencement of construction to guide all construction activities. The plan will contain specific procedures for encountering both expected and unexpected contaminants. A soils and groundwater Containment Management Plan and a Contingency Plan will also be developed to address procedures to deal with potential soil and groundwater contamination, storage tank removal, and/or discovery of unidentified hazardous or solid wastes during construction.

7.0 FINDINGS SUMMARY

In conclusion, based upon the definition of a REC in the ASTM Standard Practice E-1527-05, the following RECs have been identified for the proposed project:

- RECs on the Railroad Tracks
 - ACM – Soils surrounding railroad tracks may contain ACMs since disc brake pads for railroad use may have been manufactured with ACMs.
 - Creosote and Pentachlorophenol – Utility poles and railroad ties may contain creosote and pentachlorophenol. In addition, soils surrounding railroad ties may also contain creosote and pentachlorophenol.
 - Herbicides – Herbicides may have been used around railroad tracks and ballasts for weed control.
 - PCBs and Heavy Metals – Ballasts and soils surrounding railroad tracks have the potential to be contaminated with PCBs and heavy metals. In addition, there is a potential for pole-mounted electrical transformers to contain PCBs, as well as soils surrounding leaking transformers.
 - Railroad Tracks and Ballasts – Ballasts and soils surrounding railroad tracks have the potential to be contaminated with PNAs, kerosene, and chlorinated hydrocarbons.
- Sites of Concern
 - 1) OCTA Metrolink (approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano, California) – During site reconnaissance, two unlabeled 55-gallon metal rusted drums were observed to be within the disturbance limits of the proposed project (west of the railroad tracks); construction of the proposed project may affect these two drums. During construction activities, there is also a potential to encounter contaminated soil that may have resulted from a leak beneath the drums. Both drums appeared to have been abandoned, and it is unknown if they contain any hazardous waste/materials.
 - 2) Unnamed Site (APN 637-082-14, San Juan Capistrano, California) – During site reconnaissance, approximately 37 unlabeled 55-gallon metal rusted drums were noted onsite and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids, and a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris, and seven abandoned 55-gallon metal rusted drums was observed at the southern end of the parcel. Although the 55-gallon metal drums are not located within the disturbance limits of the proposed project, given the close proximity of the drums and the odor resonating from the drums, hazardous waste/materials may have spilled or leaked from the drums and migrated onto the proposed project site.

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8.0 OPINION

Based on the findings of our assessment, Parsons Brinckerhoff provides the following opinions on the observed conditions:

The following RECs have been identified for the proposed project:

- ACM – Soils surrounding railroad tracks may contain ACMs since disc brake pads for railroad use may have been manufactured with ACMs. It is the opinion of Parsons Brinckerhoff that soils surrounding railroad tracks that may be disturbed as part of construction should be evaluated for ACMs. All sampling and testing for ACMs in soils surrounding railroad tracks shall be done prior to any ground disturbing activity.
- Creosote and Pentachlorophenol – It is the opinion of Parsons Brinckerhoff that utility poles and railroad ties that would be removed as part of construction should be tested for creosote and pentachlorophenol. In addition, soils disturbed around the railroad ties should be tested for creosote and pentachlorophenol. All sampling and testing for creosote and pentachlorophenol shall be done prior to any ground disturbing activity.
- Herbicides – It is the opinion of Parsons Brinckerhoff that herbicides be tested in ballasts and soils surrounding railroad tracks that may be disturbed as part of construction. All sampling and testing for herbicides shall be done prior to any ground disturbing activity.
- PCBs and Heavy Metals – It is the opinion of Parsons Brinckerhoff that disturbed ballasts and soils surrounding railroad tracks should be analyzed for concentrations of heavy metals and PCBs. Utility pole-mounted transformers that will be relocated or removed as part of the project should also be considered for PCBs, as well as soils surrounding leaking transformers that will be disturbed. Leaking transformers should be considered PCB hazards, unless tested and confirmed otherwise, and handled accordingly. All sampling and testing for PCBs and heavy metals shall be done prior to any ground disturbing activity.
- Railroad Tracks and Ballasts – It is the opinion of Parsons Brinckerhoff that disturbed ballasts and soils surrounding railroad tracks should be analyzed for PNAs, kerosene, and chlorinated hydrocarbons. All sampling and testing for PNAs, kerosene, and chlorinated hydrocarbons shall be done prior to any ground disturbing activity.
- Sites of Concern
 - 1) OCTA Metrolink (approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano, California) – During site reconnaissance, two unlabeled 55-gallon metal rusted drums were observed to be within the disturbance limits of the proposed project (west of the railroad tracks); construction of the proposed project may affect these two drums. During construction, there is a potential to encounter contaminated soil that may have resulted from a leak beneath the drums. Both drums appeared to have been abandoned, and it is unknown if the drums contain any hazardous waste/materials. It is the opinion of Parsons Brinckerhoff that a Phase II ESA should be performed prior to any ground disturbing activity to characterize the content stored in the drums, and to assess for any possible soil contamination that may have resulted from a leak beneath the drums.
 - 2) Unnamed Site (APN 637-082-14, San Juan Capistrano, California) – During site reconnaissance, approximately 37 unlabeled 55-gallon metal rusted drums were noted onsite and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids and a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris, and seven abandoned 55-gallon metal rusted drums was

