

3.8 Hazards and Hazardous Materials

This section describes the environmental and regulatory settings and draft significance criteria with respect to hazards and hazardous materials.

3.8.1 Environmental Setting

This subsection describes the environmental setting for hazards and hazardous materials and also provides definitions and methodology that support the understanding of the environmental setting of the proposed project.

3.8.1.1 Definitions

For the purpose of this analysis in the Environmental Setting section, the “study area” refers to the land beneath the proposed project components (i.e., temporary workspace, permanent right-of-way [ROW], and aboveground facilities).

The U.S. Department of Transportation (DOT), Office of Hazardous Material Safety, defines “hazard” as a condition, activity, or inherent characteristic of a material that has the potential to cause harm to people, property, or the environment. The term “hazardous material” is defined by California health and safety statutes as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment (California Health and Safety Code [HSC], Chapter 6.95, Section 25501). Under Title 22 of the California Code of Regulations (CCR), the term hazardous material is further defined as:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed. (CCR, Title 22, Section 66260.10)

Exposure to hazardous materials can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Hazards to human health and the environment can occur during production, storage, transportation, use, or disposal of hazardous materials. If not properly handled or contained, hazardous materials also have the potential to be released into the environment and can cause public health and environmental concerns. Some hazardous materials are also fire and explosion hazards. For this reason, the storage, handling, transport, and disposal of hazardous materials is regulated by federal, state, and local governmental agencies (Blanchard 2008).

Hazardous substances are defined more broadly in California HSC, Chapter 6.8, Section 25316, as being inclusive of hazardous materials, hazardous wastes, hazardous contaminants, and hazardous pollutants. In this section, the term “hazardous materials” is used to denote hazardous products and hazardous commodities that are transported or used in commerce. Natural gas is a hazardous material. The term “hazardous waste” is used for waste materials that are destined for treatment or disposal and have been defined in state or federal regulations as being hazardous waste. The term hazardous waste is specifically defined by California health and safety statutes and regulations. Hazardous wastes include Resource Conservation and Recovery Act (RCRA) hazardous waste, extremely hazardous waste, and acutely

hazardous waste (California HSC §25117). CCR, Title 22, Division 4.5, Chapter 11, Section 66261.3, also defines hazardous waste.

3.8.1.2 Hazardous Materials Sites

Methodology

A Phase I Environmental Site Assessment (ESA) was completed in 2015 for the study area following the protocol established by ASTM International. The Phase I ESA included an Environmental Data Resources, Inc. (EDR) report comprised of a detailed environmental database search that identified locations of properties, facilities, and sites with known or suspected releases of hazardous materials and petroleum. The EDR report included the locations of aboveground storage tanks (ASTs) and underground storage tanks (USTs) that are used to store hazardous materials or petroleum. It also included locations where hazardous wastes are handled, generated, stored, and treated, as well as historic hazardous material disposal locations. The AST and UST locations include all known locations whether associated with a release or not. The EDR report is derived from information archived in various federal, state, and local regulatory databases. The following federal, state, and local database records were reviewed based upon the EDR and Phase I ESA reports:

- Active UST facilities;
- California Department of Conservation Online Well Record database;
- California Hazardous Material Incident Report System;
- California Office of Environmental Health Hazard Assessment Notify 65 Database;
- California State Water Resources Control Board (SWRCB) GeoTracker database;
- Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS);
- CERCLIS No Further Response Actions Planned;
- Department of Toxic Substances Control (DTSC), Cortese List;
- DTSC's EnviroStor database;
- Federal Emergency Response Notification System;
- Federal Institutional Controls/Engineering Controls;
- Federal UST listings;
- Local Landfill/Solid Waste Disposal sites;
- Local Brownfield sites;
- National Priorities List (NPL) (including delisted and proposed sites);
- Needing Further Evaluation sites;
- RCRA Corrective Action Reports (CORRACTS) facilities list;
- RCRA Non-CORRACTS Treatment, Storage, and Disposal Facilities list;
- RCRA generators list;
- California State listing of AST and petroleum storage tank locations;
- School Property Evaluation Program;

- State and Tribal Equivalent NPL/CERCLIS sites;
- State and Tribal Registered USTs;
- State and Tribal Landfills and Solid Waste Disposal sites;
- Tribal Leaking USTs (LUSTs);
- State and Tribal Voluntary Cleanup sites;
- State Response sites;
- Statewide Spills, Leaks, Investigations, and Cleanups; and
- Toxic Alert for California Superfund sites.

The Phase I ESA and EDR reports identified numerous sites where hazardous materials were managed, a number of sites where hazardous wastes were generated, and a few hazardous substance release sites that are in close proximity to the study area. The Phase I ESA further identified a total of 37 Recognized Environmental Conditions (RECs) associated with the study area (Haley & Aldrich 2015). RECs are defined by ASTM International as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” The RECs listed in the Phase I ESA are included in Table 3.8.1 and Figure 3.8-1.

Cortese List Sites

The Cortese List, compiled pursuant to California Government Code Section 65962.5, is a list of hazardous waste sites and facilities identified by the California SWRCB and the California DTSC. This list includes solid waste disposal sites, facilities, and operations with SWRCB or DTSC “Cease and Desist Orders” or “Cleanup and Abatement Orders”; all sites and facilities in the SWRCB Geotracker database; and all sites in the DTSC EnviroStor database. Cortese List sites include sites or facilities that have a documented release of hazardous materials or substances into the environment, as well as sites that are current or historic treatment, storage, and disposal facilities.

Additional review of the California DTSC EnviroStor database and the California SWRCB GeoTracker environmental database identified a total of 44 sites documented to be associated with releases of hazardous materials that are located within 0.25 mile of the study area (CA DTSC 2017; SWRCB 2017). Table 3.8-1 presents a list of these 44 Cortese List and potentially contaminated sites, which includes the 37 RECs identified in the Phase I ESA (Haley & Aldrich 2015). The locations of these 44 sites are also shown in Figure 3.8-1.

Table 3.8-1 Cortese List Hazardous Materials and Potentially Contaminated Sites within 0.25 Mile of the Study Area

Name	Case Status/ Site Type	Location	Distance from Project	Media/ Contaminant
Rainbow Compressor Station	Closed/ Contaminated Soil Site	3051 Rainbow Valley Blvd, Fallbrook	0.15 mile east of MP 0.2	Unspecified soil contamination
Flynn Rainbow Nursery (aka Hines)	This case was closed in 2001/ LUST Site	2500 Rainbow Valley Blvd, Fallbrook	0.1 mile southwest of Rainbow Creek Yard	Soil contaminated with TPH
Naton Tractor Incorporated	This case was closed in 1989/ LUST Site	4935 2nd St., Fallbrook	400 feet east of MP 1.5	Soil contaminated with TPH

Table 3.8-1 Cortese List Hazardous Materials and Potentially Contaminated Sites within 0.25 Mile of the Study Area

Name	Case Status/ Site Type	Location	Distance from Project	Media/ Contaminant
Rainbow Oaks	Case closed in 2010/LUST Site	4815 E 5th St., Fallbrook	200 feet south of MP 1.7	Groundwater contaminated with TPH
Highway Accident Release	Case closed/Spill Site	Stewart Canyon Road and Old Highway 395	Within the project area at MP 5.8	Soil contaminated with TPH
Mobil Station 18-034	Open Case/LUST Site	4730 Hwy 76, Fallbrook	Adjacent at MP 8.4 to the east	Groundwater and soil contaminated with TPH
Champagne Texaco	Case Closed 2006/LUST Site	8808 Lawrence Welk Drive, Escondido	Adjacent at MP 15.8 to the east	Groundwater and Soil contaminated with TPH
Vacant Lot	Case Closed 1993/ Soil Contamination	26845 Mountain Meadow Rd., Escondido	0.1 mile east of MP 18.5	Soil contaminated with TPH
Connecticut General Life Insurance/ McCleaners	Case Closed 2002/ Former Dry Cleaner	306 W. El Norte Pkwy, Escondido	Adjacent at MP 22.6 to the west	Soil and groundwater/ contaminated with volatile organic compounds
E-Z Auto Repair	Case Closed 2003/ LUST Site	1280 Escondido Blvd, Escondido	Adjacent to MP 23.1 to the southeast	Groundwater contaminated with TPH
Shell Service Station	Case Closed 2005/ LUST Site	340 W. Mission Ave, Escondido	Adjacent to MP 23.9 to the northeast	Groundwater contaminated with TPH
Mobil Station 18-100	Open Case/ LUST Site	502 W. Mission Blvd, Escondido	Adjacent to MP 23.9 to the west	Groundwater contaminated with TPH
Parkway Place	Closed Case 2000/ Former Dry Cleaner	649 W. Mission Blvd, Escondido	0.24 mile west of MP 23.9	Soil contaminated with halogenated hydrocarbons
Mission Escondido Mall	Closed Case 2000/ Former LUST Site	205 W. Mission Blvd, Escondido	0.24 mile East of MP 23.9	Soil contaminated with TPH
Golden Gate Gasoline	Open Case/LUST Site	225 W. Washington Ave, Escondido	0.2 mile northeast of MP 24.2	Groundwater contaminated with diesel and TPH
Hoover Dry Cleaners	Open Case/Dry Cleaner Site	370 W. Washington Ave, Escondido	400 feet east of MP 24.2	Unknown media contaminated with PCE
Dunn-Edwards Corporation/ 7 Day Market	Open Case/LUST Site	503-506 W. Washington Ave, Escondido	Adjacent to MP 24.1 on the west	Groundwater contaminated with TPH
Civic Center Plaza/Mr. Terry 1-Hr Mart	Case Closed/ Release Site	431 N. Escondido Blvd, Escondido	Adjacent to MP 24.3 on the east	Groundwater contaminated with TPH
North County Transit District	Open Case/LUST Site	755 Norlak, Escondido	0.15 mile west of MP 24.4	Groundwater contaminated with PCE and trichloroethylene
Jim L. Daniels	Case Closed/LUST Site	520 W. Grand Ave, Escondido	150 feet west of MP 24.6	Groundwater contaminated with waste oil, motor oil, hydraulic oil, and lubricating oil
U.S. Post Office Escondido Station	Case Closed/LUST Site	203 S. Orange St, Escondido	450 feet northeast of MP 24.4	Groundwater contaminated by a gasoline release

Table 3.8-1 Cortese List Hazardous Materials and Potentially Contaminated Sites within 0.25 Mile of the Study Area

Name	Case Status/ Site Type	Location	Distance from Project	Media/ Contaminant
Formulabs Industrial Inks	Case Closed/LUST Site	460 S. Quince St, Escondido	500 feet west of MP 24.8	Soil contaminated with acetone
Thrifty Service Station #123	Open Case/LUST Site	434 W. 5th Ave, Escondido	Adjacent to MP 24.9 on the northeast	Groundwater contaminated with TPH
Han's United States Petroleum and Service	Open Case/LUST Site	445 W. 5th Ave, Escondido	Adjacent to MP 24.9 on the east	Groundwater contaminated with TPH
Budget Gas	Open Case/LUST Site	510 W. 5th Ave, Escondido	Adjacent to MP 24.9 on the west	Groundwater contaminated with TPH
Mobil Service Station #18-231	Open Case/LUST Site	450 W. 9th Ave, Escondido	Adjacent to MP 25.2 on the northeast	Groundwater contaminated with TPH
7-Eleven	Open Case/LUST Site	522 W. 9th Ave, Escondido	Adjacent to MP 25.2 on the northwest	Groundwater contaminated with TPH
G&S Gasoline and Minimart	Open Case/LUST Site	501 W. 9th Ave, Escondido	Adjacent to MP 25.2 on the west	Groundwater contaminated with TPH
Carson Cleaners	Open Case/Former Dry Cleaner Site	224 W. 13th Ave, Escondido	0.15 mile northeast of MP 25.5	Groundwater contaminated with halogenated hydrocarbons
Schniepp Property	Open Case/LUST Site	1417 S. Escondido Blvd, Escondido	0.15 mile northeast of MP 25.6	Groundwater contaminated with TPH
Gas and Save/ Texaco/ Walgreen	Closed Case/LUST Site	460 W. Felicita Ave, Escondido	Adjacent to MP 25.8 on the east	Groundwater contaminated with gasoline
Former Camp Escondido	Closed Case/Former Military Installation	Developed properties, vacant lots, roadways and rights-of-way between 5th and 11th Avenues to the north and south and between Tulip and Pine Streets east and west in Escondido	Adjacent to MP 25.9 on the west	Potential for UXO
Chevron 9-3920	Open Case/LUST Site	469 W. Felicita Ave, Escondido	Adjacent to MP 25.9 on the southeast	Groundwater contaminated with TPH
Shell Oil Products Company	Open Case/LUST Site	12472 Rancho Bernardo Rd, San Diego	Adjacent to MP 33.2 on the west	Groundwater contaminated with TPH
Rancho Bernardo Texaco	Open Case/LUST Site	12507 Rancho Bernardo Rd, San Diego	130 feet northeast of MP 33.3	Groundwater contaminated with TPH
7-Eleven Food Store #13624	Case Closed/LUST Site	13626 Pomerado Rd, Poway	130 feet northwest of MP 34.9	Groundwater contaminated with methyl tert-butyl ether and tert-butyl alcohol

Table 3.8-1 Cortese List Hazardous Materials and Potentially Contaminated Sites within 0.25 Mile of the Study Area

Name	Case Status/ Site Type	Location	Distance from Project	Media/ Contaminant
Poway Econo Lube	Open Case/AST and LUST Site	13506 Pomerado Rd, Poway	Adjacent to MP 37.3 on the west	Groundwater contaminated with TPH
Union Oil Service Station #488	Case Closed/LUST Site	13012 Pomerado Rd, Poway	Adjacent to MP 37.8 on the northwest	Groundwater contaminated with TPH
Chevron 94955	Case Closed/ LUST Site	12410 Poway Rd, Poway	Adjacent to MP 38.0 on the east	Groundwater contaminated with TPH
Shell Service Station/ Callaway Oil Incorporated	Open Case/LUST Site,	12365 Poway Rd, Poway	Adjacent to MP 38.1 on the northwest	Groundwater contaminated with TPH
Circle K	Case Open/LUST Site	12906 Pomerado Rd, Poway	100 feet northwest of MP 38.2	Groundwater contaminated with TPH
Sycamore Canyon Missile Test Area/ Facilities	Case open/Former Military and Defense Contractor Facilities	East of Pomerado Rd, Scriptts Ranch Neighborhood of San Diego	Access road and MCAS Miramar Missile Test Area is adjacent to MP 40.5 on the east	Potential Groundwater and soil with organic and inorganic chemicals and waste
Superway Dry Cleaners	Open Case/Former Dry Cleaner Site	9396-D Mira Mesa Blvd, City of San Diego	0.2 mile south west of Mira Mesa Pipeline Extension/ Regulator Station 1494	Groundwater and soil contaminated with halogenated hydrocarbons
Linda Vista Landing Field	Case open/Former Military Facility	1 mile north of MCAS Miramar, Mira Mesa Neighborhood of San Diego	0.2 mile southwest of Mira Mesa Pipeline Extension/ Regulator Station 1051	Potential for UXO

Sources: CA DTSC 2017; Haley & Aldrich 2015; SWRCB 2017.

Key:

AST = Aboveground Storage Tank

LUST = Leaking Underground Storage Tank

MCAS = Marine Corps Air Station

MP = Milepost from Rainbow Metering Station

PCE = Tetrachloroethylene

TPH = Petroleum Hydrocarbons

UXO = Unexploded ordnance

Hazardous Materials

Contaminated Soil and Groundwater

In recent years, LUST sites have been closed using risk-based criteria, meaning that they may have been closed with known soil and/or groundwater contamination remaining in place. While contaminated soil and/or groundwater on the 44 sites listed in Table 3.8-1 may exist, Table 3.8-2 presents a list of the 14 locations within the study area that are most likely to have contaminated soil and/or groundwater. The locations are also shown in Figure 3.8-1. The groundwater associated with 13 of the 14 sites is documented to have been contaminated with petroleum hydrocarbons that include both hazardous volatile and semi-volatile organic compounds. The groundwater depth in the vicinity of these sites is shallow with historically documented depths to groundwater ranging between 4 to 35 feet below ground surface.

Petroleum hydrocarbons contaminated groundwater and soil has the potential to have migrated onto the study area (Haley & Aldrich 2015).

Table 3.8-2 Potentially Contaminated Locations Within the Study Area

Proposed Project Location	Contamination Origin Name	Contamination Origin Location	Media/Contaminant
MP 5.8	Highway Accident Release	Stewart Canyon Rd and Old Highway 395	Soil potentially contaminated with TPH
Adjacent at MP 8.4 to the east	Mobil Station 18-034	4730 Hwy 76, Fallbrook	Groundwater and soil contaminated with TPH
Adjacent to MP 23.9 to the northeast	Shell Service Station	340 W. Mission Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 24.9 on the northeast	Thrifty Service Station #123	434 W. 5th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 24.9 on the east	Han's United States Petroleum and Service	445 W. 5th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 24.9 on the west	Budget Gas	510 W. 5th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 25.2 on the northeast	Mobil Service Station #18-231	450 W. 9th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 25.2 on the northwest	7-Eleven	522 W. 9th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 25.2 on the west	G&S Gasoline and Minimart	501 W. 9th Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 25.6 on the southeast	Chevron 9-3920	469 W. Felicita Ave, Escondido	Groundwater contaminated with TPH
Adjacent to MP 33.2 on the west	Shell Oil Products Company	12472 Rancho Bernardo Rd, San Diego	Groundwater contaminated with TPH
130 feet northeast of MP 33.3	Rancho Bernardo Texaco	12507 Rancho Bernardo Rd, San Diego	Groundwater contaminated with TPH
Adjacent to MP 38.1 on the northwest	Shell Service Station/ Callaway Oil Incorporated	12365 Poway Rd, Poway	Groundwater contaminated with TPH
100 feet northwest of MP 38.2	Circle K	12906 Pomerado Rd, Poway	Groundwater contaminated with TPH

Sources: CA DTSC 2017; Haley & Aldrich 2015; SWRCB 2017.

Key:

MP = Milepost from Rainbow Metering Station

TPH = Petroleum Hydrocarbons

Unexploded Ordnance

The proposed project from Milepost (MP) 43.7 to the southern terminus lies within the boundaries of Marine Corps Air Station (MCAS) Miramar. MCAS Miramar has 18 hazardous materials disposal or discharge sites and 12 historical munitions and explosives areas within its' 24,000-acre boundaries (USMC 2011). While the MCAS Miramar hazardous material sites are not near the study area, the proposed project is routed through areas of historical munitions and explosives use, which have the potential to contain unexploded ordnance (UXO) including the Camp Elliot Formerly Used Defense Site (FUDS) located adjacent to MCAS Miramar.

The study area within MCAS Miramar is adjacent and parallel to the two existing San Diego County Water Authority's aqueducts (Aqueducts #1 and #2) and adjacent to a maintained firebreak. Thus, the

proposed project is in an area that was previously disturbed during construction of the San Diego County Water Authority's aqueducts. The study area would be adjacent a firebreak with routine disturbances due to the maintenance. However, excavation and trenching activities have the potential to disturb previously undisturbed UXO, even in areas with past disturbances (USMC 2017a).

Hazardous Materials Used During Construction, Operation, and Maintenance

During construction, the proposed project would require the transport and use of an unspecified quantities of hazardous materials such as fuels, lubricants, coolants, industrial gases (such as acetylene, argon, oxygen, and propane), and cleaning chemicals. Table 3.8-3 provides an applicant-supplied general listing of the types of hazardous materials anticipated to be used during construction. These hazardous materials, if stored on a construction site in sufficient quantity, would require a Hazardous Materials Business Plan (HMBP), which is required by California regulation. The HMBP would include an inventory of any hazardous materials used during the construction. The operation and maintenance phase of the proposed project would also require the transportation and use of these hazardous materials, but in smaller quantities. These hazardous materials, if stored in sufficient quantity on site during operation and maintenance, would require a HMBP as well. HMBPs and associated regulations are further discussed in Section 3.8.2, Regulatory Setting.

Although the hazardous materials listed in Table 3.8-3 are not acutely hazardous, with the possible exception of insecticides, most are classified as toxic, flammable, or combustible. The transportation, storage, and use of these hazardous materials could result in potential human and environmental exposures through accidental spillage or release.

Insecticide used for pest control would require that the applicant store and use U.S. Environmental Protection Agency (EPA)-registered and approved pesticides. Weed control, if required and used for fire hazard abatement during construction, operation, and maintenance would also require the use of EPA-registered and approved herbicides.

Safety Data Sheets readily available to on-site personnel for all applicable hazardous substances and materials would be required by the U.S. Occupational Safety and Health Administration (OSHA) and the San Diego Department of Environmental Health's Hazardous Materials Division (Hazardous Materials Division [HMD]). No extremely hazardous substances (i.e., governed under Title 40, Part 335 of the Code of Federal Regulations [CFR]) are anticipated to be produced, used, stored, transported, or disposed of as a result of project construction, operation, and maintenance.

Hazardous Wastes Generated During Construction, Operation, and Maintenance

Hazardous wastes and non-hazardous wastes that are likely to be generated from construction and operation of the proposed project include used coolant, waste motor oils, waste hydraulic fluids, and waste solvents and adhesives.

Table 3.8-3 Applicant-Supplied List of Hazardous Materials Typically Used During Construction, Operation, and Maintenance

Hazardous Materials List	
Fuels and Fuel Additives	Vehicle Maintenance
Gasoline Diesel Propane (Compressed Gas) Diesel fuel additive Gasoline treatment Diesel de-icer Compressed oxygen Acetylene	Antifreeze (ethylene glycol) Batteries/Battery acid (in vehicles) Motor oil Automatic transmission fluid Brake fluid Starter fluid Two-cycle oil (contains distillates and hydro-treated heavy paraffinic) Chain lubricant (contains methylene chloride) Connector grease (penotex) Lubricating grease Puncture seal tire inflator Hydraulic fluid
Specific Chemicals	Products
Methyl alcohol Ammonium hydroxide ZIP (1,1,1-trichloroethane) Eyeglass cleaner (contains methylene chloride) Hot stick cleaner (cloth treated with polydimethylsiloxane) Insecticide (1,1,1-trichloroethene carrier) Insulating oil (inhibited, non-polychlorinated biphenyl)	Canned spray paint Paint thinner Safety fuses Contact Cleaner 2000 (precision aerosol cleaner) WD-40 ZEP (safety solvent) ABC fire extinguisher Air tool oil Mastic coating

Source: SDG&E and SoCalGas 2015

3.8.1.3 Schools

Sixteen public and thirty private schools, preschools, and day care centers were identified within 0.25 mile of the study area, as shown in Table 3.8-4. Two additional public school properties exist where a portion of the property is situated within approximately 0.25 mile of the study area. However, all the school structures on these properties are located beyond 0.25 mile from the study area. Twenty of the 48 schools are located within 500 feet of the study area. School locations are shown on Figure 3.8-2.