- 3) observed at the southern end of the parcel. Although the 55-gallon metal drums are not located within the disturbance limits of the proposed project, given the close proximity of the drums, and the odor resonating from the drums, hazardous waste/materials may have spilled or leaked from the drums and migrated onto the proposed project site. It is the opinion of Parsons Brinckerhoff that a Phase II ESA should be performed prior to any ground disturbing activity to determine if any site contamination may have migrated onto the proposed project site.

9.0 CONCLUSION

Parsons Brinckerhoff has conducted this Initial Site Assessment for the Laguna Niguel – San Juan Capistrano Passing Siding Project in general accordance with applicable sections of the ASTM Standard Practice for Environmental Site Assessments (E-1527-05), applicable sections of EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), and California Public Resources Code Section 21092.6. This assessment has revealed no evidence of RECs in connection with the subject property except for the potential of the following:

- ACM in soils surrounding railroad tracks.
- Creosote and pentachlorophenol in utility poles and railroad ties, and in soils surrounding railroad ties.
- Herbicides in soils surrounding railroad tracks and in ballasts.
- PCB and heavy metals in soils surrounding the railroad tracks and in ballasts. PCB in utility pole-mounted transformers and soils surrounding leaking transformers.
- PNAs, kerosene and chlorinated hydrocarbons in soils surrounding railroad tracks and in ballasts.
- Potential soil contamination at two hazardous waste/materials sites (one site within the project disturbance limits and one site adjacent to the project disturbance limits).

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10.0 RECOMMENDATIONS

The following are the recommendations for potential hazardous waste/materials issues associated with the proposed project.

Recognized Environmental Conditions

- ACM – Soils surrounding railroad tracks that may be disturbed should be tested for ACMs. All sampling and testing for ACMs in these soils shall be done prior to any ground disturbing activity.
- Creosote and Pentachlorophenol – Utility poles and railroad ties that would be removed as part of construction should be tested for creosote and pentachlorophenol. In addition, disturbed soils surrounding railroad ties should be tested for creosote and pentachlorophenol. All sampling and testing for creosote and pentachlorophenol shall be done prior to any ground disturbing activity.
- Herbicides – Soils surrounding railroad tracks that may be disturbed should be tested for herbicides. All sampling and testing for herbicides in soils surrounding railroad tracks shall be done prior to any ground disturbing.
- PCBs and Heavy Metals – Disturbed ballasts and soils surrounding railroad tracks should be analyzed for concentrations of heavy metals and PCBs. Utility pole-mounted transformers that will be relocated or removed as part of the project should be considered for PCBs, as well as soils surrounding leaking transformers that will be disturbed. Leaking transformers should be considered as a PCB hazard unless tested and confirmed otherwise, and handled accordingly. All sampling and testing for PCBs and heavy metals shall be done prior to any ground disturbing activity.
- Railroad Tracks and Ballasts – Disturbed ballasts and soils surrounding railroad tracks should be analyzed for PNAs, kerosene, and chlorinated hydrocarbons. All sampling and testing for PNAs, kerosene, and chlorinated hydrocarbons shall be done prior to any ground disturbing activity.
- Sites of Concern
 - 1) OCTA Metrolink (approximately 50 feet west of 29931 Camino Capistrano, San Juan Capistrano, California) – During site reconnaissance, two unlabeled 55-gallon metal rusted drums were observed to be located within the disturbance limits of the proposed project (west of the railroad tracks) and as a result, construction of the proposed project may affect these two drums. There is also a potential to encounter contaminated soil that may have resulted from a leak beneath the drums during construction activities. Both drums appeared to have been abandoned, and it is unknown if the drums contain any hazardous waste/materials. A Phase II ESA should be performed prior to any ground disturbing activity to characterize the content stored in the drums, and to assess for any possible soil contamination that may have resulted from a leak beneath the drums.
 - 2) Unnamed Site (APN 637-082-14, San Juan Capistrano, California) – During site reconnaissance, approximately 37 unlabeled 55-gallon metal rusted drums were noted and appeared to have been abandoned. Multiple drums had open nozzle caps on the lids with a resonating odor of petroleum or asphalt. In addition, a dumping ground consisting of automobiles, trash, debris, and seven abandoned 55-gallon metal rusted drums was observed at the southern end of the parcel. Although the 55-gallon metal drums are not located within the disturbance limits of the proposed project, given the close proximity of the drums and the odor resonating from the drums, there is a potential hazardous waste/materials may have spilled or leaked from the drums and migrated onto the proposed project site. A Phase II ESA should be performed prior to any ground disturbing activity to determine if any site contamination may have migrated onto the proposed project site.