Table 3.8-4 Schools within 0.25 Mile of the Study Area

School	Address	Approximate Distance
Mustard Seed School	1200 Rainbow Valley Blvd, Fallbrook	250 feet east of MP 2.3
Canyon Ridge Christian Prep	1200 Old Highway 395, Fallbrook	575 feet east of MP 2.5
Escondido High School*	1535 North Broadway, Escondido	625 feet east of MP 22.7
Toddler Town	1300 N Escondido Blvd, Escondido	300 feet east of MP 23.0
Lincoln Elementary School*	1029 North Broadway, Escondido	925 feet east of MP 23.5
Dehesa Charter/Community Montessori Charter	1441 Montiel Rd, Suite 143, Escondido	625 feet southeast of Laydown #6D - Montiel
Kids Galore	270 W Crest St, Escondido	900 feet east of MP 23.8
The Classical Academy Middle School*	144 Woodward Ave, Escondido	Within 0.20 mile east of MP 24.2

Table 3.8-4 Schools within 0.25 Mile of the Study Area

School	Address	Approximate Distance
Balboa City School*	130 Woodward Ave, Escondido	Within 0.25 mile east of MP 24.2
Classical Academy Online	390 West Valley Pkwy, Escondido	250 feet east of MP 24.5
Los Ninos Head Start/Getsemani Bible Heritage School of Escondido	221 West 7th Ave, Escondido	Within 0.25 mile east of MP 25.1
Grace Lutheran School/Preschool	643 West 13th Ave, Escondido	625 feet west of MP 25.5
Felicita Elementary School*	737 West 13th Ave, Escondido,	Within 0.25 mile west of MP 25.5
Infusion Church Preschool	777 W Felicita Ave, Escondido	Within 0.25 mile east of MP 25.8
North County Community Services Preschool	1805 S Escondido Blvd, Escondido	775 feet south of MP 26.0
Montessori Children's School	1748 South Escondido Blvd, Escondido	225 feet south of MP 26.1
Juniper Elementary School*	1809 South Juniper St, Escondido	550 feet south of MP 26.0
Westminster Christian Preschool	1500 S Juniper St, Escondido	Within 0.25 mile south of MP 26.1
L.R. Green Elementary School*	3115 Las Palmas Ave, Escondido	650 feet west of MP 28.3
Bear Valley Middle School*	3003 Bear Valley Pkwy, Escondido	200 feet west of MP 28.4
The Classical Academy Elementary*	2950 South Bear Valley Pkwy, Escondido	175 feet east of MP 28.4
San Pasqual High School*	3300 Bear Valley Pkwy, Escondido	350 feet east of MP 29.0
Rancho Bernardo Community Presbyterian Church (RBCPC) Preschool	RBCPC Preschool 17010 Pomerado Rd, San Diego	100 feet east of MP 33.1
St. Bartholomew's Preschool	16275 Pomerado Rd, Poway	200 feet east of MP 34.0
Pomerado Christian Preschool	12708 Stone Canyon Rd, Poway	500 feet east of MP 34.3
Mosad Shalom Religious School/Ganon Gil Preschool	15905 Pomerado Rd, Poway	225 feet east of MP 34.5
Bernardo Heights Middle School*	12990 Paseo Lucido, San Diego	School property boundary 0.25 mile west of MP 34.8
Rancho Bernardo High School*	13010 Paseo Lucido, San Diego	School property boundary 0.25 mile west of MP 35.0
Country Montessori School	12642 Monte Vista Rd, Poway	575 feet east of MP 35.0
Poway Hilltop Preschool	5318-B Pomerado Rd, Poway	900 feet east of MP 35.1
St. Michael's School	15542 Pomerado Rd, Poway	150 feet west of MP 35.1
Oak Knoll Montessori	15010 Pomerado Rd, Poway	150 feet west of MP 35.6
Community Montessori Charter School	12370 Adobe Ridge Rd, Poway	80 feet west of MP 35.9
Abraxas Continuation High School*	12450 Glenoak Rd, Poway	475 feet east of MP 36.5
Meadowbrook Middle School*	15010 Pomerado Rd, Poway	725 feet east of MP 37.2
Legacy Montessori School	12310 9th St, Poway	600 feet west of MP 37.5
Pomerado Elementary School*	12321 Ninth St, Poway	375 feet west of MP 37.6
Kiddies Korner Daycare and Preschool	12334 Oak Knoll Rd, Poway	300 feet west of MP 38.2
New Bridge School/ Krooning Center	12285 Oak Knoll Rd, Poway	675 feet west of MP 38.2
Discovery Isle Child Development Center	11740 Creek Rd, Poway	100 feet west of MP 39.5
Smartstart Children's Academy	11755 Negley Dr, San Diego	Within 0.2 mile west of MP 41.8
Chauncy I. Jerabek Elementary School	10050 Avenida Magnifica, San Diego	850 feet west of MP 42.3
My Friends & I Childrens Center	9972 Avenida Magnifica, San Diego	600 feet west of MP 41.9
Chabad Hebrew Academy	10785 Pomerado Rd, San Diego	Within 0.22 mile south of MP 42.6
Alliant International University	10455 Pomerado Rd, San Diego	Within 0.20 mile southwest of MP 42.8/ At the Alliant Yard
Thurgood Marshall Middle School*	9700 Avenue of Nations, San Diego	250 feet east of MP 43.7

Table 3.8-4 Schools within 0.25 Mile of the Study Area

School	Address	Approximate Distance
Walker Elementary*	9225 Hillery Dr, San Diego	300 feet west of Mira of Mesa Pipeline Extension
San Diego Miramar College*	10440 Black Mountain Rd, San Diego	200 feet west of Mira Mesa Pipeline Extension
Mira Mesa Christian School	9696 Candida St, San Diego	575 feet west of Regulator Station 1335

Sources: Google 2017; GSO 2017; SanGIS 2017.

Key:

CA = California

MP = Milepost

* = Public Schools

3.8.1.4 Airports and Airstrips

MCAS Miramar east-west runways are located to the west of the study area on MCAS Miramar property. A portion of the study area is located within an MCAS Miramar Airport Land Use Compatibility Plan (ALUCP) area and within 20,000 feet of MCAS Miramar runways. The proposed project near MP 45.6 is within 10,000 feet from the end of several MCAS Miramar runways and in the runway protection zone (ALUC 2011; NAVFAC 2005).

The study area is not located within 2 miles of any other public or private airport. The closest public airport is Montgomery Field in San Diego, which is located 3.25 miles southwest of the southern terminus of the proposed project. The closest heliport at the Pomerado Hospital is located approximately 0.1 mile east of the proposed project at MP 34.9 and the closest private airport is Blackinton Airport, which is located 3.75 miles east of MP 14.1 (AirNav 2017; Google 2017).

3.8.1.5 Emergency Response

The San Diego Office of Emergency Services, California Office of Emergency Services (Cal OES), and Federal Emergency Management Authority use hazard mitigation plans and area emergency plans to prepare for emergency response situations. Based upon the Unified San Diego County Emergency Services Organization, Operational Area Emergency Plan, Evacuation Annex Q, the proposed project would be constructed and operated along or across a number of major transportation routes that would be used during major evacuations (County of San Diego 2014). The routes include:

- Interstate (I-) 15, which is paralleled for 20 miles and crossed twice;
- Centre City Drive, which is along 4 miles of the proposed project;
- State Highway 78, which is crossed once;
- Espola Road/Rancho Bernardo, which is crossed once;
- Poway Road, which is crossed once; and
- Twin Peaks Road and Ted Williams Parkway; which are crossed once.

The proposed project would be routed along several heavily used urban roadways. In the city of Escondido, the proposed project is routed along Centre City Parkway, which is a major transportation route, and West Felicita Avenue, which intersects Centre City Parkway. In the city of Poway and the city of San Diego, the proposed project would be routed along Pomerado Drive, which intersects the evacuation routes of Poway and Twin Peaks Road/Ted Williams Parkway and Espola/Rancho Bernardo Road. Pomerado Drive is the sole north-south egress route for multiple neighborhoods in the Rancho Bernardo, Scripps Ranch, and Poway communities. Pomerado Hospital in Poway is situated on Pomerado

Drive adjacent to the proposed project route. All access to the hospital is via Pomerado Drive (Google 2017; Appendix A).

3.8.1.6 Fire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) uses Fire Hazard Maps to estimate the likelihood and physical behavior of a fire, so that fire response planners can predict the damage that a fire is likely to cause. Fire Hazard Maps indicate fire hazard severity areas that range from Moderate to Very High Fire Hazard Severity Zones. The Fire Hazard Severity Zones are based on a fire hazard model that considers the topography, typical weather conditions, and amount and types of natural vegetation anticipated to burn during a wildfire (CAL FIRE 2007, 2009).

Approximately 28 miles of Line 3602 would be situated in an area classified as “Extreme Threat to People” under the California Department of Forestry and CAL FIRE’s Fire Resource Assessment Programs. Additionally, the communities of Rainbow, Fallbrook, Bonsall, Pala Mesa, Hidden Meadows, Escondido, Poway, and San Diego’s Rancho Bernardo and Scripps Ranch communities are historically prone to wild land fire and have been designated as “Communities at Risk” by Fire Resource Assessment Programs (CAL FIRE 2017a, 2017b).

The northern 21 miles of the study area would be located in a state of California responsibility area under the jurisdiction of the San Diego County Fire Authority and CAL FIRE (CAL FIRE 2007, 2009). Remaining portions of the study area are located within the jurisdiction of four local responsibility fire departments, which have local fire response and firefighting responsibility for residential, commercial, industrial fires, and wildfires. Based on CAL FIRE and local jurisdictional fire protection data and maps, the majority of the study area would be located in Very High Fire Hazard Severity Zones and High Fire Hazard Severity Zones as shown in Figure 3.8-3. Table 3.8-5 presents fire hazard and jurisdictional information for the study area.

Table 3.8-5 Fire Hazard Zones within the Study Area

Project Areas	Fire Hazard Severity Zone	Responsibility Area	Jurisdiction	Location
MP 0 to MP 10	Very High and High	State of California	CAL FIRE/San Diego County Fire Authority	North County Fire Protection District
MP 10 to MP 21	Very High and High	State of California	CAL FIRE/San Diego County Fire Authority	Dear Springs Fire Protection District
MP 21 to MP 23	Very High and High	Local	The City of Escondido Fire Department	City of Escondido
MP 23 to MP 26	Moderate	Local	The City of Escondido Fire Department	City of Escondido
MP 26 to MP 29.5	Very High and High	Local	The City of Escondido Fire Department	City of Escondido
MP 29.5 to MP 34.5	Very High	Local	San Diego Fire Department	City of San Diego
MP 34.5 to MP 39.7	Very High and Not Zoned	Local	City of Poway Fire Department	City of Poway

Table 3.8-5 Fire Hazard Zones within the Study Area

Project Areas	Fire Hazard Severity Zone	Responsibility Area	Jurisdiction	Location
MP 39.7 to MP 44.3	Very High	Local	San Diego Fire Department	City of San Diego
MP 44.3 to MP 46.6	Very High	Local	MCAS Miramar Fire Department	MCAS Miramar

Sources: CAL FIRE 2007, 2009; EFD 2017; SanGIS 2017.

Key:

CAL FIRE = California Department of Forestry and Fire Protection

MCAS = Marine Corps Air Station

MP = Milepost

3.8.2 Regulatory Setting

This subsection summarizes federal, state, and local laws; regulations; and standards that govern hazards and hazardous materials.

3.8.2.1 Federal

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act of 1968 authorizes the DOT to oversee the transportation of natural gas through pipelines. The DOT Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), administers the national regulatory program to ensure the safe transportation of gas and other hazardous materials by pipeline. Through certification, OPS grants states the authority to inspect and enforce the pipeline safety regulations for all intrastate hazardous liquid pipelines and for intrastate gas pipelines.

Natural Gas Pipeline Operations and Safety Regulations

Regulations addressing the safety and operations of natural gas pipeline transportation are promulgated under Title 49 CFR Parts 190–199 and United States Code (USC) Chapter 601, and the Natural Gas Pipeline Safety Act, Hazardous Liquid Pipeline Safety Act, and Pipeline Safety Improvement Act. These regulations describe minimum safety requirements and various technologies that the pipeline operator may use to meet these requirements.

These regulations describe minimum safety requirements for design, installation, construction, initial inspection, and initial testing a new natural gas pipeline and addresses the various technologies that the pipeline operator may use to meet these requirements. Title 49 CFR 192 regulations define pipe class locations based on population densities in the vicinity and contains design specifications based on those classes. Title 49 CFR 192 is comprised of 15 subparts (A through O), which are summarized below:

- Subpart A, General: This subpart provides definitions, a description of the class locations used within the regulations, documents incorporated into the regulation by reference, conversion of service requirements, and other items of a general nature.
- Subpart B, Materials: This subpart provides the requirements for the selection and qualification of pipe and other pipeline components. Generally, it covers the manufacture, marking, and transportation of steel, plastic, and copper pipe used in gas pipelines and distribution systems.
- Subpart C, Pipe Design: This subpart covers the design (primarily minimum wall thickness determination) for steel, plastic, and copper pipe.

- Subpart D, Design of Pipeline Components: This subpart provides the minimum requirements for the design and qualification of various components (e.g., valves, flanges, fittings, passage of internal inspection devices, taps, fabricated components, branch connections, extruded outlets, supports and anchors, compressor stations, vaults, overpressure protection, pressure regulators and relief devices, instrumentation and controls, etc.).
- Subpart E, Welding of Steel Pipelines: This subpart provides the minimum requirements for welding procedures, welder qualification, inspection, and repair/replacement of welds in steel pipeline systems.
- Subpart F, Joining of Materials Other Than by Welding: This subpart covers the requirements for joining, personnel and procedure qualification, and inspection of cast iron, ductile iron, copper, and plastic pipe joints.
- Subpart G, General Construction Requirements for Transmission Lines and Mains: This subpart provides the minimum construction requirements, including, but not limited to: inspection of materials, pipe repairs, bends and elbows, protection from hazards, installation in the ditch, installation in casings, underground clearances from other substructures, and minimum depth of cover.
- Subpart H, Customer Meters, Service Regulators and Service Lines: This subpart prescribes the minimum requirements for these components.
- Subpart I, Requirements for Corrosion Control: This subpart provides the minimum requirements for cathodic protection systems, required inspections and monitoring, remedial measures, and records maintenance.
- Subpart J, Testing Requirements: This subpart prescribes the minimum leak and strength test requirements.
- Subpart K, Upgrading: This subpart provides the minimum requirements for increasing the maximum allowable operating pressure.
- Subpart L, Operations: This subpart prescribes the minimum requirements for pipeline operation, including: procedural manuals for operations, maintenance, and emergencies, change in class locations, damage prevention programs, requirements for emergency response plans, public awareness programs, failure investigations, maximum allowable operating pressures, odorization, tapping, and purging.
- Subpart M, Maintenance: This subpart prescribes the minimum requirements for pipeline maintenance, including: line patrols, leakage surveys, line markers, record keeping, repair procedures and testing, compressor station pressure relief device inspection and testing, compressor station storage of combustible materials, compressor station gas detection, inspection and testing of pressure limiting and regulating devices, valve maintenance, prevention of ignition, etc.
- Subpart N, Qualification of Pipeline Personnel: This subpart prescribes the minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility. Part 192.615 outlines the requirements for natural gas pipeline operators.
- Subpart O, Pipeline Integrity Management: This subpart was promulgated on December 15, 2003. It requires operators to implement pipeline integrity management programs on the gas pipeline systems.

A major factor of pipeline design is the pipe class location, which is addressed in Subpart A. A pipe class location is defined as “an on-shore area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline.” The four area classifications are segregated as follows:

- Class 1: Location with 10 or fewer buildings intended for human occupancy.
- Class 2: Location with more than 10 but less than 46 buildings intended for human occupancy.
- Class 3: Location with 46 or more buildings intended for human occupancy or where the pipeline lies within 100 yards of a building, or a small well-defined outside area that is occupied by 20 or more people on at least 5 days a week for 10 weeks in any 12-month period.
- Class 4: Location where buildings with four or more stories above ground are prevalent.

In 2011, Congress passed the Pipeline Safety, Regulatory Uncertainty, and Job Creation Act to amend Title 49 of the CFR. The purpose of this legislation was to enhance the safety, environmental protection, and reliability associated with the transportation of energy products by pipeline.

Pipeline Safety Improvement Act

In 2002, the U.S. Congress passed the Pipeline Safety Improvement Act (PSIA) of 2002 to strengthen the nation’s pipeline safety laws, which grew out of a series of pipeline incidents with severe consequences. The PSIA is promulgated in Title 49 of the CFR 192 Subpart O, Pipeline Integrity Management. This Subpart requires operators of gas pipeline systems in high consequence areas (HCAs) to significantly increase their minimum required maintenance and inspection efforts.

Regulations require that the natural gas transmission operators of pipelines in HCAs were required to develop and follow a written integrity management program that contained all of the elements prescribed in 49 CFR and addressed the risks on each covered transmission pipeline segment.

HCAs may be defined two ways. Both methods are prescribed by 49 CFR 192.903. The first method includes:

- Current Class 3 and 4 locations;
- Any area in Class 1 or 2 locations where the potential impact radius is greater than 660 feet (200 meters) and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
- Any area in Class 1 or 2 locations where the potential impact circle includes an “identified site.”

In the second method, an HCA includes any area within a potential impact circle that contains:

- 20 or more buildings intended for human occupancy; or
- An “identified site.”

“Identified sites” include areas such as beaches, playgrounds, recreational facilities, camp grounds, outdoor theaters, stadiums, recreational areas, religious facilities, and other areas where high concentrations of the public may gather periodically as defined by 49 CFR 192.903.

Under the PSIA, gas transmission operators are required to develop and follow a written integrity management program containing all the elements described in Part 192.911 of the DOT regulations to address the risk on all HCA transmission pipeline segments.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act (HMTA) of 1975 provides protection against risks to life and property inherent in the transportation of hazardous materials in commerce. HMTA authorizes the DOT to regulate the transportation of hazardous materials by rail, aircraft, vessel, and public highway. Amendments in 1976 and 1990 substantially revised existing provisions and added new requirements for chemicals that the DOT has determined pose unreasonable risks to health, safety, and property during transport activities.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (15 USC 2601, et seq.) authorizes the EPA to track industrial chemicals produced within or imported into the United States. The EPA screens and tests industrial chemicals that pose a potential health hazard to humans and/or the environment and is authorized to control and ban chemicals that pose a risk to public and environmental health.

Resource Conservation and Recovery Act

The RCRA, passed in 1976, regulates hazardous waste from generation through its management, storage, transport, treatment, and to final disposal. To meet tracking requirements, facility owners and operators must keep certain records and submit reports to the EPA at regular intervals. All facilities that generate, transport, recycle, treat, store, or dispose of hazardous waste are required to notify the EPA (or an authorized state agency) of their hazardous waste activities. In 1984, Congress expanded the scope of RCRA, with the Hazardous and Solid Waste Amendment, to include small quantity generators of hazardous waste and establishing additional requirements for disposal.

In 1992, the EPA authorized the California DTSC to administer the state's RCRA programs.

Hazardous Liquid Pipeline Safety Act

The Hazardous Liquid Pipeline Safety Act of 1979, and amendments, authorize the DOT to regulate pipeline transportation of hazardous liquids including crude oil, petroleum products, anhydrous ammonia, and carbon dioxide.

Comprehensive Environmental Response, Compensation, and Liability Act

In 1980 congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly called Superfund (USC Title 42, Chapter 103). CERCLA provides broad federal authority for the EPA to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA also outlines requirements concerning closure and abandonment of hazardous waste sites, provides for liability of persons responsible for release of hazardous waste, and establishes a mechanism for cleanup of these sites when there is no responsible party. In 1986, Superfund was amended by the Superfund Amendment and Reauthorization Act (SARA) Title III, also known as the Emergency Planning and Community Right-to-Know Act. SARA Title III and the Clean Air Act of 1990 established a national emergency planning and response program and imposed reporting requirements for businesses that store, handle, or produce significant quantities of extremely hazardous materials. States are required to implement a system to inform local agencies and the public when a significant quantity of hazardous material is stored or handled at a facility.

U.S. Environmental Protection Agency Risk Management Program

The Risk Management Program is part of the Clean Air Act (42 USC 7401 et seq.). This program requires companies of all sizes that use certain substances to develop a company-specific Risk Management Program that includes detailed safety precautions and maintenance plans; an adequate emergency response program is also required. The information in the Risk Management Program assists local emergency response personnel in case of an accident or exposure.

Occupational Safety and Health Administration 29 Code of Federal Regulations, Parts 1910 and 1926

OSHA regulates worker safety during pipeline construction activities. Chapter 29 CFR Parts 1910 and 1926 prescribe federal safety standards for such activities, including process safety management of highly hazardous chemicals (1910.119), and gas welding and cutting (1926.350).

Occupational Safety and Health Administration

OSHA administers Occupational Safety and Health Standards (29 CFR Sections 1910 and 1926) that: (1) provide regulations for safety in the workplace; (2) regulate construction safety; and (3) require a Hazard Communication Plan to identify and inventory all hazardous materials and material safety data sheets. OSHA's standards also require employee training in safe handling of hazardous materials.

Federal Aviation Administration

Under 14 CFR Part 77.9, notification of construction or alteration to the Federal Aviation Administration is required for public use airports with runways more than 3,200 feet long if construction or alteration would exceed a slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest runway.

3.8.2.2 State

California Hazardous Waste Control Act

Title 22 of the CCR, Division 4.5, Chapter 11, contains regulations for the identification and classification of hazardous wastes. The code defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. Article 3 provides detailed definitions of each characteristic. Articles 4 and 5 provide lists of RCRA hazardous wastes, non-RCRA hazardous wastes, hazardous wastes from specific sources, extremely hazardous wastes, hazardous wastes of concern, and special wastes.

Certified Unified Program Agency and Hazardous Materials Plans

Administration of the Certified Unified Program Agency is authorized by the California HSC (Chapter 6.11, Sections 25404-25404.8) and the CCR (Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100–15620). The program is implemented at the local level by government agencies certified by the secretary of the California Environmental Protection Agency. The program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency response programs including Hazardous Materials Release Response Plans and Inventories (i.e., HMBPs), Spill Prevention, Control, and Countermeasure Plans, and Hazardous Waste Generator and On-site Hazardous Waste Treatment Program permits.

Government Code Section 65962.5: Cortese List

This section of the government code directs the DTSC to compile, and update at least annually, a list of the following: 1) all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the HSC, 2) land designated as hazardous waste property or border zone property pursuant to Article 11 of Chapter 6.5 of Division 20 of the HSC, 3) information received by DTSC pursuant to Section 25242 of the HSC regarding hazardous waste disposals on public land, 4) sites listed pursuant to Section 25356 of the HSC (removal and remedial action sites), and 5) all sites included in the Abandoned Site Assessment Program. DTSC compiles this information and presents it in the Cortese List.