Plans

- Construction Health and Safety Plan. A Health and Safety Plan would be developed to guide all construction activities. A certified industrial hygienist would prepare this plan based on evaluations of proposed construction activities, the potential hazards identified in this ISA, and any future assessment prepared for the proposed project. This plan would contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. This plan would meet the requirements of 29 CFR 1910, 29 CFR 1926, and all other applicable federal, state, and local regulations and requirements.
- Construction Contaminant Management Plan. A soils and groundwater Contaminant Management Plan would be implemented. This plan would include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials in accordance with applicable federal, state, and local regulations and requirements.
- Construction Contingency Plan. Before construction begins, a Construction Contingency Plan would be developed and implemented for handling and dealing with unknown hazards. This plan would include provisions for responding to events such as the discovery of unidentified USTs, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers. Underground Service Alert must be notified at least two days prior to excavation by calling 811 to ensure that utility owners mark the locations of underground transmission lines and facilities. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies.

Approvals and Permits

- Certain permits will require that the results of this ISA and any subsequent studies are included and addressed in project planning. The NPDES general construction permit requires a construction site characterization, including a description of any pollution sources. The contractor will also have to provide pollution-source corrective measures in the NPDES permit application.
- Soils removed by grading may be contaminated. Proper treatment or disposal of contaminated soils will be required. A variety of techniques (e.g., covering the material or transporting it off site to approved landfills or treatment facilities) could be used to prevent contaminated material from reentering the environment or exposing humans or animals to harmful materials. The removal or treatment of contaminated soils would be a potential benefit to the environment.
- Dewatering activities are not anticipated during construction of the proposed project. However, should dewatering activities be necessary, a dewatering permit from the San Diego RWQCB for construction dewatering activities would be required. This permit requires similar background information as the general construction permit, but also requires collecting representative samples of the dewatering effluent before construction can begin. Treatment of contaminated water is required prior to discharge into nearby storm sewers, streams, or marine waters. Further measures to protect surface and groundwater are described in the Water Quality Assessment Report (Parsons Brinckerhoff, 2011). Additional coordination with the OCHCA may be required when groundwater dewatering will occur in the vicinity of contaminated soils or contaminated groundwater sites. The removal or treatment of contaminated groundwater would be a potential benefit to the environment.
- The contractor would obtain advance approval from landfills to accept any impacted soil that requires disposal.

11.0 REFERENCES

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APPENDIX A

FIELD PHOTOS

February 4, 2009, and February 19, 2009

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Photo 1 – Arroyo Trabuco Golf Club (26772 Avery Parkway, Mission Viejo). This site is a golf club with a golf course.



Photo 3B – Residential Property (29931 Camino Capistrano, San Juan Capistrano). An additional 55-gallon metal rusted drum was noted. The drum was missing a lid and was unlabeled.



Photo 2 – Rancho Capistrano Community Church (29251 Camino Capistrano, San Juan Capistrano). This site appears to be a church facility.



Photo 3C – Residential Property (29931 Camino Capistrano, San Juan Capistrano). Two additional 55-gallon metal rusted drums were noted to be stored near a tool shed.



Photo 3A – Residential Property (29931 Camino Capistrano, San Juan Capistrano). This site is to a residential property. An unlabeled 55-gallon metal rusted drum was noted.



Photo 4A – Unnamed Site (APN 637-082-14). This site is primarily open space. Multiple 55-gallon metal rusted drums appear to have been abandoned on this site.

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Photo 4B – Unnamed Site (APN 637-082-14). A number of the drums had open nozzle caps on the lids. A resonating odor of petroleum or asphalt was also noted.



Photo 4E – Unnamed Site (APN 637-082-14). An additional unlabeled 55-gallon metal rusted drum was noted at the southern end of the parcel.



Photo 4C – Unnamed Site (APN 637-082-14). A dumping ground consisting of automobiles and multiple 55-gallon metal rusted drums was noted to at the southern end of the parcel. The drums were unlabeled, had no lids, and appear to have been abandoned.



Photo 5A – Taiwan Farm (APN 121-050-12). This site appears to be a greenhouse.



Photo 4D – Unnamed Site (APN 637-082-14). Trash and debris were also noted at the dumping ground.



Photo 5B – Taiwan Farm (APN 121-050-12). Two large ASTs containing water were noted to be stored on site.

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Photo 5C – Taiwan Farm (APN 121-050-12). Two small ASTs were also noted to be stored on site. The ASTs appear to be propane tanks and do not pose a potential contamination risk to the project. These small ASTs did not appear to be active.



Photo 6 – OCTA Metrolink (approximately 50 feet southwest of 29931 Camino Capistrano, San Juan Capistrano). Two 55-gallon metal rusted drums were noted within the disturbance limits of the proposed project (west of the railroad tracks). Both drums were unlabeled and appeared abandoned.