Hazardous Waste Control Act

The Hazardous Waste Control Act established the state hazardous waste management program. Title 26 of the CCR describes the requirements for the proper management of hazardous waste under the Hazardous Waste Control Act, including:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for the identification, packaging, and disposal of such waste. Under the Hazardous Waste Control Act and Title 26 of the CCR, the generator of hazardous waste must document waste from generation to transport to disposal. Through this program, DTSC meets the federal EPA's RCRA reporting requirements.

Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous material or hazardous waste is an important segment of the plan administered by the Cal OES. Cal OES coordinates the response of agencies that include the California Environmental Protection Agency, California Department of Transportation, California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

California Occupational Health and Safety Administration

The California Occupational Health and Safety Administration (Cal/OSHA) is responsible for the development and enforcement of workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. Cal/OSHA requires businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Cal/OSHA Hazards Communication Standard requires that workers be informed of the hazards associated with the materials they handle. Manufacturers are required to label containers, provide Safety Data Sheets in the workplace, and provide worker training.

Under Title 8 of the CCR, Cal/OSHA establishes requirements for safe working conditions and safety-related reporting in California. The primary intent of the Title 8 requirement is to protect workers, but compliance with these regulations also reduces potential hazards for non-construction workers and project vicinity occupants through the implementation of required controls relating to site monitoring, reporting, and other activities.

Conservation of Petroleum and Gas

The CCR, Public Resources Code 01, and the California Laws for the Conservation of Petroleum and Gas, Division 3, Chapter 1, Articles 4 and 5, contain regulations governing the production, operation, and maintenance of oil and gas facilities. Regulations cover construction and operation procedures ranging from well completion, well abandonment, blowout prevention, repair orders, abandoned wells, hazardous wells, to unreasonable waste of gas.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act of 2011 added new or amended provisions related to safety to Public Utilities Code Sections 955-970. Among other things, this Act requires the installation of automatic shutoff or remote controlled block valves on certain transmission lines, addresses emergency response communication procedures, and requires the California Public Utilities Commission (CPUC) to establish compatible emergency response standards.

Other Applicable State Regulations

Various other state regulations have been enacted that affect hazardous waste management; those relevant to the proposed project are listed below.

California Public Resources Code Section 4291-4299

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that has an internal combustion engine; specify the requirements for the safe use of gasoline-powered tools in fire hazard areas; specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas; and addresses vegetation management.

California Public Utilities Code Section 955.5

The California Public Utilities Code includes requirement that a gas corporation shall provide notice to the administration of a school or hospital prior to undertaking nonemergency excavation or construction of a gas pipeline if the work is located within 500 feet of the school or hospital. The notice must be given at least 3 working days prior to activity.

California Public Utilities Code General Orders

The California Constitution, Article XII created the California Public Utilities Code and provides authority to the CPUC to regulate public utilities. Through certification by OPS within the DOT, PHMSA, the state of California inspects and enforces the pipeline safety regulations for all intrastate hazardous liquid pipelines and for intrastate gas pipelines that are public utilities in California. This work is performed respectively by the CPUC for gas pipelines and by the California Office of the State Fire Marshal for hazardous liquid pipelines. The CPUC regulates the construction and operation of intrastate natural gas pipelines in California through the implementation and oversight of several rules and regulations known as General Orders.

School Facility Construction Regulations

Title 5 of CCR Section 14010(h), states that school sites shall not be located near an aboveground water or fuel storage tank or within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study conducted by a competent professional. The Education Code Section 17213 and the Public Resources Code Section 21151.8 place prohibitions on school site construction, acquisition, and environmental impact/negative declarations approval by a school district if the site “contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood.”

Underground Service Alert (DigAlert)

Government Code 4216 et seq. defines emergency notification procedures for subsurface excavations and installations. Pursuant to Government Code 4216, the applicant would contact the Underground Service Alert of Southern California prior to construction of the proposed project (DigAlert 2015).

3.8.2.3 Regional and Local

San Diego County, Department of Environmental Health’s Hazardous Materials Division

Hazardous materials and wastes are regulated by local and county ordinance in addition to state and federal laws and regulation. The San Diego Department of Environmental Health’s HMD is the Certified Unified Program Agency for the study area. The goal of the HMD is to protect human health and the environment by ensuring that hazardous materials, hazardous waste, medical waste and USTs are properly managed. As the Certified Unified Program Agency, the HMD regulates facilities that handle or

store hazardous materials, generate or treat hazardous wastes. The HMD also manages the Emergency Response, Aboveground Petroleum Storage, and the Underground Tank Storage programs.

County of San Diego General Plan

The Safety Element of the San Diego County General Plan describes safety considerations and establishes policies to minimize the risk of personal injury, loss of life, property damage, and environmental damage associated with natural and man-made hazards. Goals and policies relevant to the proposed project include (County of San Diego 2015):

- **Goal S-1. Enhance public safety and protection of public and private property.**
 - *Policy S-1.1 Minimize Exposure to Hazards. Minimize the population exposed to hazards by assigning land use designations and density allowances that reflect site specific constraints and hazards.*
 - *Policy S-1.3 Risk Reduction Programs. Support efforts and programs that reduce the risk of natural and ma-made hazards and that reduce the time for responding to these hazards.*
- **Goal S-3. Minimized Fire Hazards. Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.**
 - *Policy S-3.5. Access Roads. Require development to provide additional access roads when necessary to provide for safe access of emergency equipment and civilian evacuation concurrently.*
 - *Policy S-3.6 Fire Protection Measures. Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.*
- **Goal S-11. Controlled Hazardous Material Exposure. Limited human and environmental exposure to hazardous materials that pose a threat to human lives or environmental resources.**
 - *S-11.1 Land Use Location. Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulations.*
 - *S-11.2 Industrial Use Restrictions. Restrict industrial uses that store, process, or transport significant amounts of hazardous material to areas designated as High Impact Industrial.*
 - *S-11.3 Hazards-Sensitive Uses. Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.*
 - *S-11.4 Contaminated Lands. Require areas of known or suspected contamination to be assessed prior to reuse. The reuse shall be in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.*
 - *S-11.5 Development Adjacent to Agricultural Operations. Require development adjacent to existing agricultural operations in Semi-Rural and Rural Lands to adequately buffer agricultural areas and ensure compliance.*

Northern San Diego County Community Plans

The following Community Plans are relevant to the proposed project:

- Bonsall Community Plan

- Rainbow Community Plan
- Fallbrook Community Plan
- Hidden Meadows Community Plan
- Interstate (I-) 15 Corridor Community Plan
- Twin Oaks Valley Community Plan
- North County Metro Community Plan

These plans were reviewed, but none of the goals or policies related to hazards were found to be applicable to the proposed project.

San Diego County Fire Code and the 2017 County of San Diego Consolidated Fire Code

The County of San Diego has adopted fire codes more stringent than the state fire code. The San Diego Fire Code addresses brush clearance, access roads, emergency access, maintenance for vacant property, blasting, hazardous fire areas, use of spark arresters, open-flame equipment, and use of fire roads and firebreaks. The County of San Diego Consolidate Fire Code is based upon the County Fire Code and has been adopted by San Diego County Fire Authority districts. (County of San Diego 2017).

San Diego County Code of Regulatory Ordinances

Ordinances regarding hazardous material and hazardous waste are addressed in Title 6, Division 8, Chapter 11. These ordinances address hazardous and medical wastes, underground storage of hazardous substances, hazardous materials inventory and response plans, hazardous waste establishments (Certified Unified Program Agency), and additional locally required information on hazardous compressed gases, carcinogens, and reproductive toxins.

San Diego County Airport Land Use Compatibility Plans

The San Diego County Airport Land Use Commission (ALUC) has developed an ALUCP document for each major county airport (ALUC 2017). The MCAS Miramar ALUCP was adopted October 2008 and has been amended in 2010 and 2011 (ALUC 2011). The MCAS Miramar ALUCP is consistent with the safety and noise standards in the Air Installations Compatible Use Zones prepared by the U.S. Department of Defense for MCAS Miramar, dated December 2004, and revised in March 2005. The purpose of the ALUCP is to provide for the orderly growth of the airport and the area surrounding the airport and to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

San Diego County 2010 Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the multi-hazard mitigation plan is to help San Diego County community leaders and residents to understand the natural and manmade hazards that threaten public health, safety, and welfare; economic vitality; and to take action to address vulnerabilities to future disasters. The plan addresses all types of emergencies and covers all the jurisdictional areas within San Diego County (County of San Diego 2010).

County of San Diego Operational Area Emergency Operations Plan

The County of San Diego Operational Area Emergency Operations Plan describes the San Diego Counties' emergency management system, which provides for a planned response to any emergency associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents. It delineates operational concepts relating to various emergencies, identifies components of a comprehensive emergency management system, and describes the overall responsibilities for protecting life and property and assuring the overall wellbeing of the population. The Emergency Operations Plan

also identifies sources of outside support, which may be provided by other jurisdictions (through mutual aid and specific statutory authorities), state and federal agencies, and the private sector. The Emergency Operation Plan has 16 annexes which address components of the plan. Annex Q addresses evacuation planning (County of San Diego 2014).

City of Escondido General Plan

The City of Escondido General Plan's Community Protection Element identifies and addresses the most relevant public safety issues affecting the community, and offers possible solutions and establishes standards and policies for proactively addressing threats to life and property. The goals and policies established to minimize dangers set forth the framework that will regulate existing and proposed development in hazard-prone areas. The policies relevant to the proposed project include:

- **Wildland and Fire Hazards Policies:**

- 2.14 *Fire Protection Policy*

Require new development in high wildfire risk areas to incorporate site design, maintenance practices, and fire resistant landscaping to protect properties and reduce risks.

- 2.15 *Fire Protection Policy*

Continue to remove excessive/overgrown vegetation from city-owned properties, and require private property owners to remove excessive/ overgrown vegetation to the satisfaction of the Fire Department, to prevent and minimize fire risks to surrounding properties.

- 2.16 *Fire Protection Policy*

Require fire protection plans for mitigation of potential grass and wildland fires within designated high fire hazard areas and other areas required by the Fire Department, that address the need for fire systems, water availability, secondary emergency access routes, construction requirements, and fire resistant landscaping and appropriate defensible space around structures.

- **Hazardous Materials Policies:**

- 8.3 *Hazardous Materials Policy*

Maintain regulations requiring proper handling, storage and disposal of hazardous materials to prevent leakage, potential explosion, fire, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances.

- 8.10 *Hazardous Materials Policy*

Require proponents of projects in known contamination areas to perform comprehensive soil and groundwater contamination assessments, in accordance with applicable regulations. If contamination exceeds regulatory levels, require the proponent to undertake remediation procedures consistent with county, regional, and state regulations prior to grading and development of the site.

- 8.11 *Hazardous Materials Policy.*

Maintain strict land use controls, performance standards, and structure design standards for uses that generate, use, or store hazardous materials, including

setbacks from sensitive uses (schools, residential homes, daycare facilities, etc.) to protect and health and safety of the community in concert with regional, state and federal requirements for existing and proposed uses (City of Escondido 2012).

City of Escondido Municipal Code

The City of Escondido Municipal Code does not specifically address hazardous materials or wastes. However, Chapter 11 of the municipal code addresses fire prevention and protection, and specifically addresses fire codes and abatement requirements.

City of Poway General Plan

Within the Public Safety Element, the Poway General Plan includes the following goal and policy related to hazards determined to be applicable to the proposed project (City of Poway 2005):

- **Goal 7.** *It is the goal of the City of Poway to provide a safe and healthy environment for the residents of Poway.*

- **Hazardous Waste Management Policy:**

Policy G

The City supports the San Diego County Hazardous Waste Management Plan and seeks its implementation by encouraging waste minimization, proper disposal of household hazardous wastes and by establishing criteria for land use decisions regarding hazardous waste treatment facility siting.

City of Poway Municipal Code

Chapter 8.88 of the City of Poway Municipal Code addresses hazardous materials or wastes and specifically addresses disclosure, reporting, emergency response, and permitting requirements. Chapter 15.2 of the municipal code addresses fire codes.

City of San Diego General Plan

The Public Facilities, Services, and Safety Element of the City of San Diego General Plan addresses public safety in addition to public facilities and services. Specifically regarding hazards, the Element addresses the following goals:

- **Fire-Rescue Goal**
 - *Goal: The protection of life, property, and environment by delivering the highest level of emergency and fire-rescue services, hazard prevention, and safety education.*
- **Disaster Preparedness Goals**
 - *Goal: A city and region that, through diligent planning, organizing, and training is able to prevent, respond to, and recover from man-made and natural disasters.*
 - *Goal: Reduced disruptions in the delivery of vital public and private services during and following a disaster.*
 - *Goal: Prompt and efficient restoration of normal City functions and activities following a disaster (City of San Diego 2015).*

City of San Diego Municipal Code

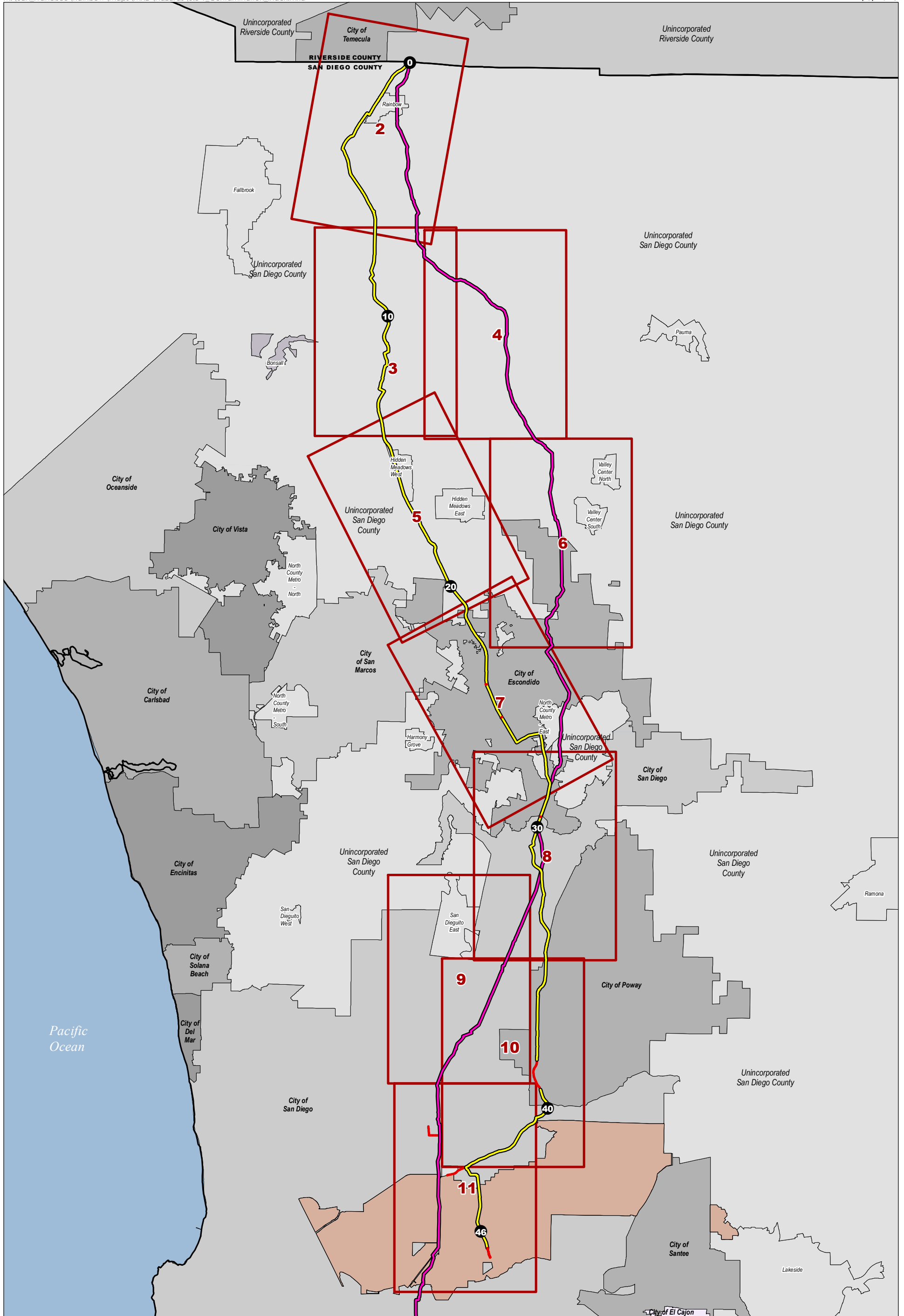
Chapter 5, Article 5, of the City of San Diego Municipal Code addresses fire codes and hazardous materials ordinances. Chapter 4, Article 2, Divisions 8 and 9, address hazardous waste and hazardous materials disclosure requirements.

3.8.3 Draft Significance Criteria

Had an impact analysis been completed for the proposed project, significance criteria would likely have been based on California Environmental Quality Act Guidelines Appendix G. An impact might have been considered significant if the project would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.8.4 Draft Analytical Figures



- Milepost
- Line 3602
- Tie-Ins & Extensions
- Existing Line 1600

- MCAS Miramar
- Map Series Index

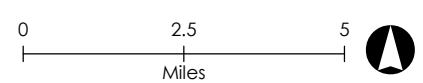
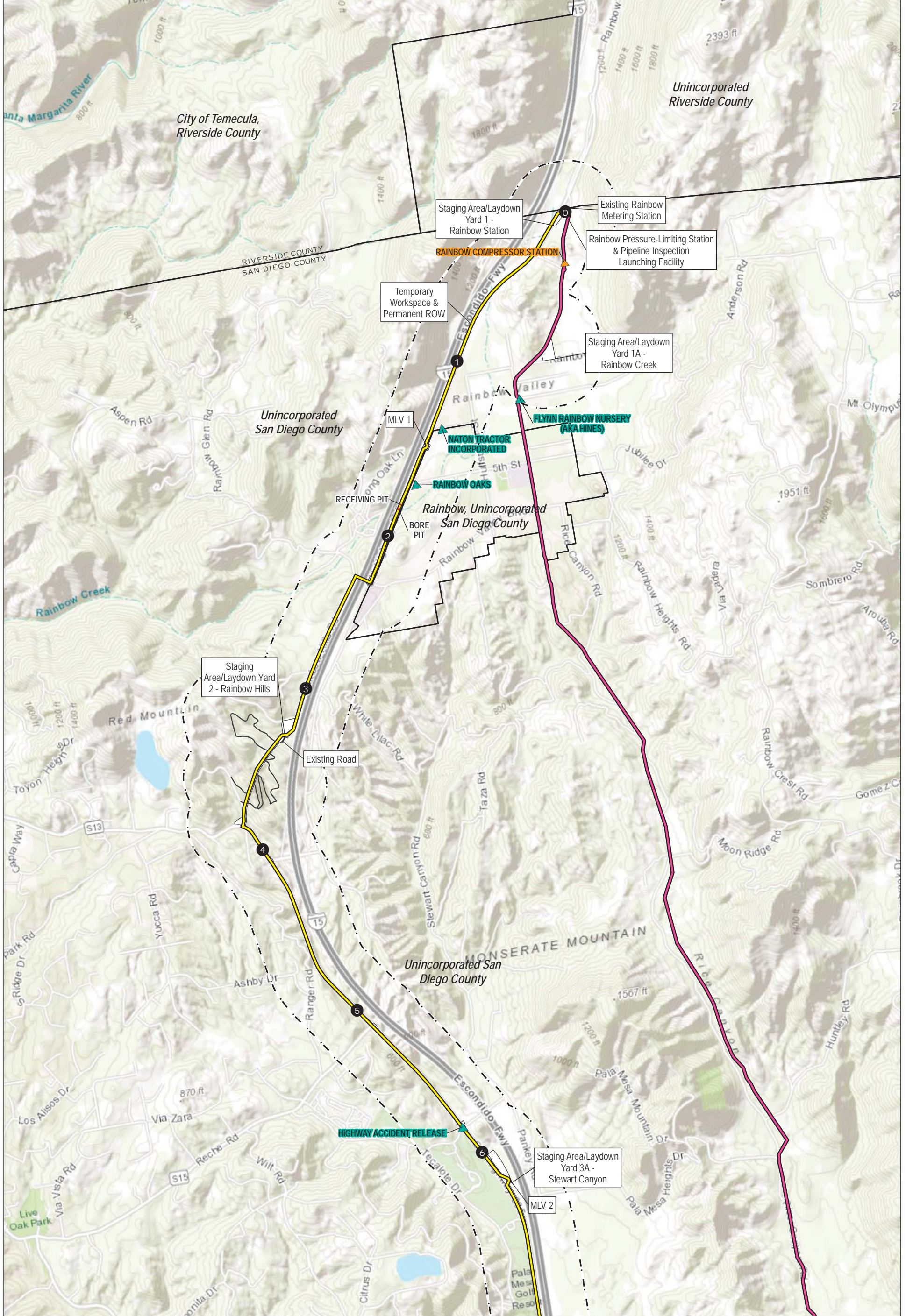


Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 1 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA



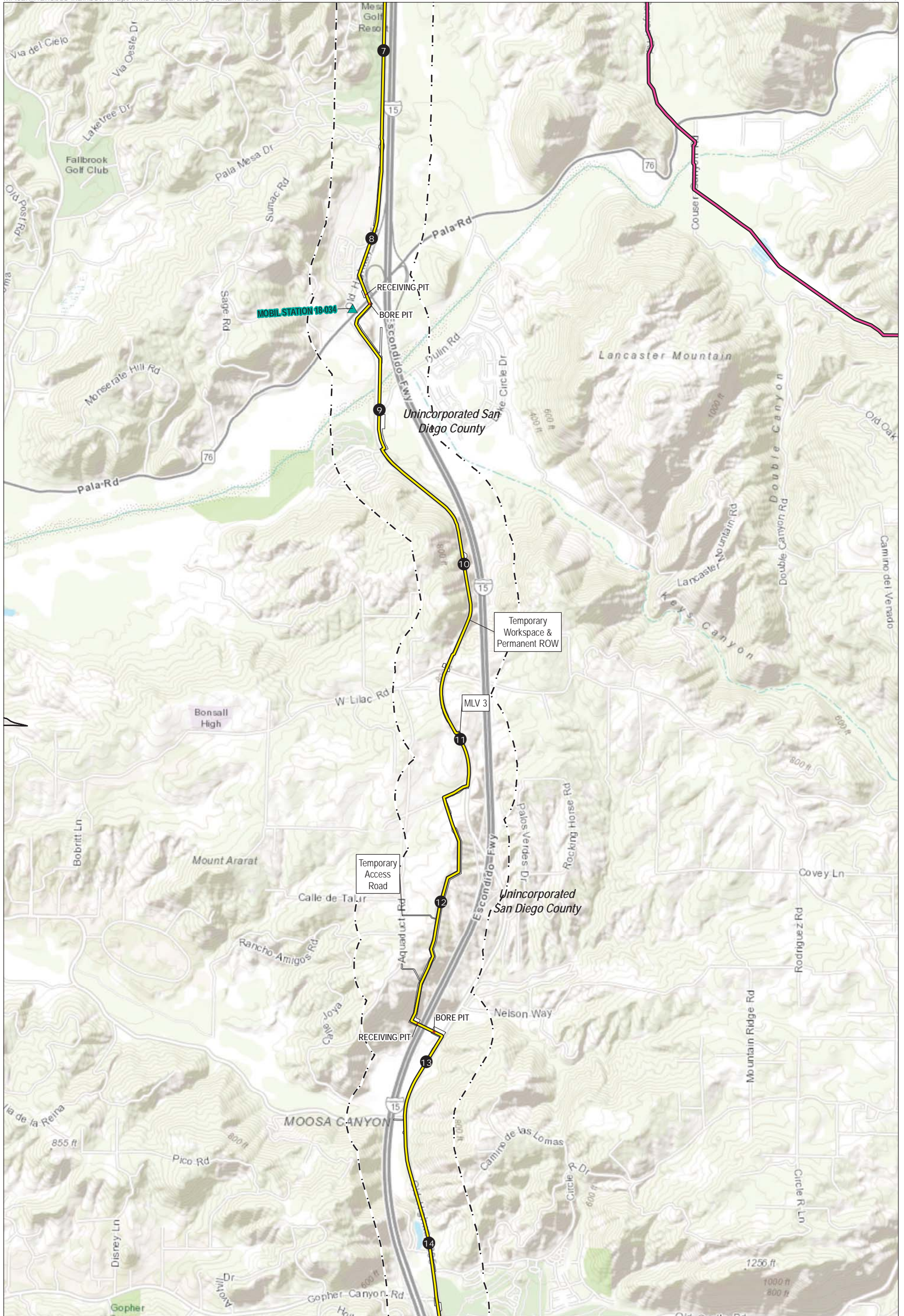
1 Milepost	0.25-Mile Buffer	Potentially Contaminated Site
Line 3602	Municipal Boundary	Envirostor Cleanup Site
Existing Line 1600	Bore Pits	Workspaces

Key:
 Right-Of-Way

0 0.25 0.5
 Miles

Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 2 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: CA DTSC 2014; ESRI 2012, 2018; SanGIS 2016a; SDG&E 2017; US EPA 2016; USMC 2017b



1 Milepost	0.25-Mile Buffer	Potentially Contaminated Site	Key: ROW Right-Of-Way
Line 3602	Municipal Boundary		
Existing Line 1600			
Bore Pits			
Workspaces			

0 0.25 0.5
 Miles

Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 3 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

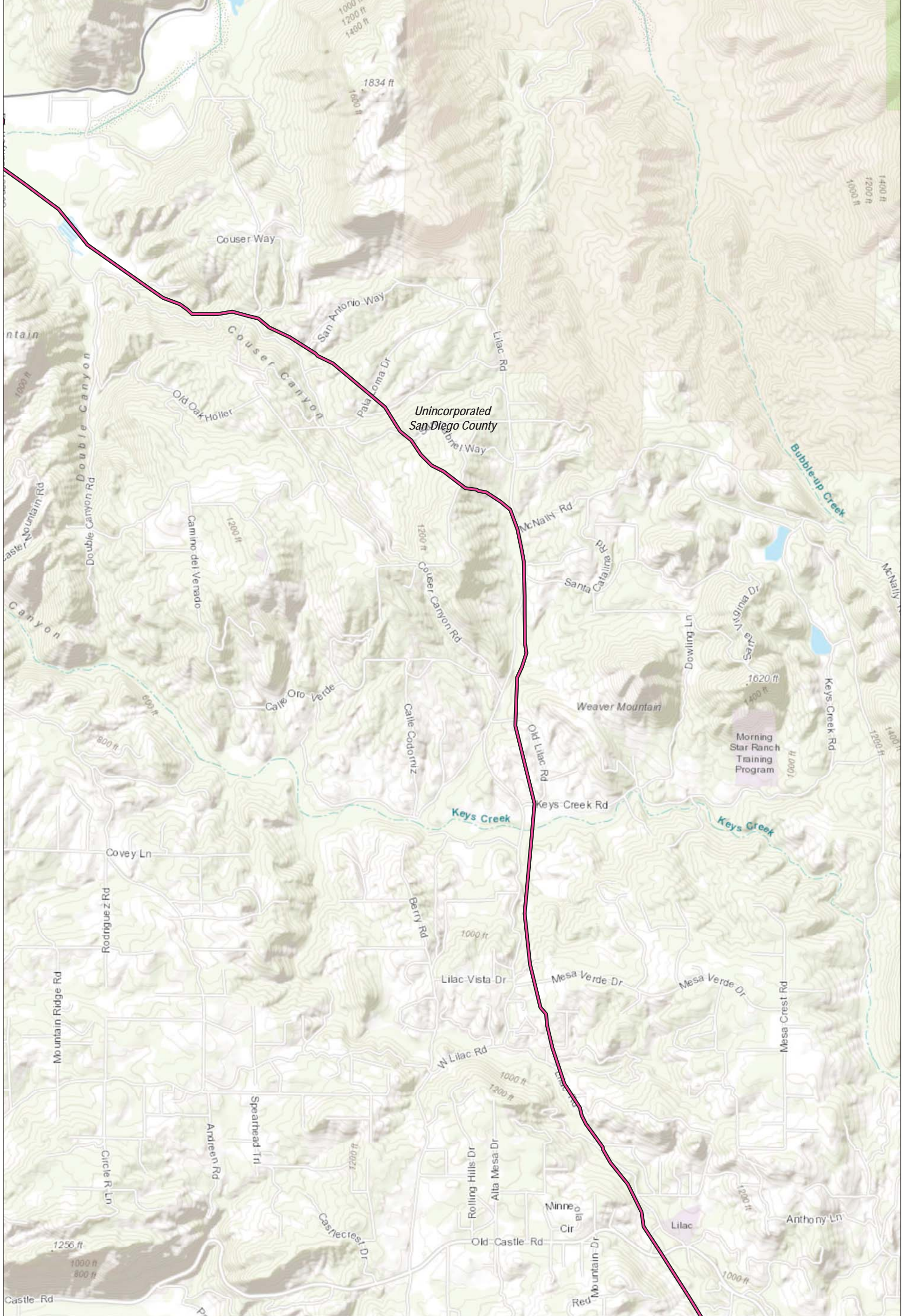


Figure 3.8-1
 Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 4 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

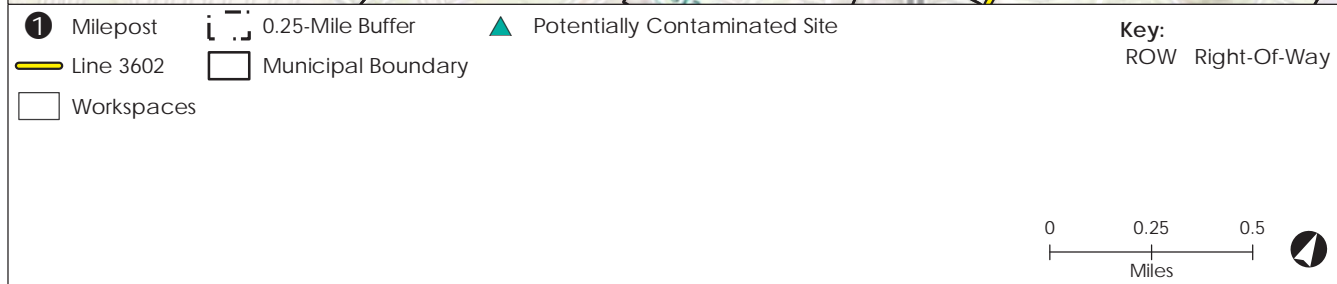
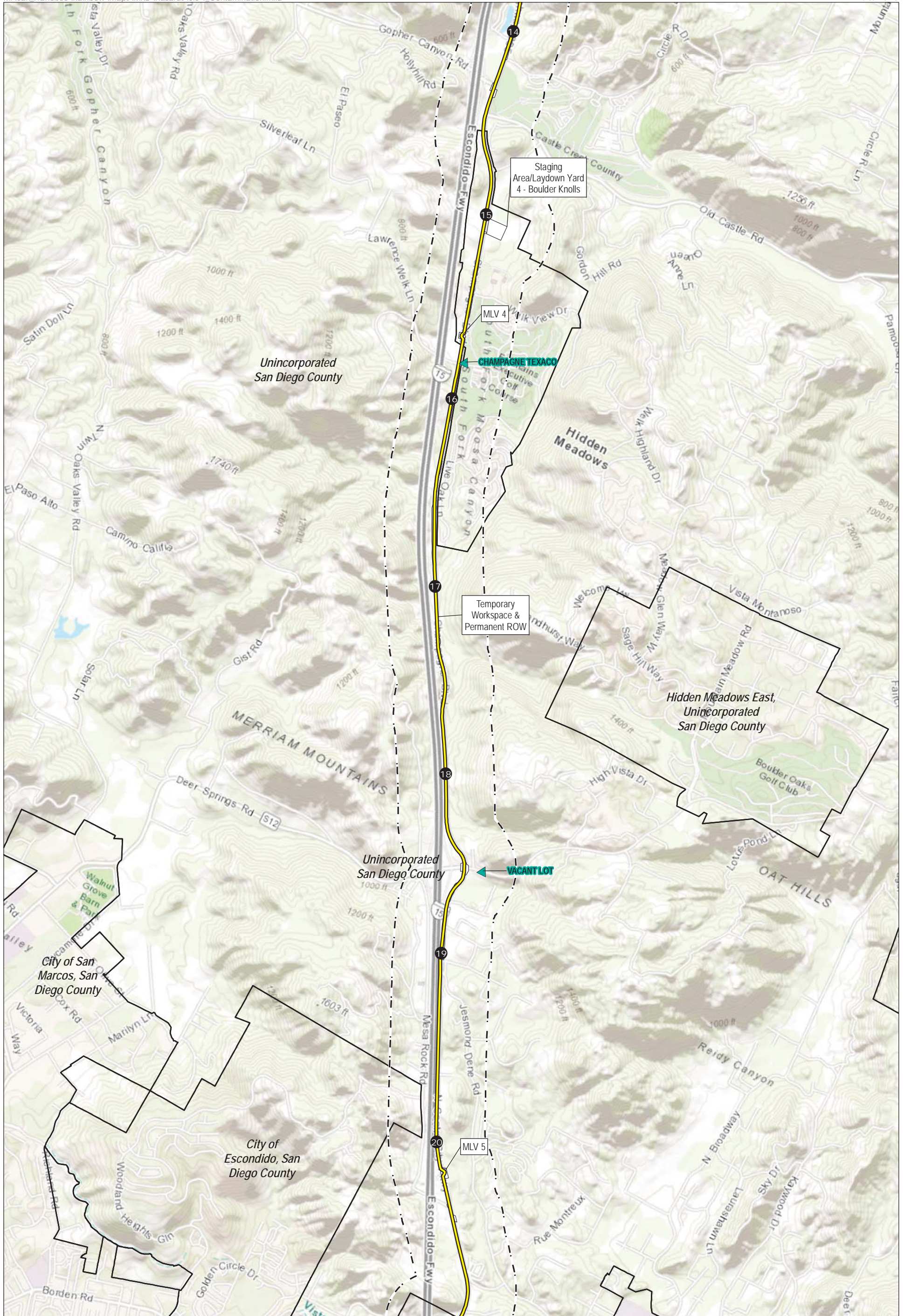


Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 5 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: CA DTSC 2014; ESRI 2012, 2018; SanGIS 2016a; SDG&E 2017; US EPA 2016; USMC 2017b

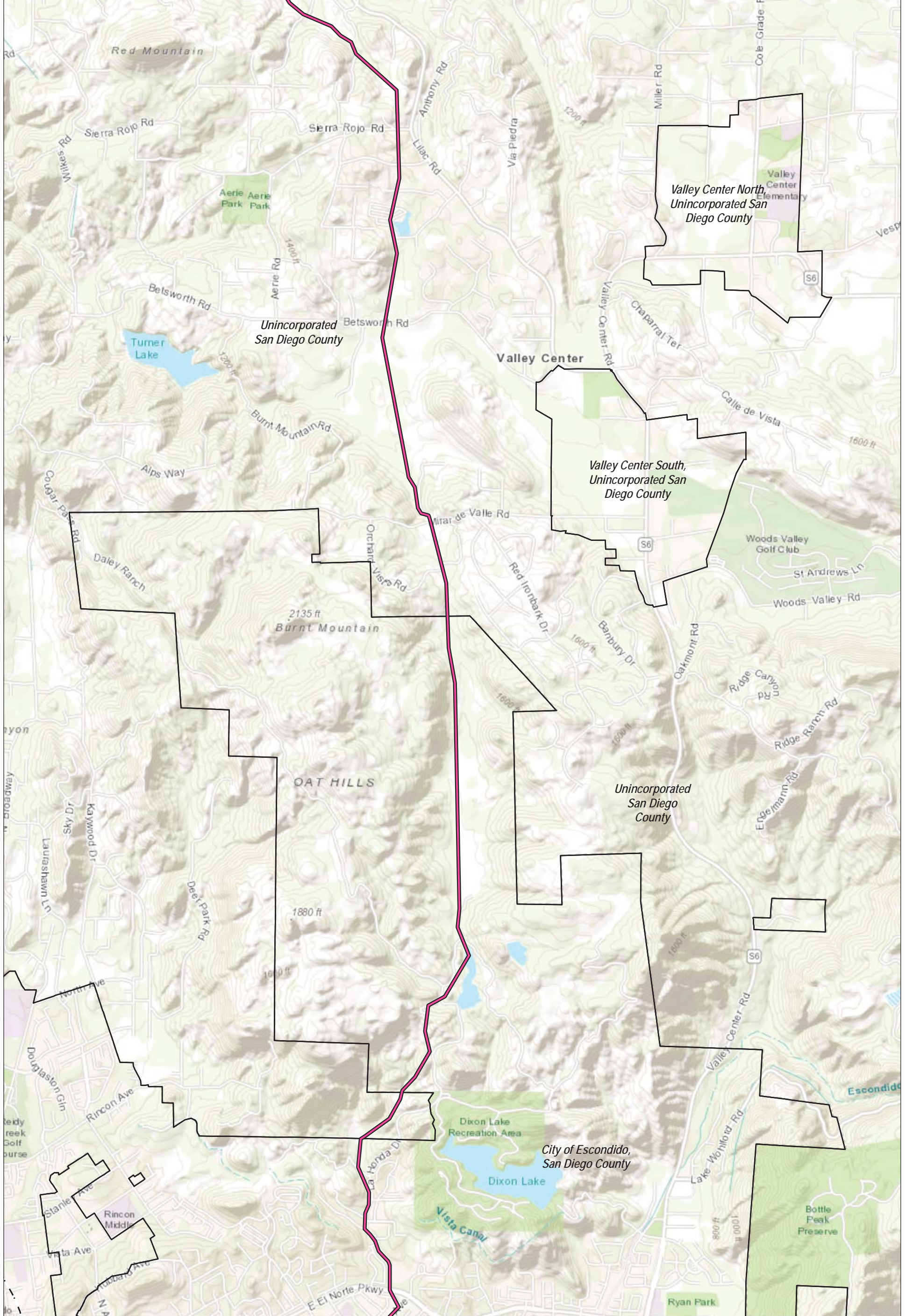


Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 6 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

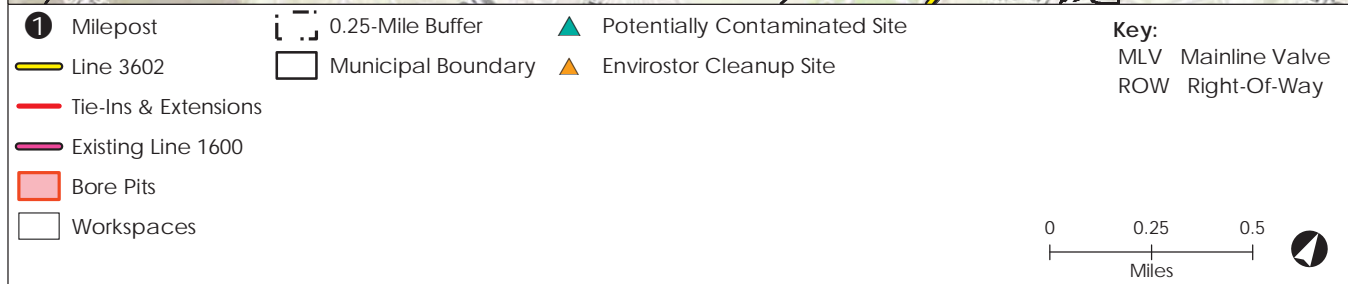
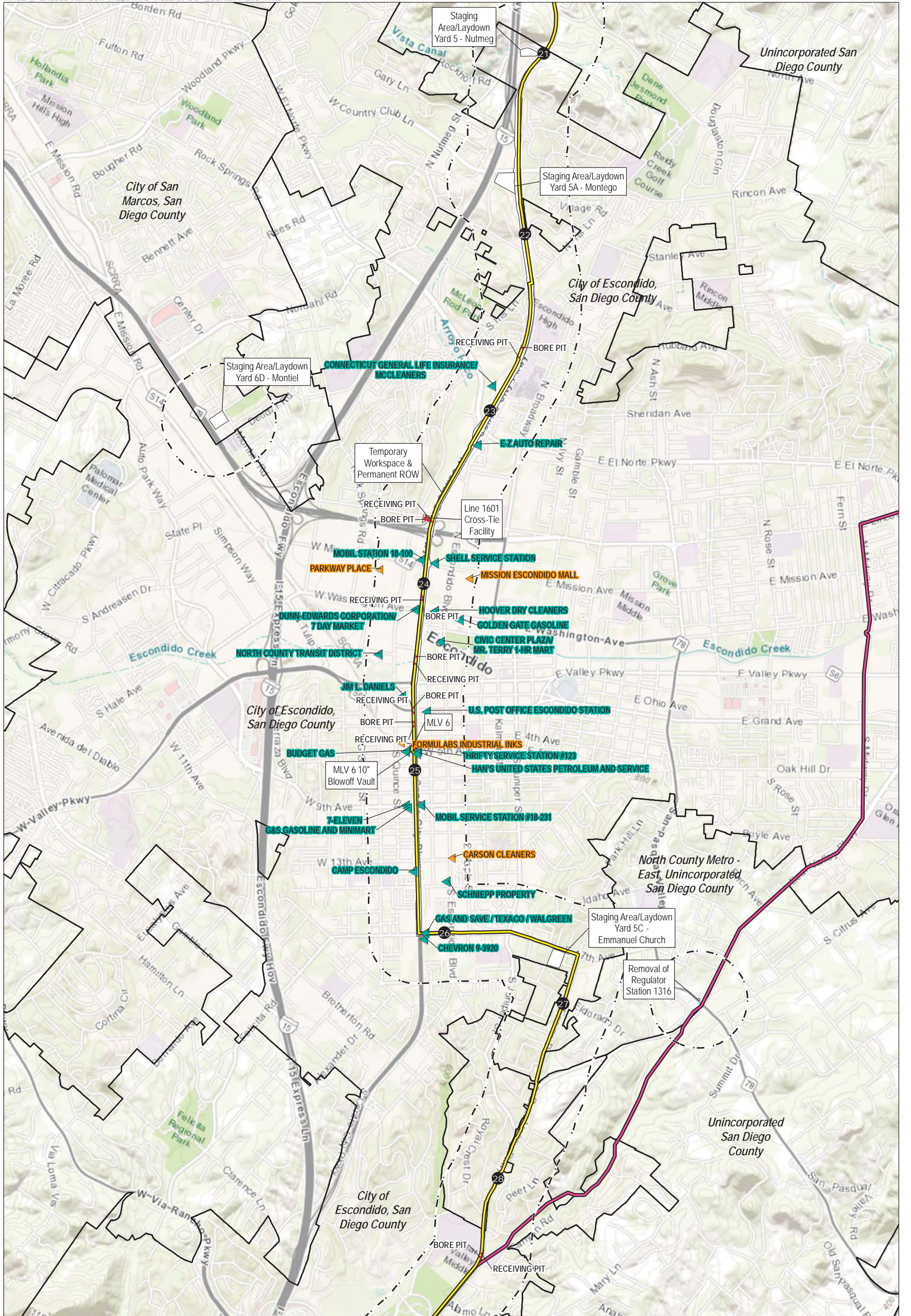
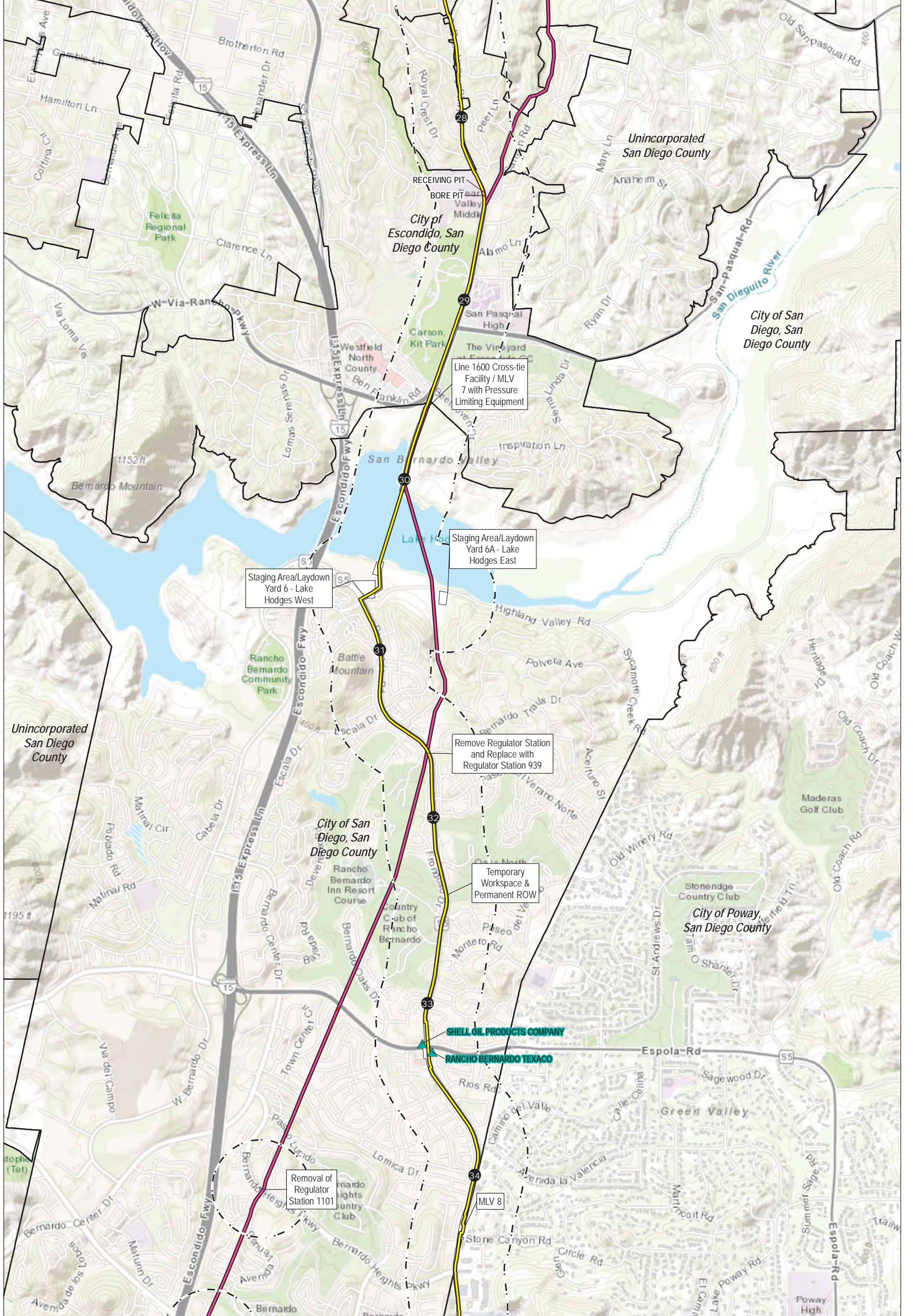


Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 7 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: CA DTSC 2014; ESRI 2012, 2018; SanGIS 2016a; SDG&E 2017; US EPA 2016; USMC 2017b

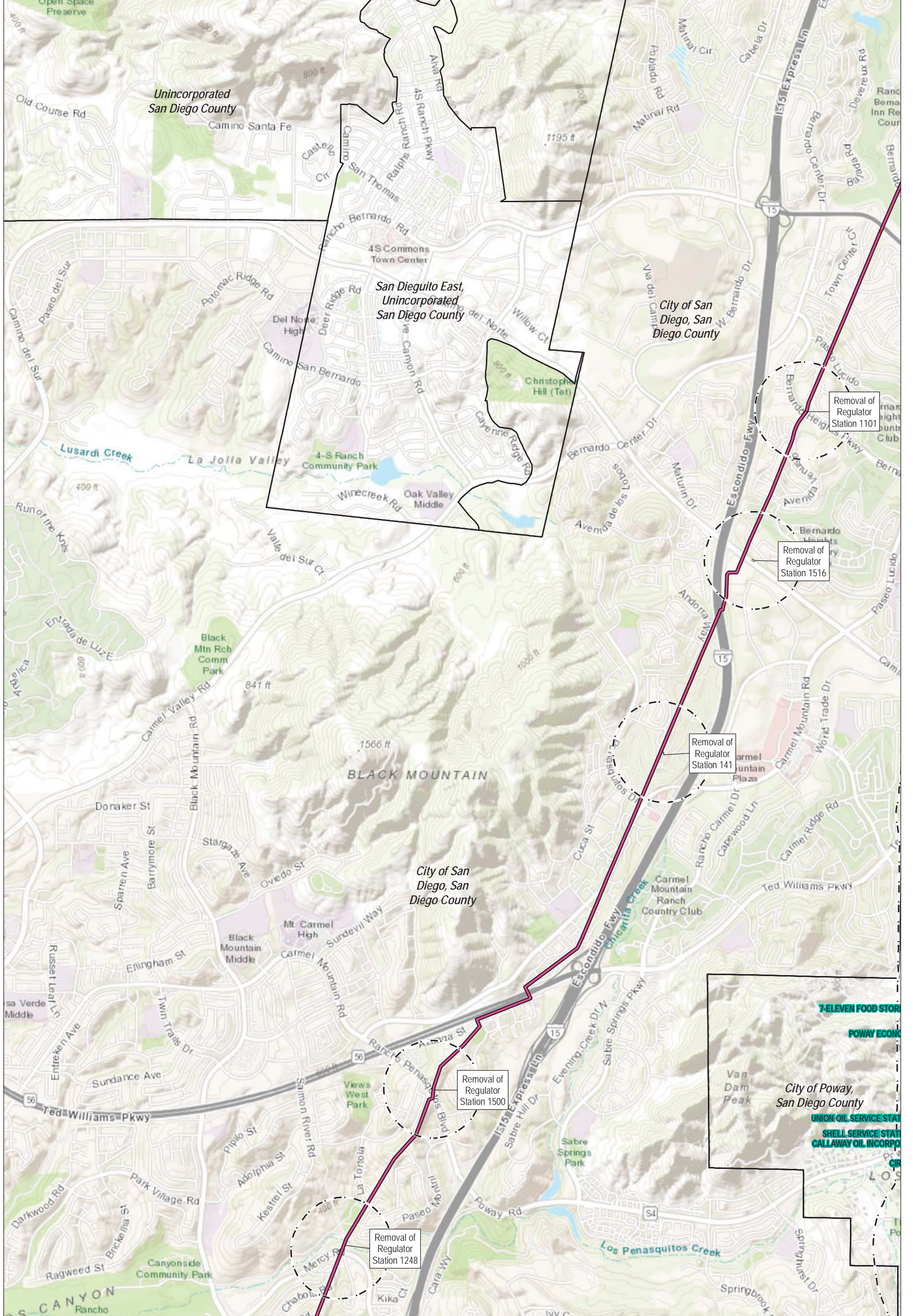


Milepost	0.25-Mile Buffer	Potentially Contaminated Site
Line 3602	Municipal Boundary	Key:
Tie-Ins & Extensions		ROW Right-Of-Way
Existing Line 1600		
Bore Pits		
Workspaces		

0 0.25 0.5
Miles

Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 8 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: CA DTSC 2014; ESRI 2012, 2018; SanGIS 2016a; SDG&E 2017; US EPA 2016; USMC 2017b



7-ELEVEN FOOD STORE

POWAY ECON...

UNION OIL SERVICE STATION

SHELL SERVICE STATION

CALLAWAY OIL INCORPORATED

City of Poway, San Diego County

Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 9 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

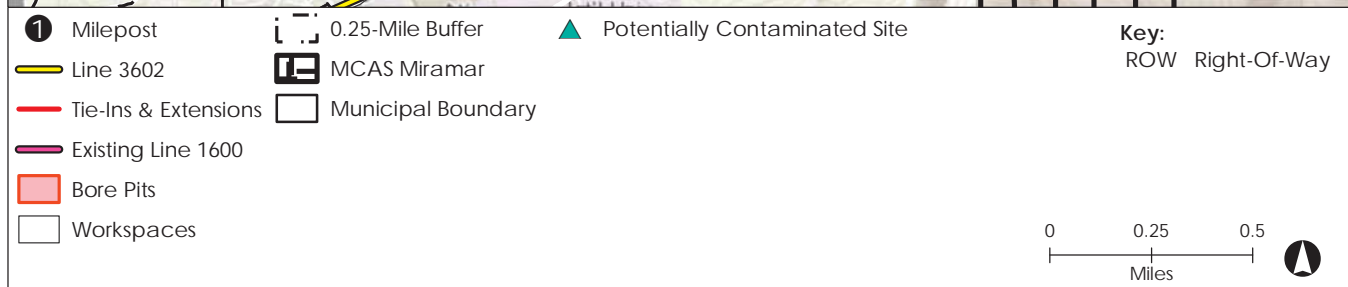
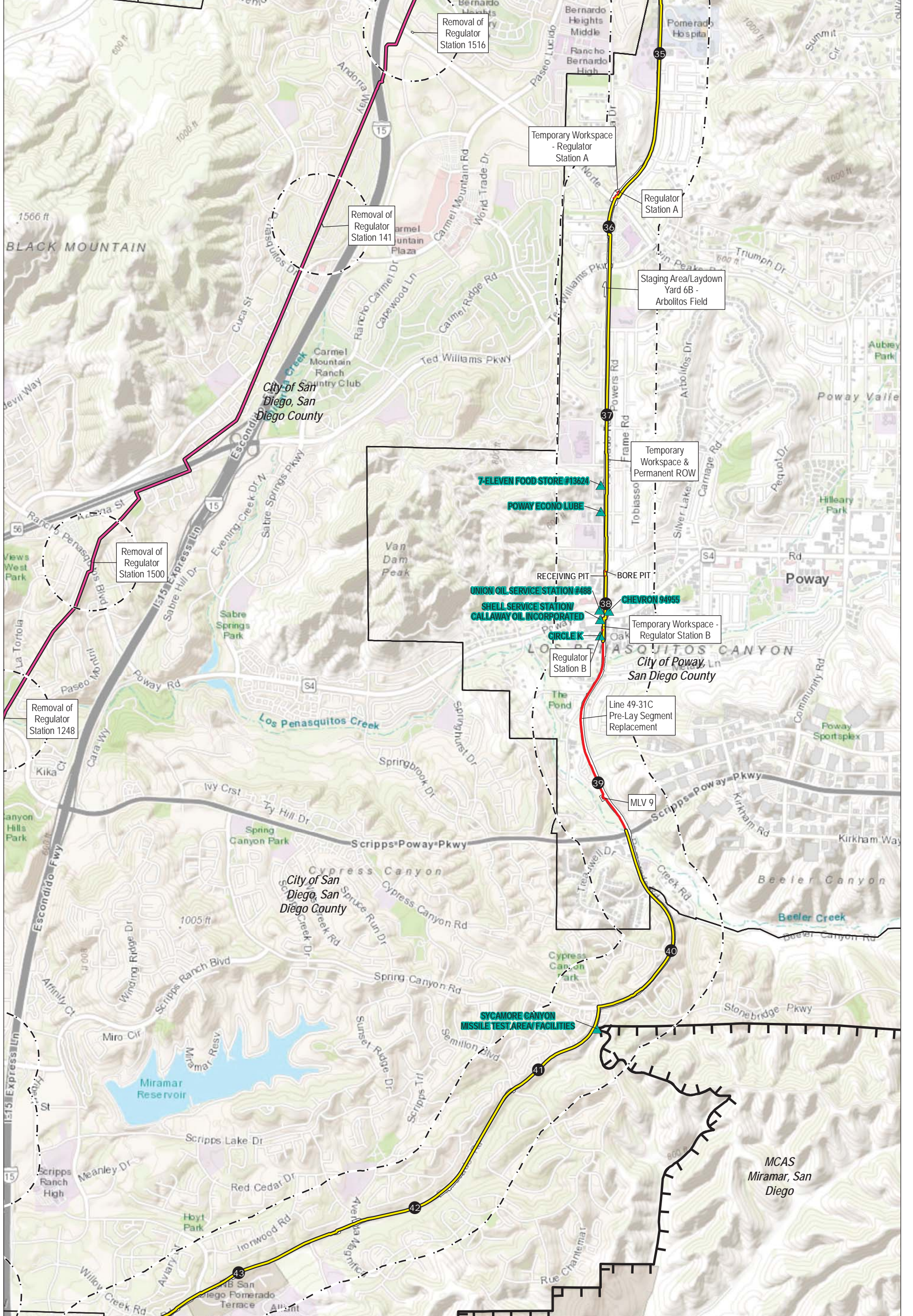
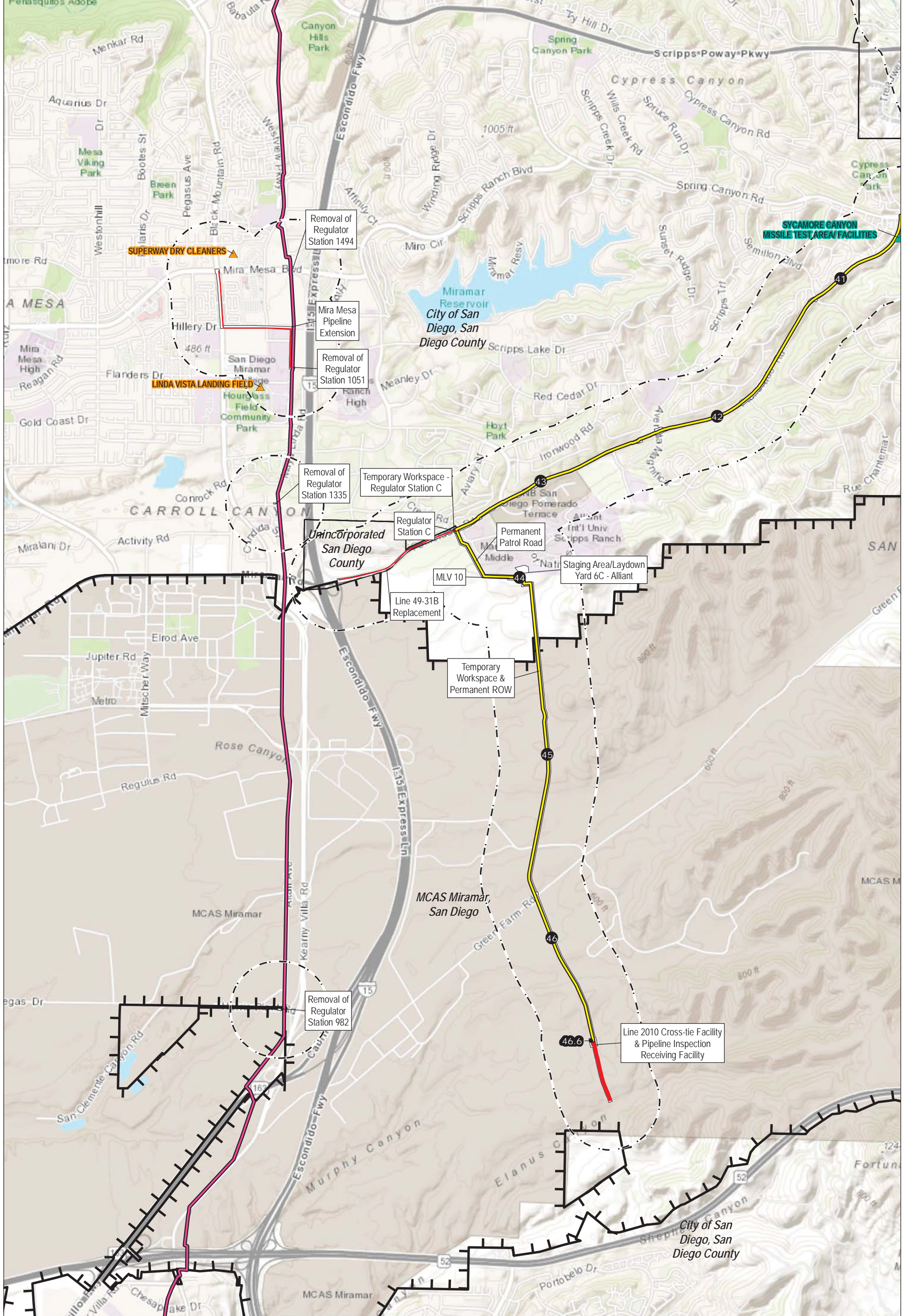


Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 10 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: CA DTSC 2014; ESRI 2012, 2018; SanGIS 2016a; SDG&E 2017; US EPA 2016; USMC 2017b



Milepost	0.25-Mile Buffer	Potentially Contaminated Site	Key: ROW Right-Of-Way
Line 3602	MCAS Miramar	Envirostor Cleanup Site	
Tie-Ins & Extensions	Municipal Boundary		
Existing Line 1600			
Workspaces			

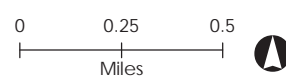
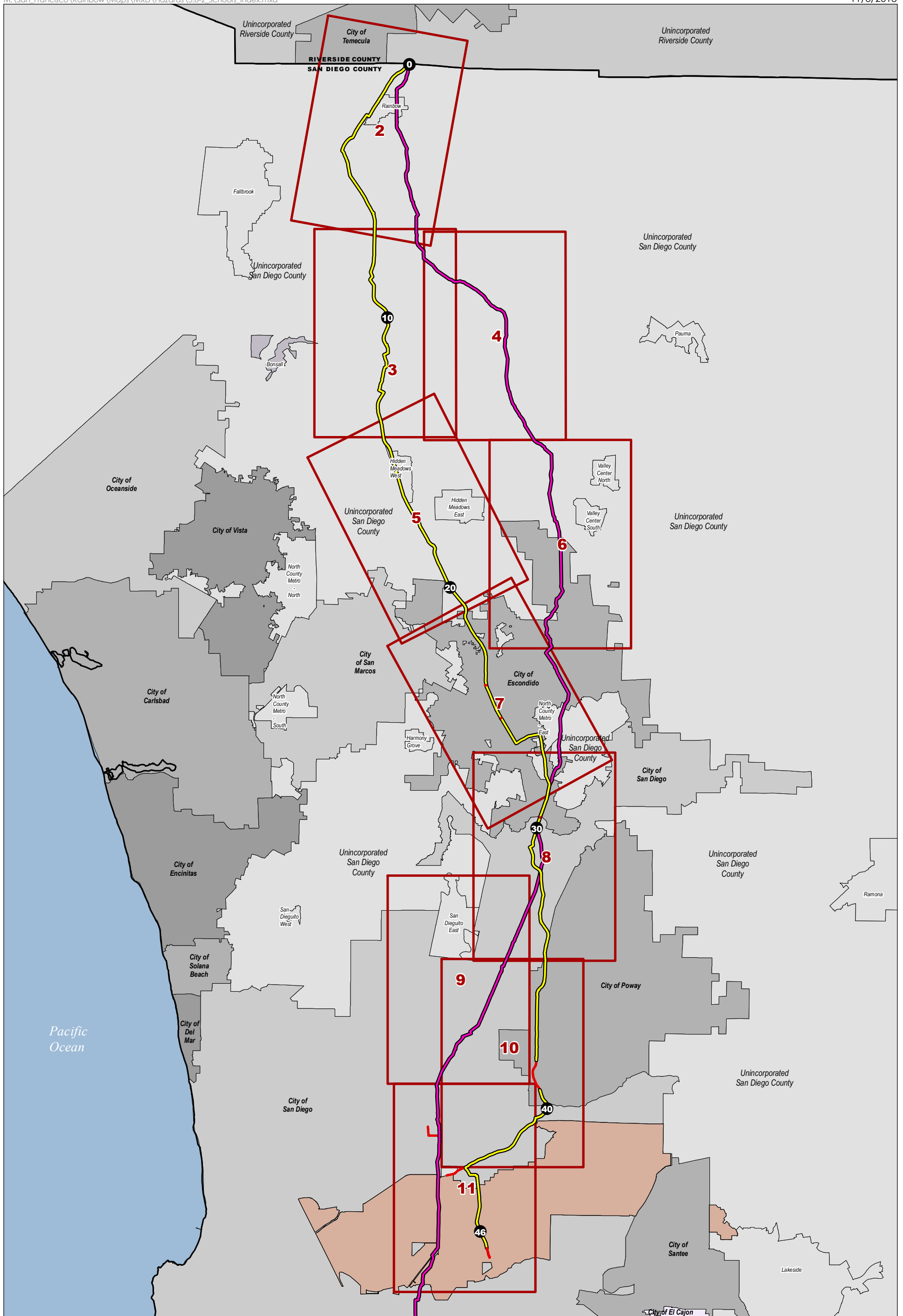


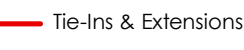





Figure 3.8-1
Cortese Sites and Potentially Contaminated Sites within 0.25 Mile of the Study Area
 Page 11 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA



-  Milepost
-  Line 3602
-  Tie-Ins & Extensions
-  Existing Line 1600
-  MCAS Miramar
-  Map Series Index

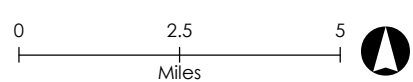
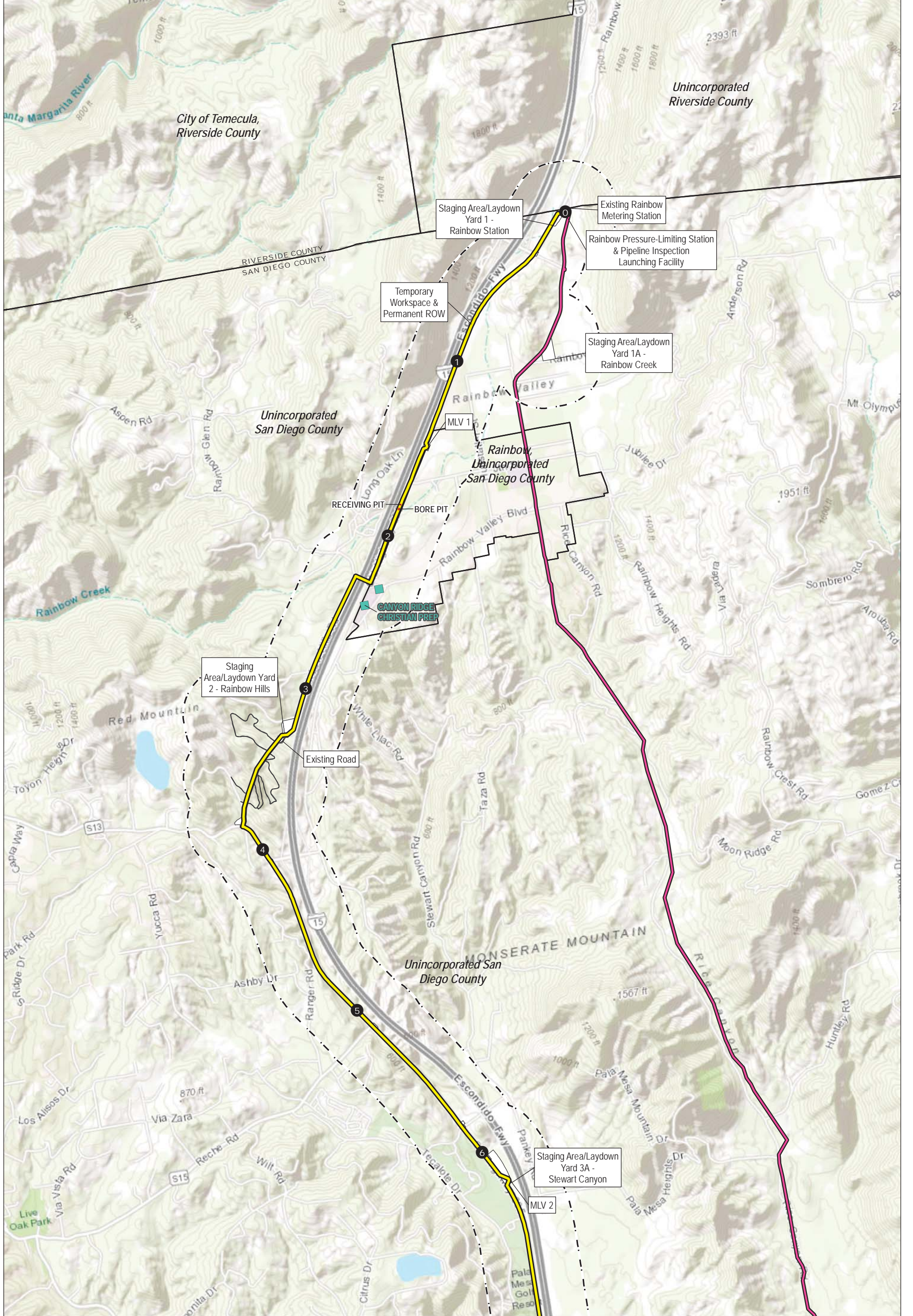


Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 1 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

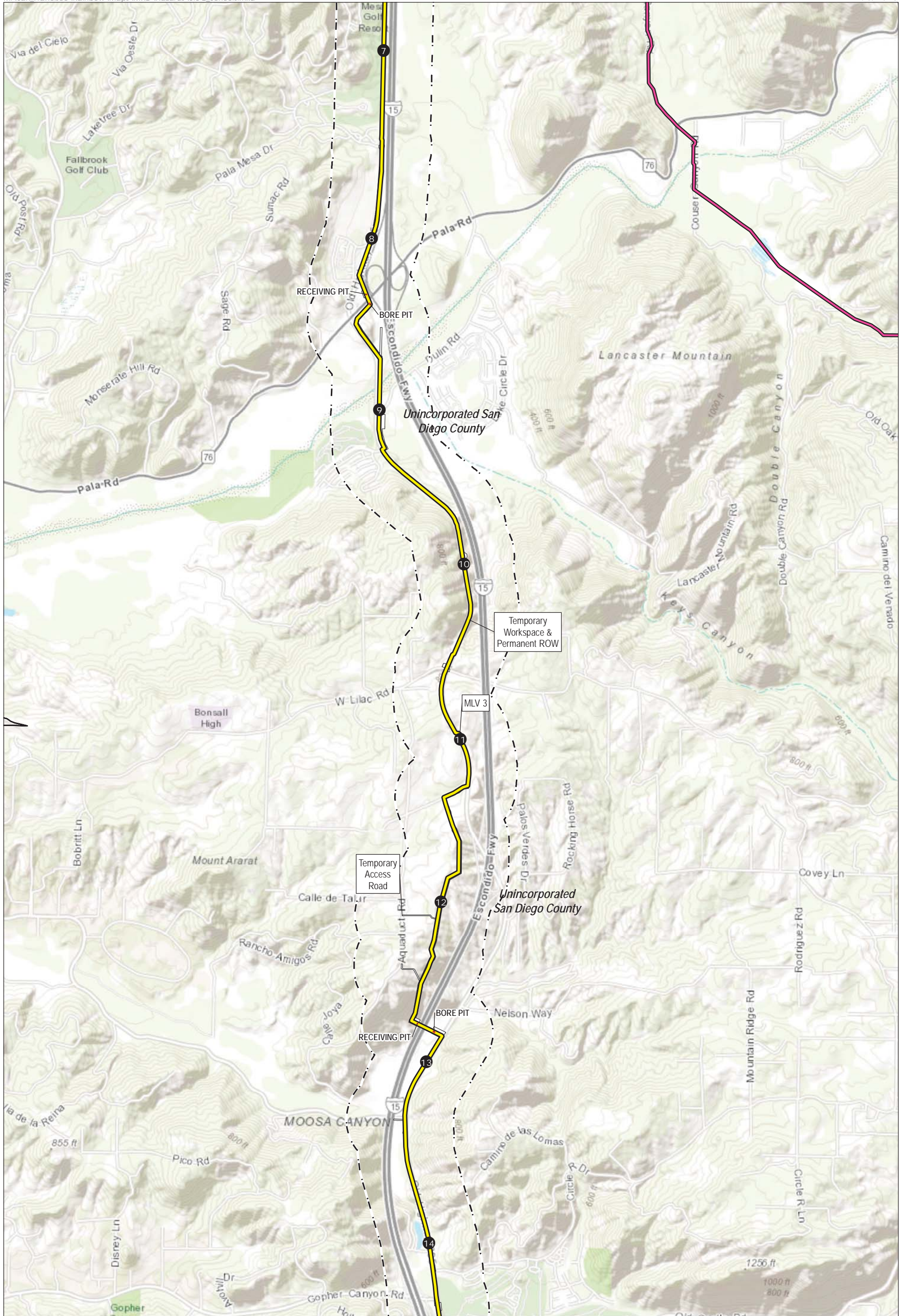


1 Milepost	0.25-Mile Buffer	School
Line 3602	Municipal Boundary	
Existing Line 1600		
Bore Pits		
Workspaces		

Key:
 ROW Right-Of-Way

0 0.25 0.5
 Miles

Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 2 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



1 Milepost	0.25-Mile Buffer	Key: ROW Right-Of-Way
Line 3602	Municipal Boundary	
Existing Line 1600		
Bore Pits		
Workspaces		

0 0.25 0.5
Miles

Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 3 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

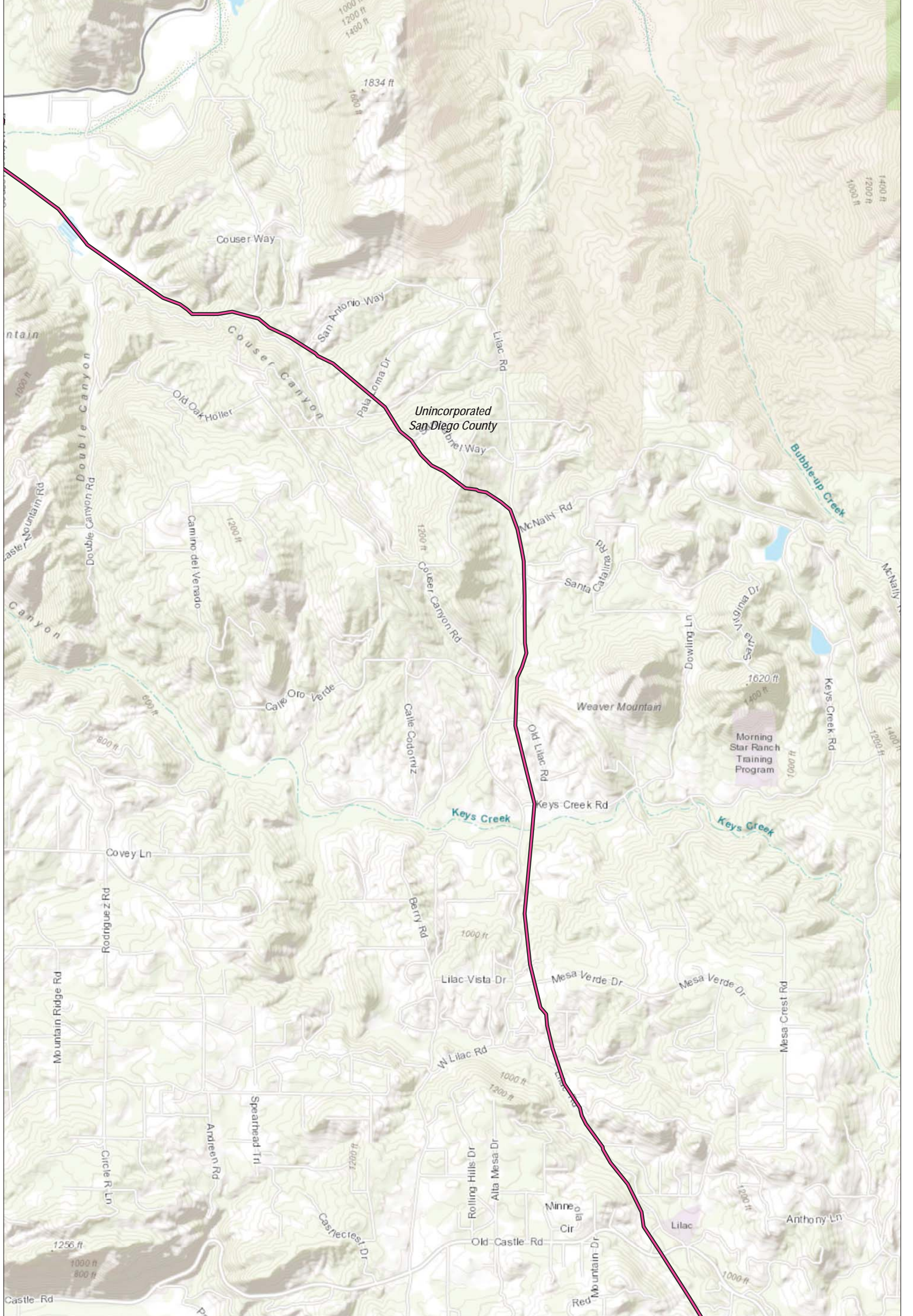
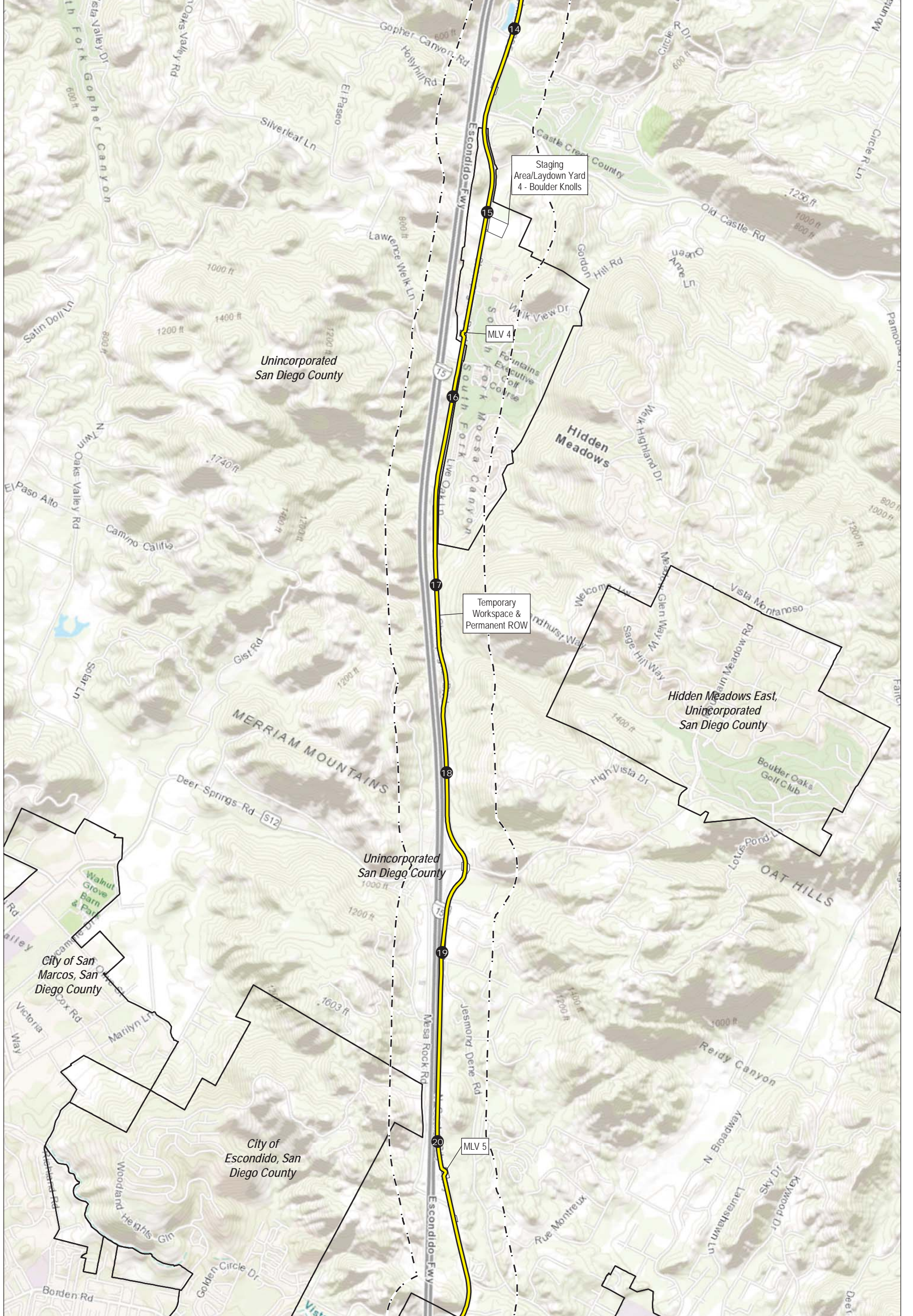


Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 4 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



- ① Milepost
- ▭ 0.25-Mile Buffer
- ▬ Line 3602
- ▭ Municipal Boundary
- ▭ Workspaces

Key:
 ROW Right-Of-Way

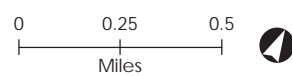


Figure 3.8-2
Schools
 within 0.25 Mile of the Study Area
 Page 5 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

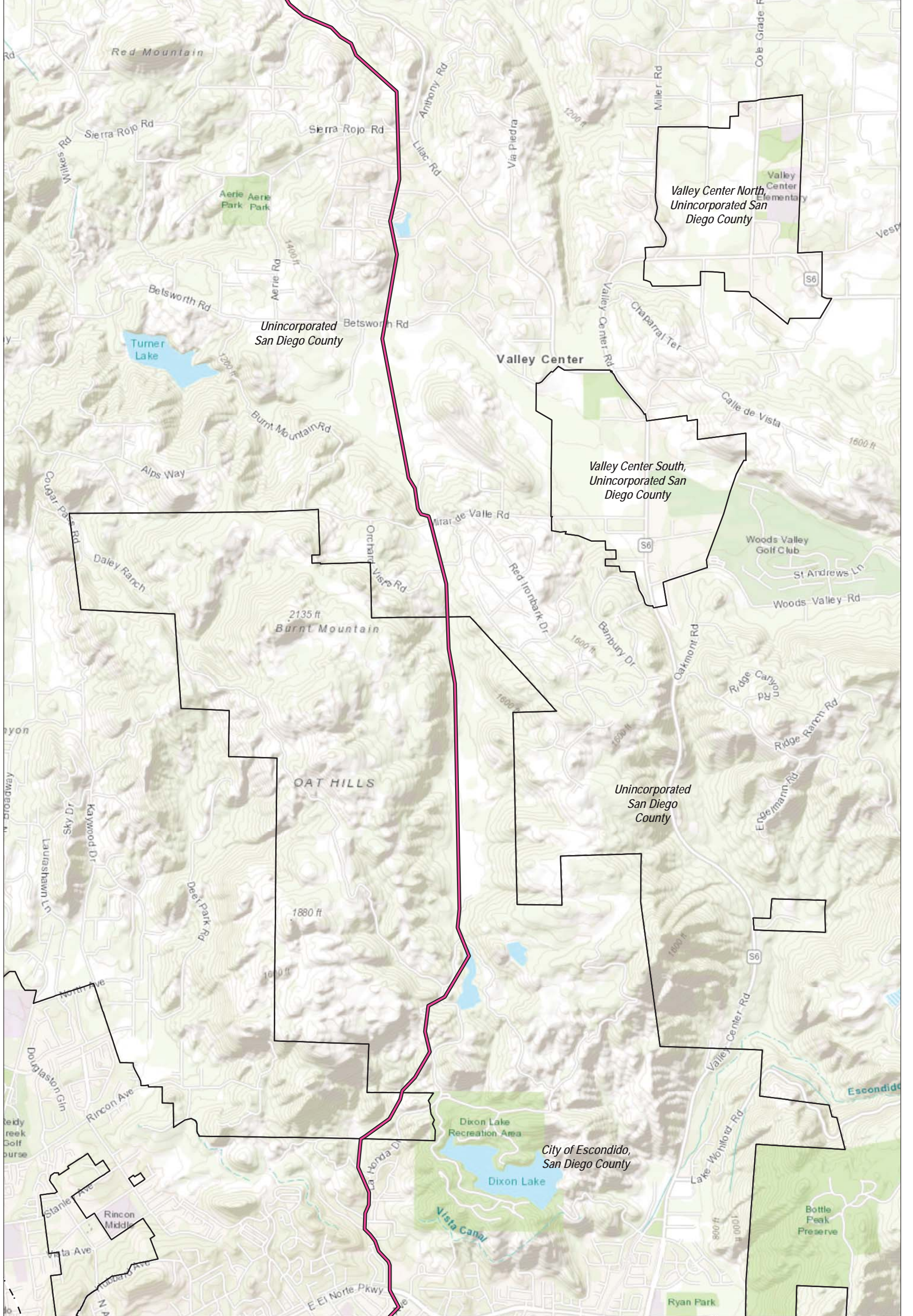


Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 6 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

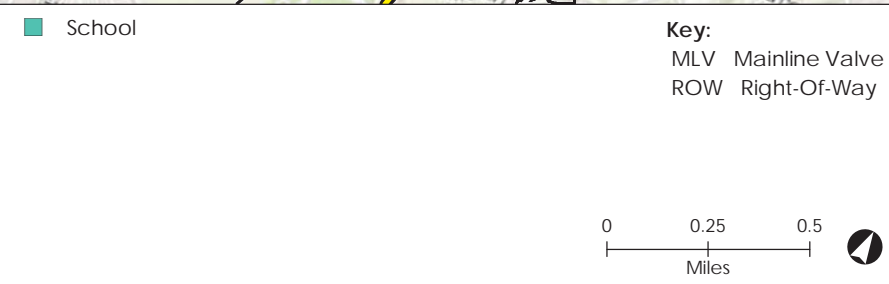
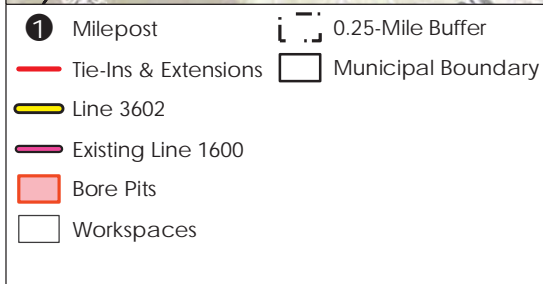
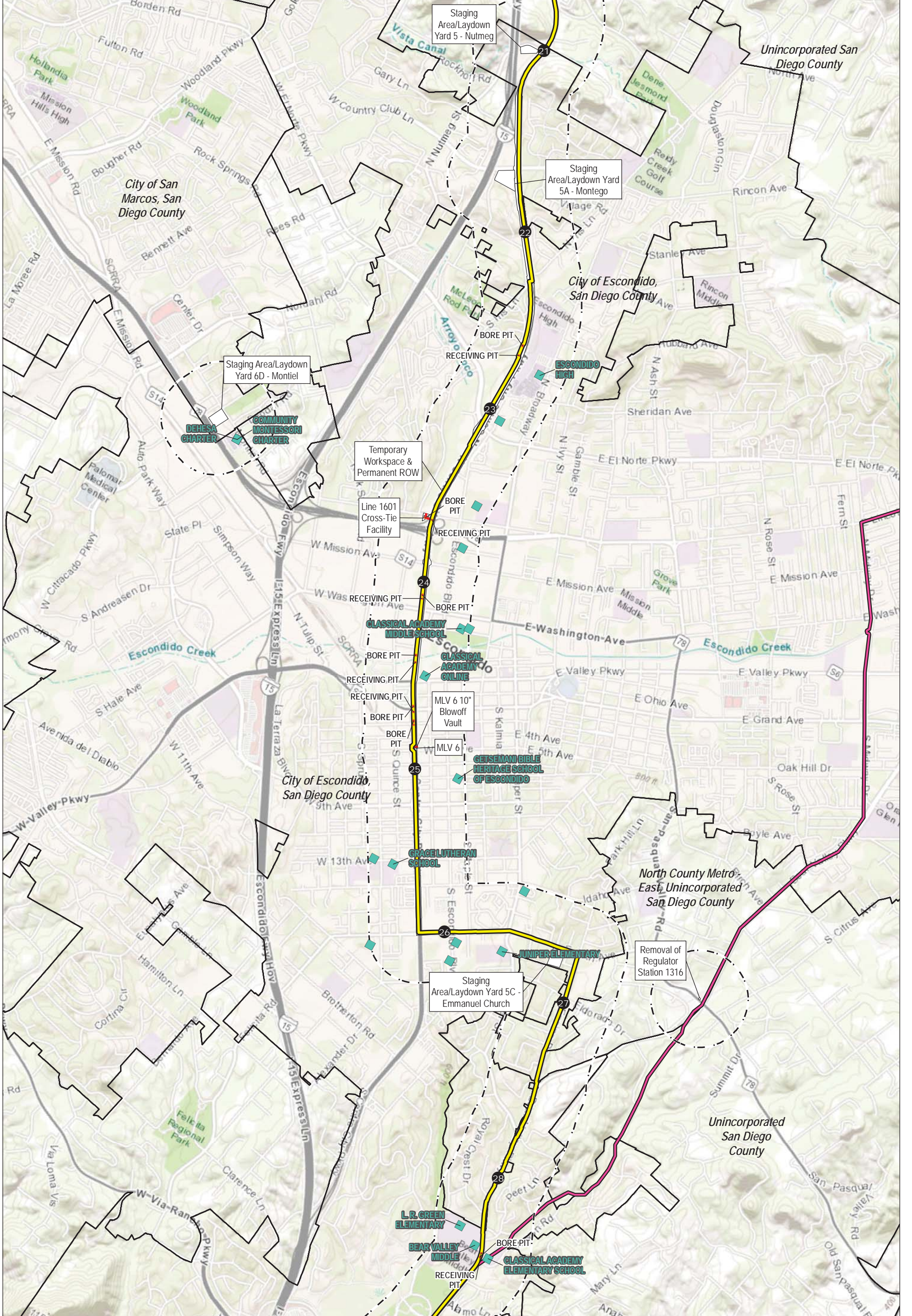
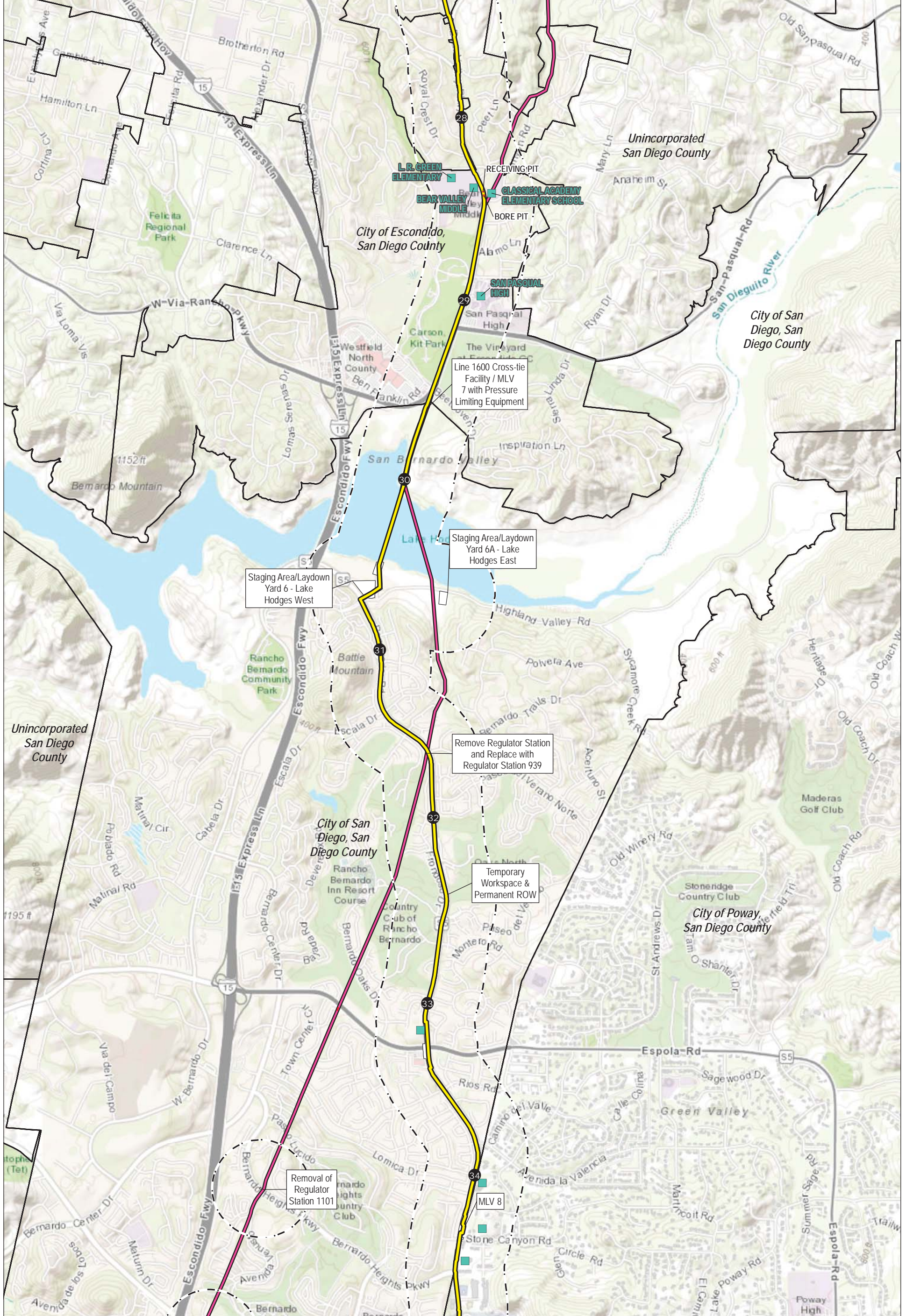


Figure 3.8-2
Schools
 within 0.25 Mile of the Study Area
 Page 7 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

Sources: ESRI 2012, 2018; SanGIS 2016a, 2016b; SDG&E 2017; USMC 2017b



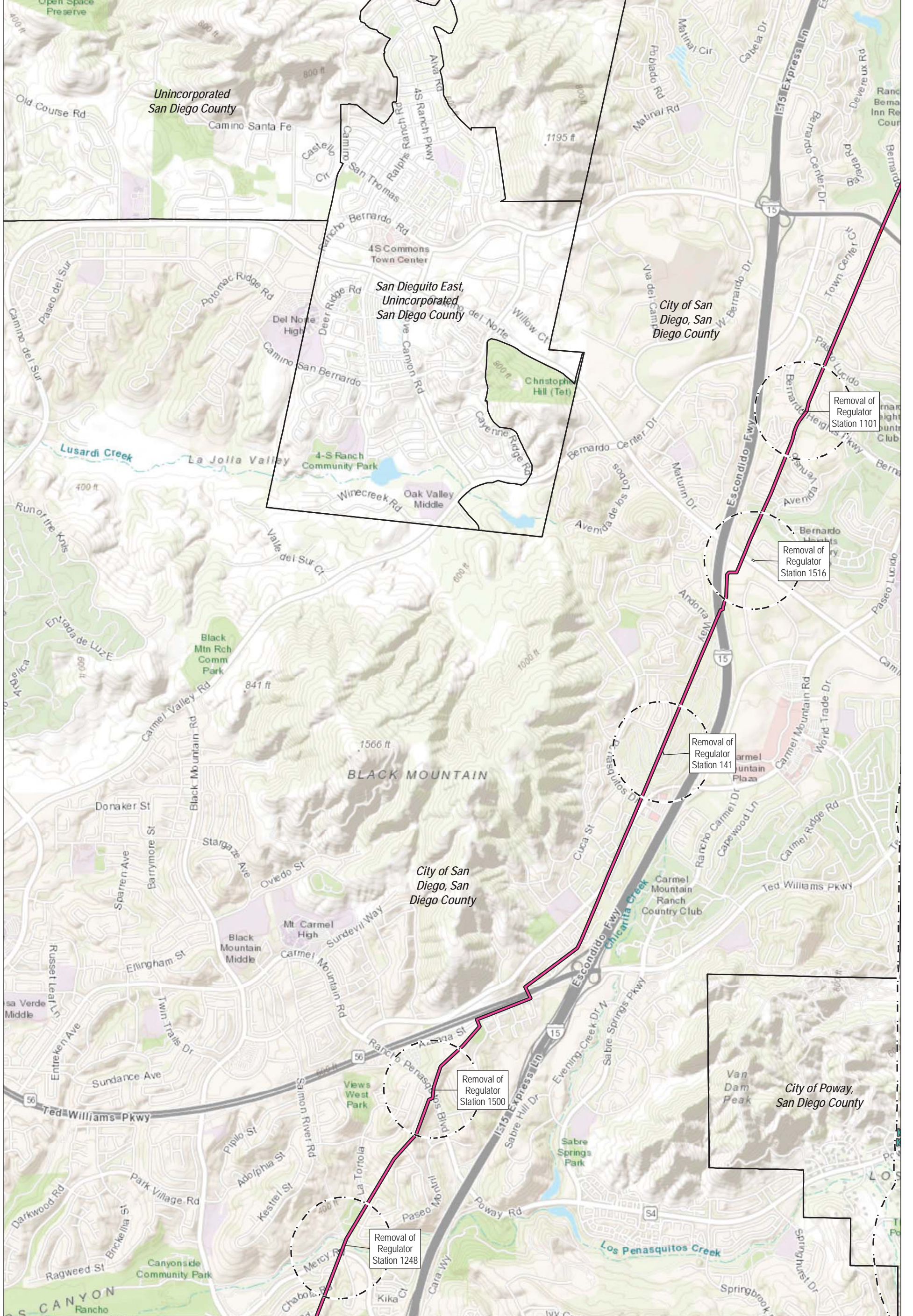
- Milepost
- 0.25-Mile Buffer
- School
- Municipal Boundary
- Tie-Ins & Extensions
- Line 3602
- Existing Line 1600
- Bore Pits
- Workspaces

Key:
 ROW Right-Of-Way

0 0.25 0.5
 Miles

Figure 3.8-2
Schools
 within 0.25 Mile of the Study Area
 Page 8 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

Sources: ESRI 2012, 2018; SanGIS 2016a, 2016b; SDG&E 2017; USMC 2017b



— Existing Line 1600 0.25-Mile Buffer
 Workspaces Municipal Boundary

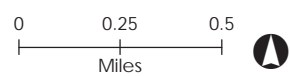


Figure 3.8-2
Schools
within 0.25 Mile of the Study Area
 Page 9 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

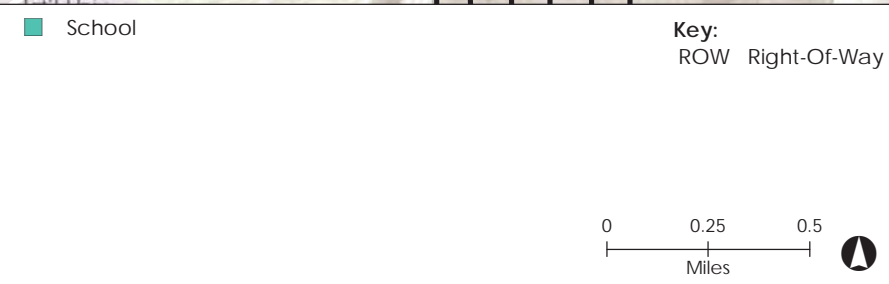
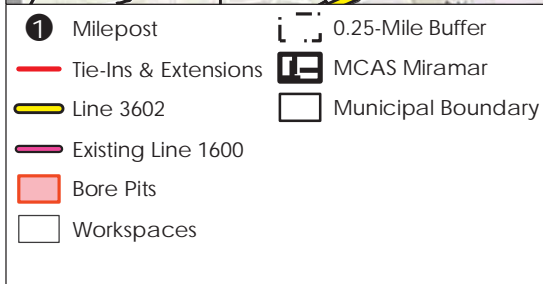
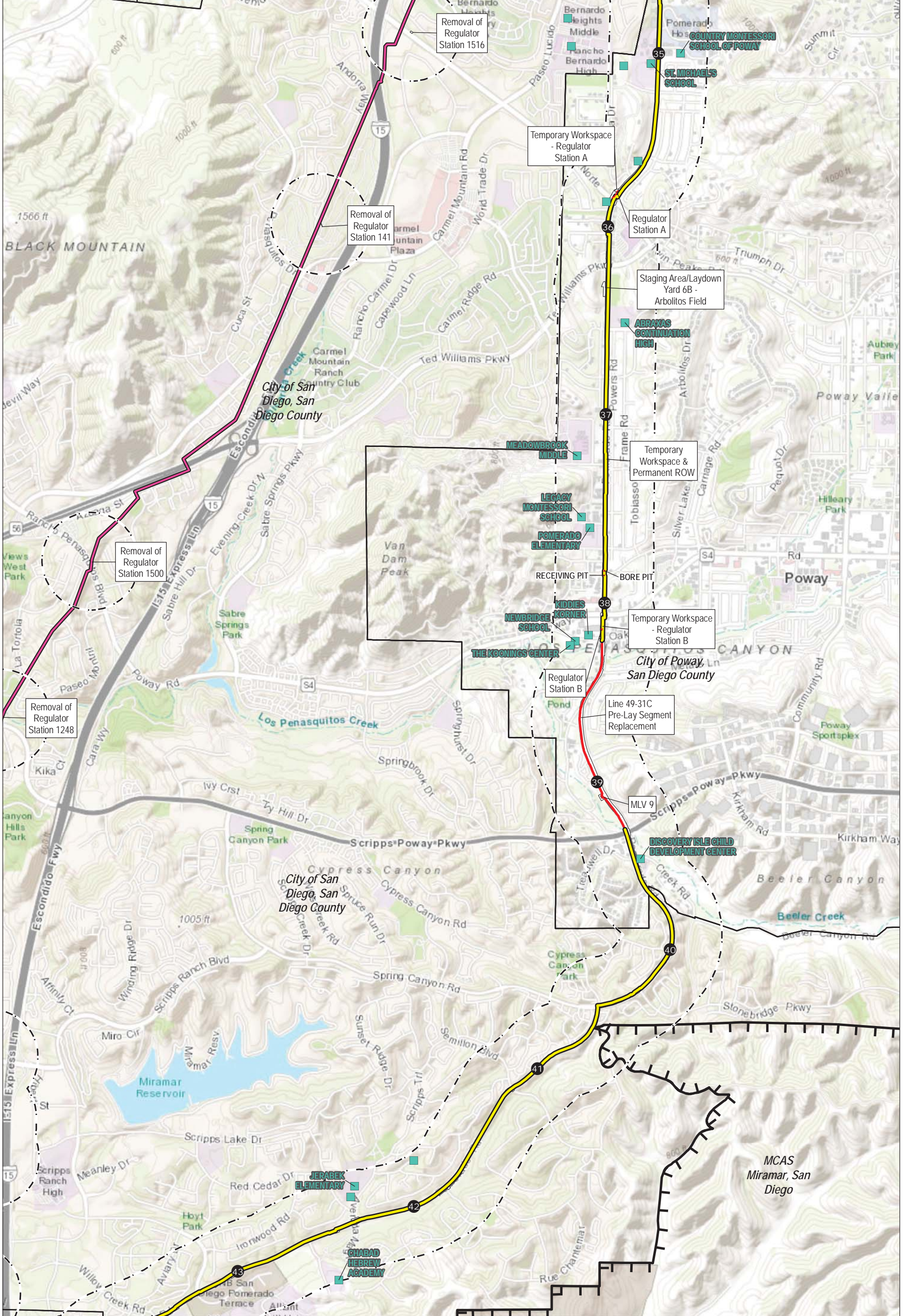
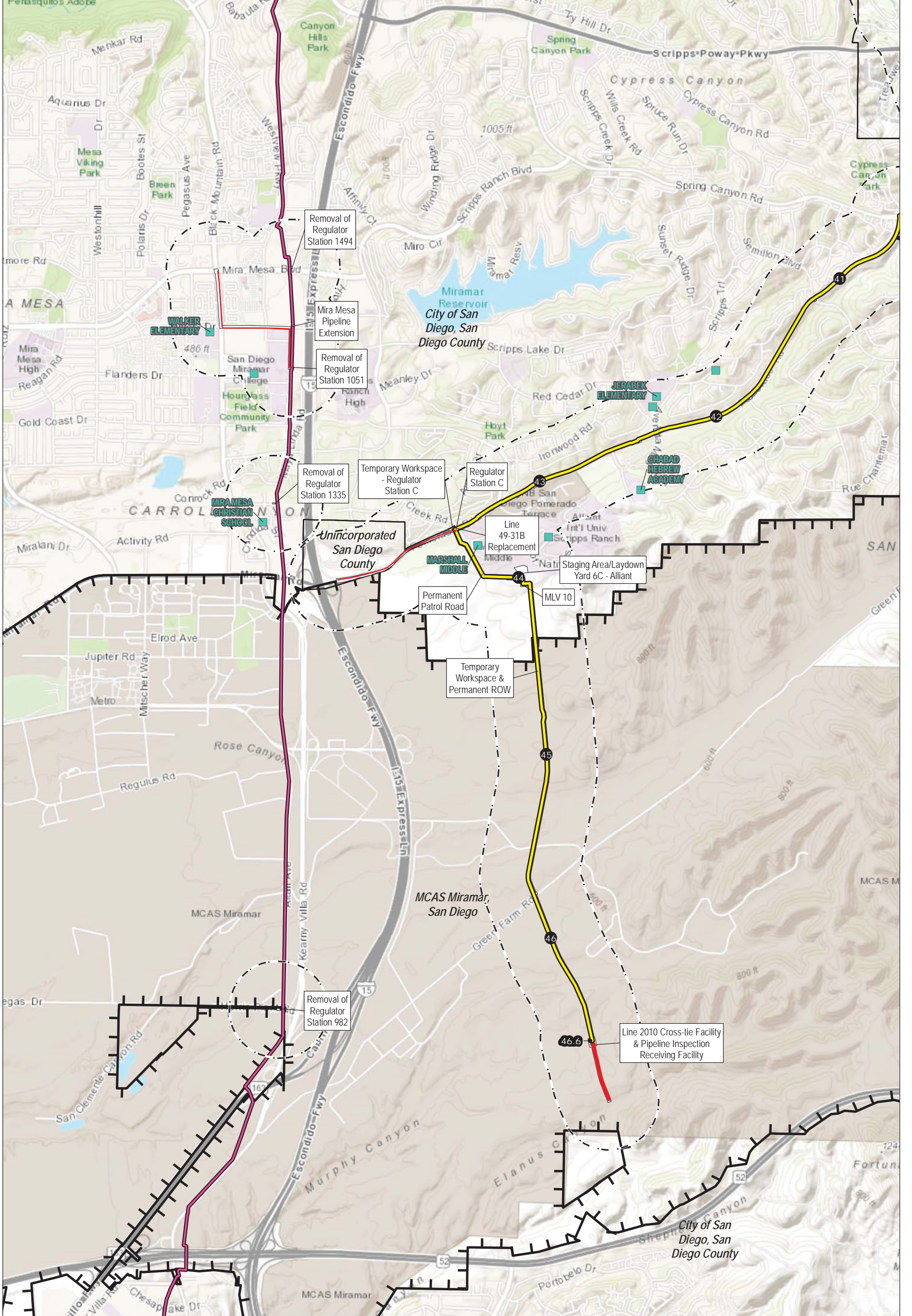
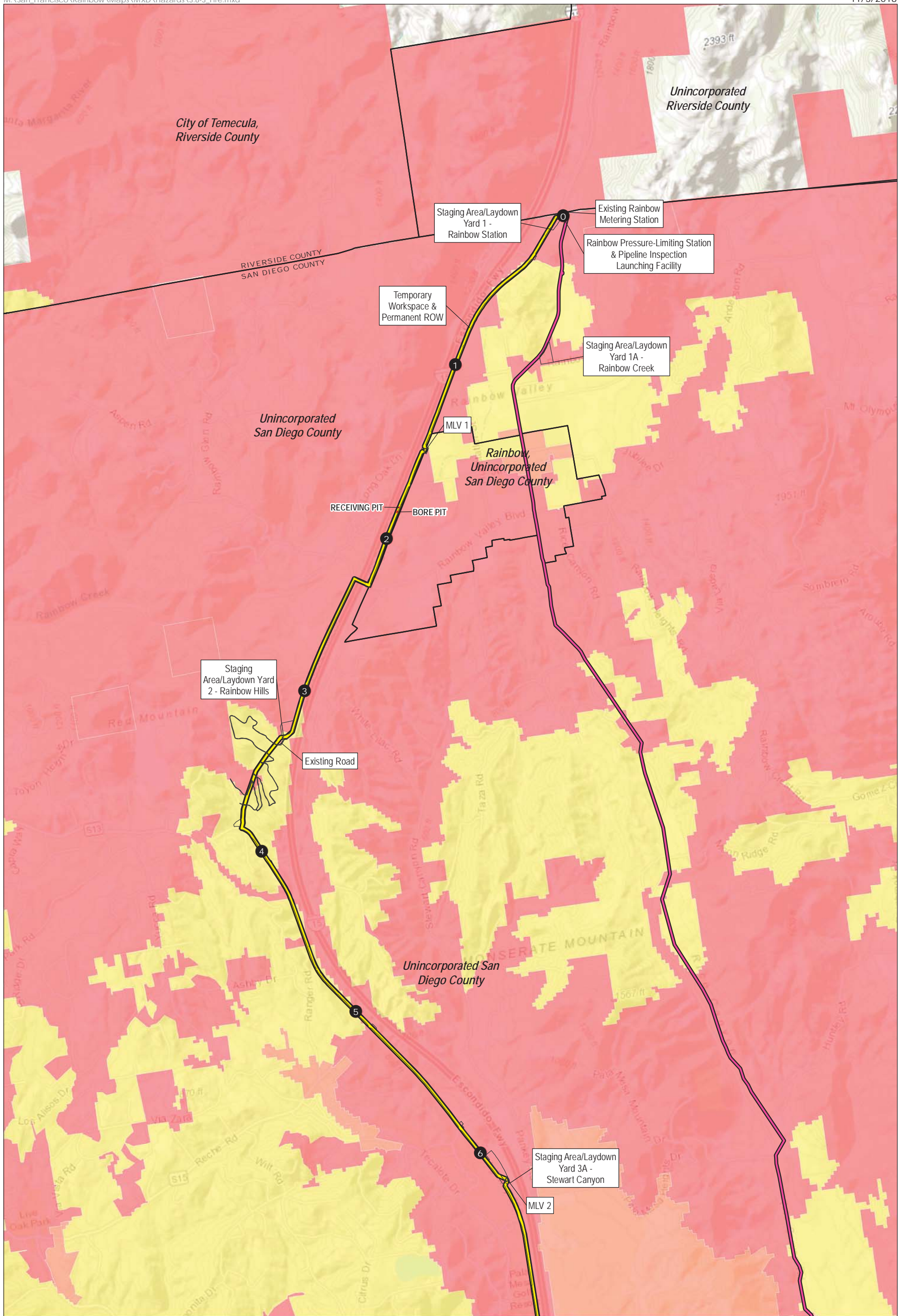


Figure 3.8-2
Schools
 within 0.25 Mile of the Study Area
 Page 10 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

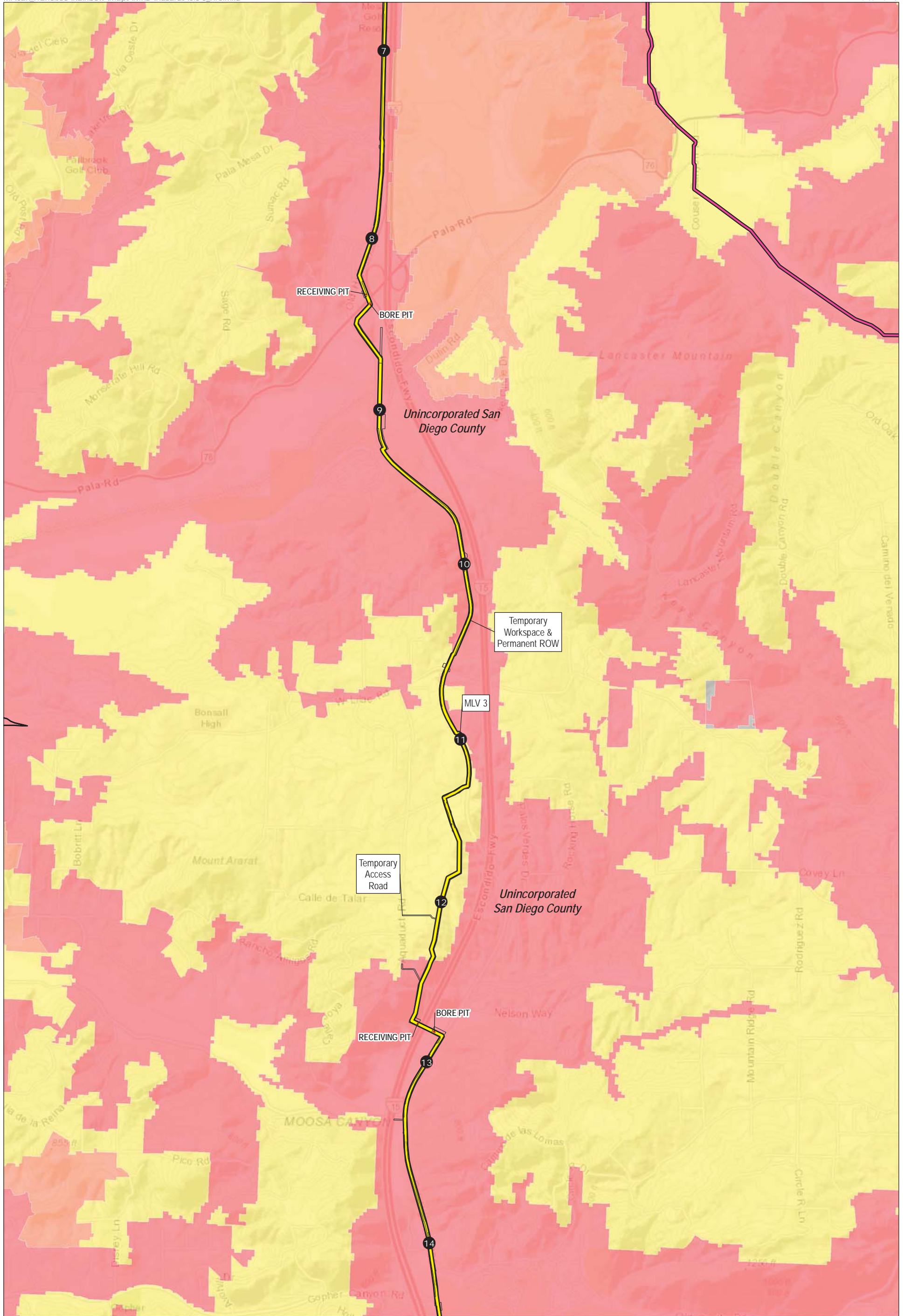


<ul style="list-style-type: none"> ● Milepost 0.25-Mile Buffer ■ School Tie-Ins & Extensions Line 3602 Existing Line 1600 Workspaces MCAS Miramar Municipal Boundary 	<p>Key: ROW Right-Of-Way</p> <p>0 0.25 0.5 Miles</p>	<p>Figure 3.8-2 Schools within 0.25 Mile of the Study Area Page 11 of 11 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600 San Diego County, CA</p>
---	---	--



1 Milepost	Fire Hazard Severity Zone	Key:
Line 3602	Very High	ROW Right-Of-Way
Existing Line 1600	High	
Bore Pits	Moderate	
Workspaces		
Municipal Boundary		

Figure 3.8-3
**Fire Hazard Severity Zones
 in the Study Area**
 Page 2 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



1 Milepost	Fire Hazard Severity Zone	Key:
Line 3602	Very High	ROW Right-Of-Way
Existing Line 1600	High	
Bore Pits	Moderate	
Workspaces	Non-Wildland/Non-Urban	
Municipal Boundary		

0 0.25 0.5
Miles

Figure 3.8-3
**Fire Hazard Severity Zones
 in the Study Area**
 Page 3 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

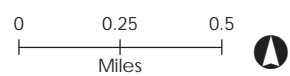
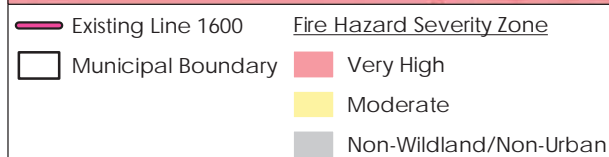
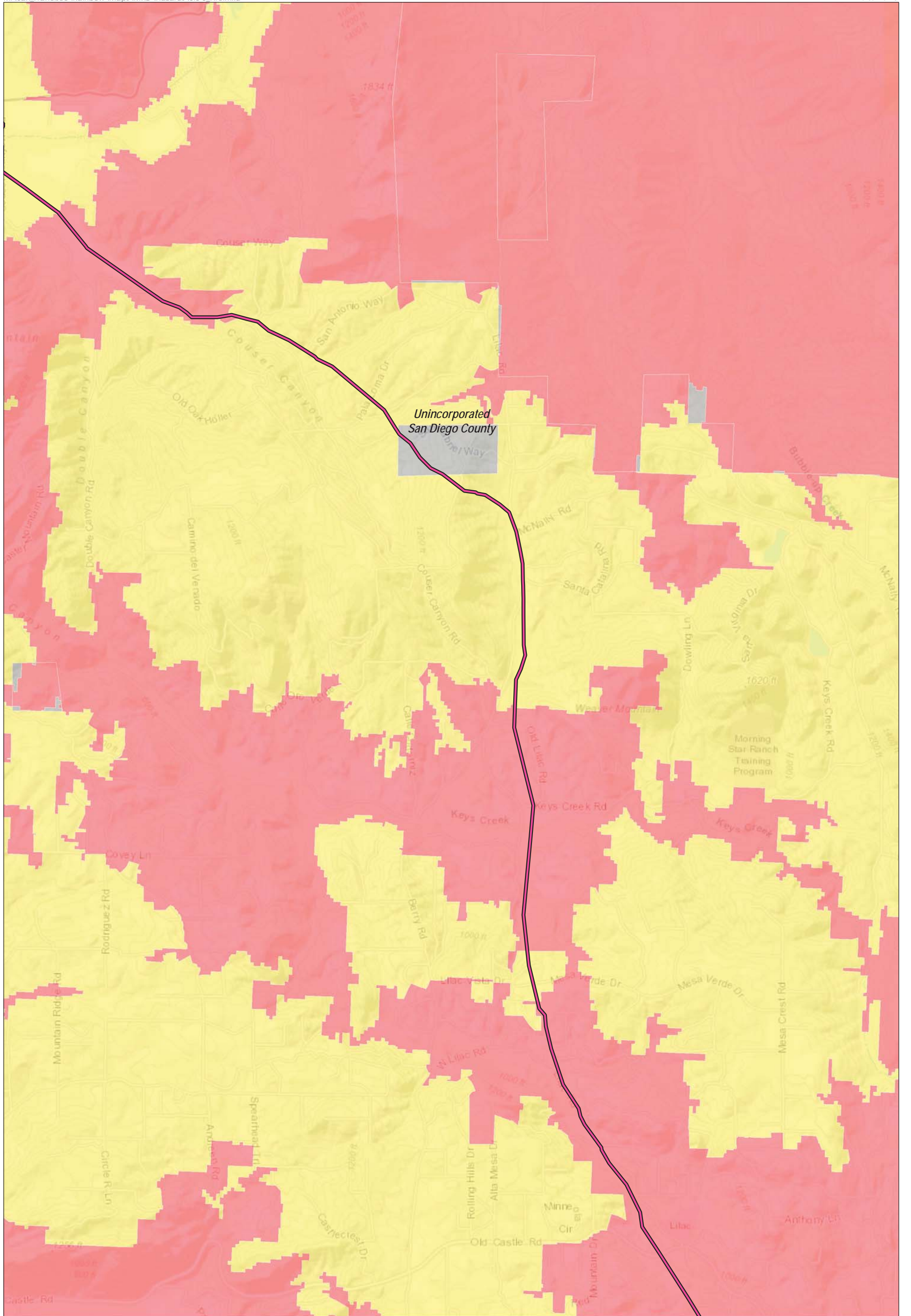
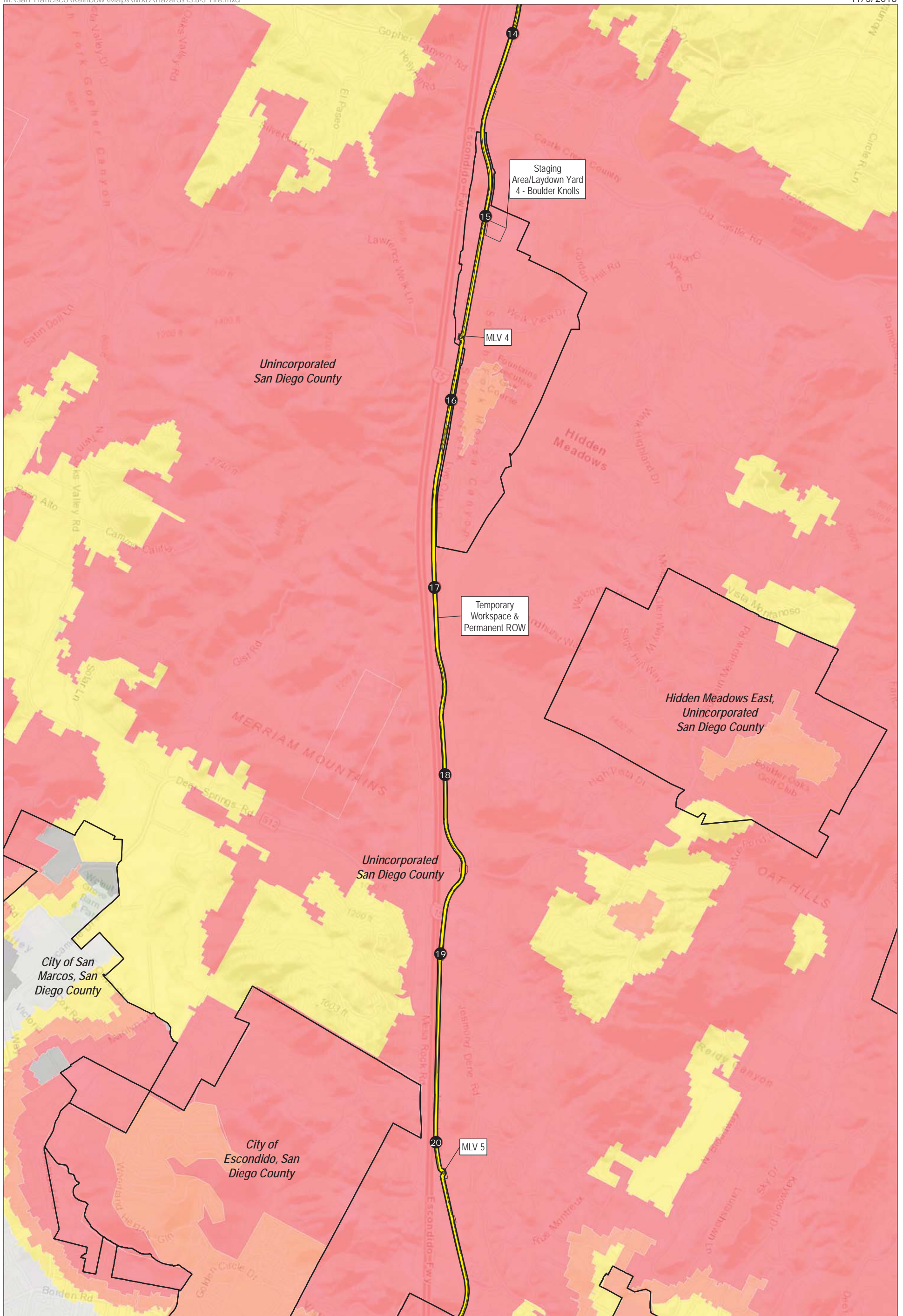


Figure 3.8-3
**Fire Hazard Severity Zones
 in the Study Area**
Page 4 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



<ul style="list-style-type: none"> ① Milepost — Line 3602 □ Workspaces □ Municipal Boundary 	<p>Fire Hazard Severity Zone</p> <ul style="list-style-type: none"> Very High High Moderate Non-Wildland/Non-Urban Urban Unzoned 	<p>Key:</p> <ul style="list-style-type: none"> ROW Right-Of-Way 	<p>Figure 3.8-3 Fire Hazard Severity Zones in the Study Area Page 5 of 11 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600 San Diego County, CA</p>
<p>Sources: ESRI 2012, 2018; SanGIS 2009, 2016a; SDG&E 2017; USMC 2017b</p>		<p>0 0.25 0.5 Miles</p>	

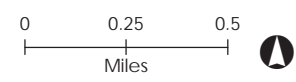
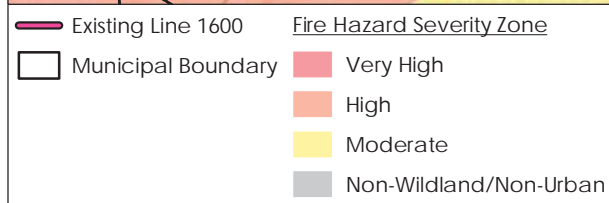
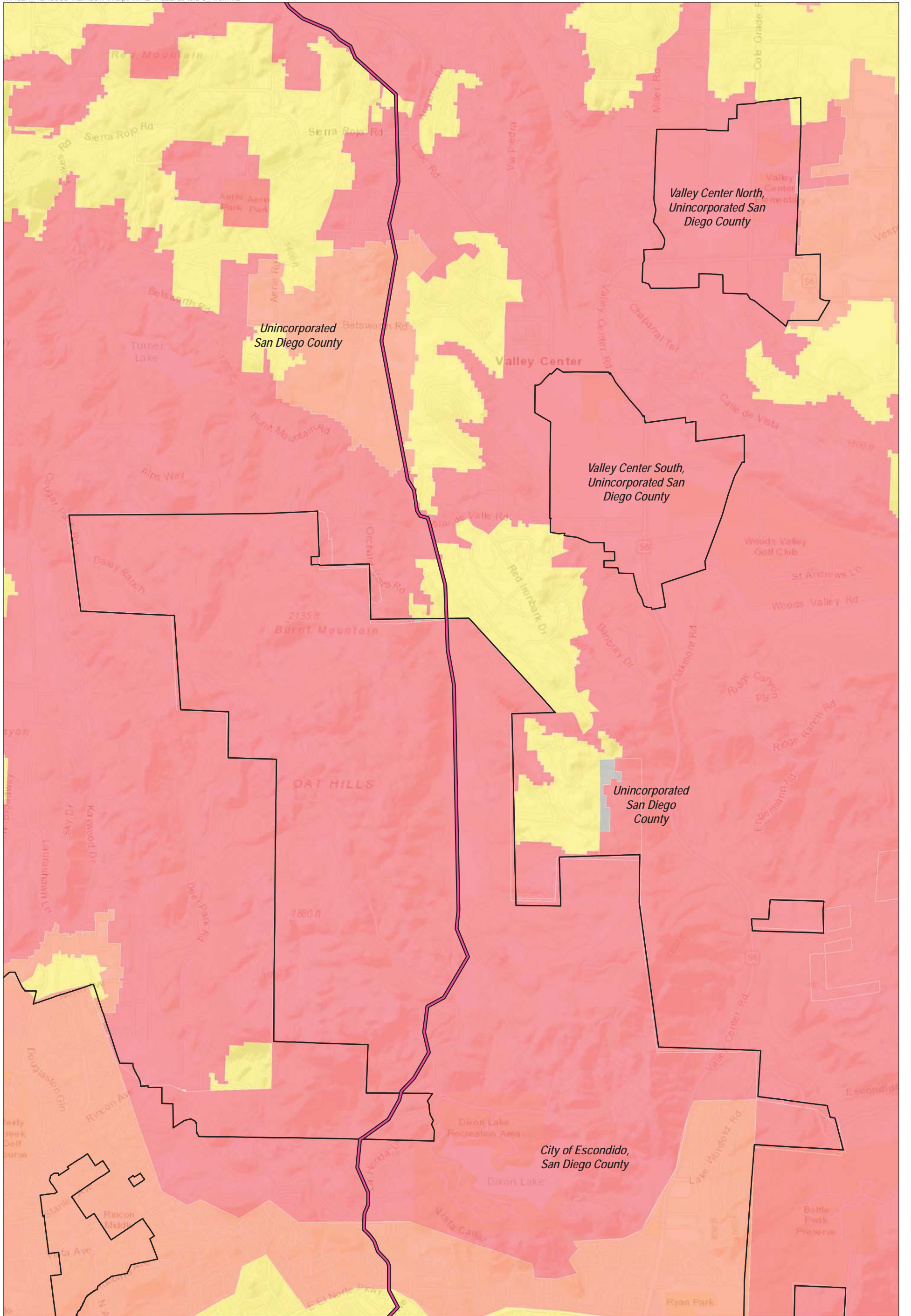
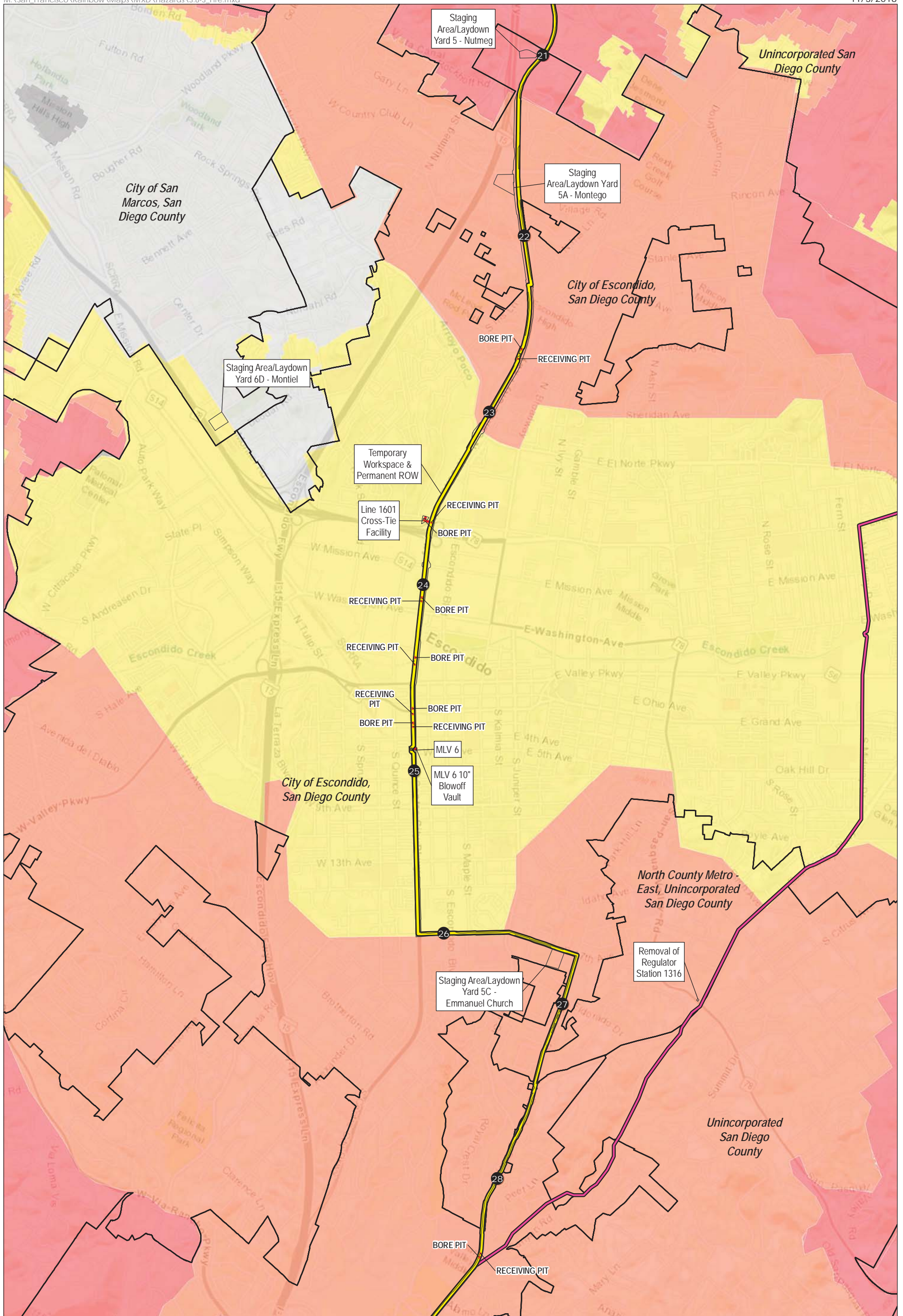
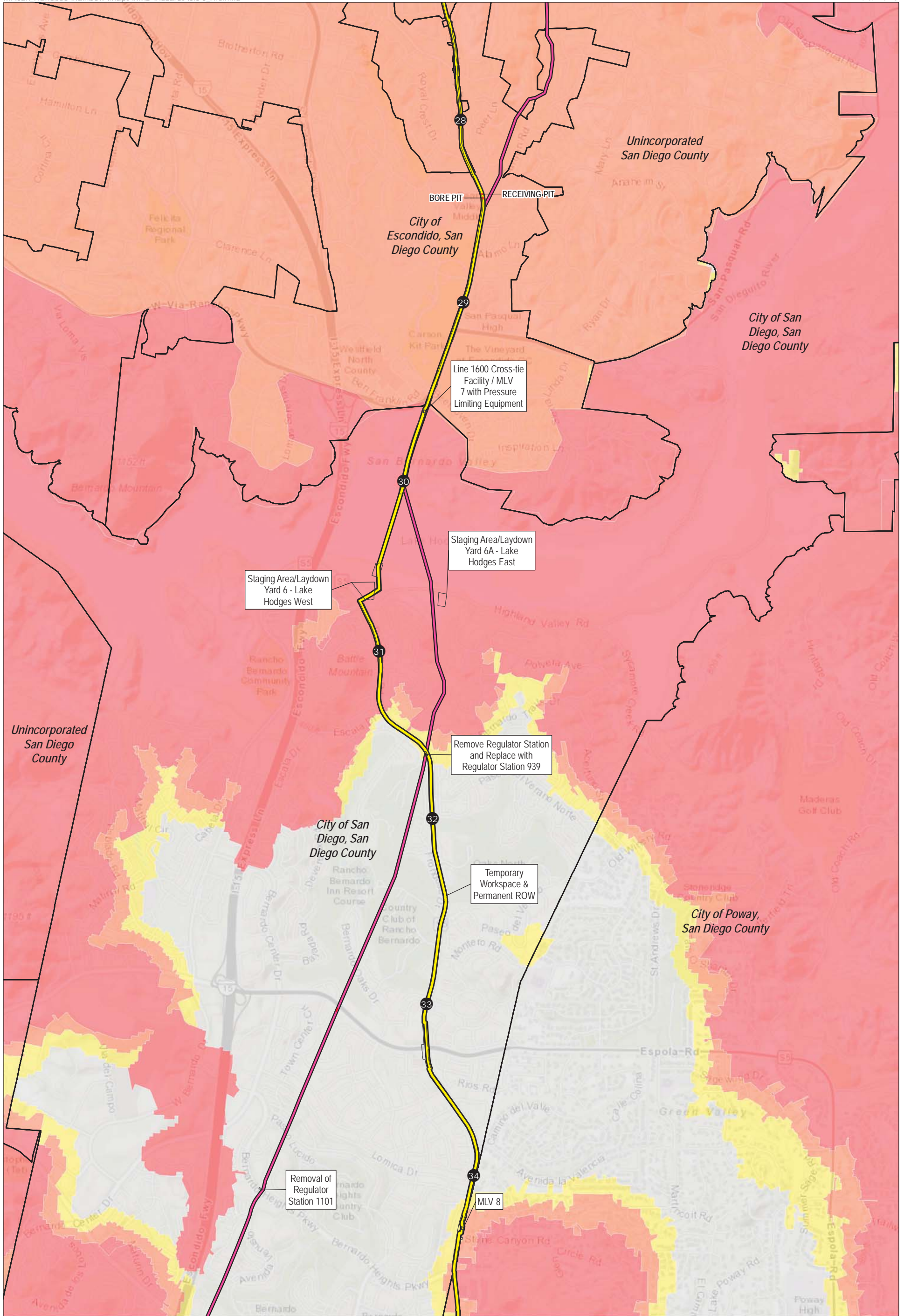


Figure 3.8-3
**Fire Hazard Severity Zones
 in the Study Area**
 Page 6 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



<ul style="list-style-type: none"> Milepost Line 3602 Tie-Ins & Extensions Existing Line 1600 Bore Pits Workspaces Municipal Boundary 	<p><u>Fire Hazard Severity Zone</u></p> <ul style="list-style-type: none"> Very High High Moderate Non-Wildland/Non-Urban Urban Unzoned 	<p>Key:</p> <ul style="list-style-type: none"> MLV Mainline Valve ROW Right-Of-Way 	<p>Figure 3.8-3 Fire Hazard Severity Zones in the Study Area Page 7 of 11 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600 San Diego County, CA</p>
--	---	---	---

Sources: ESRI 2012, 2018; SanGIS 2009, 2016a; SDG&E 2017; USMC 2017b



- 1** Milepost
 - █ Line 3602
 - █ Tie-Ins & Extensions
 - █ Existing Line 1600
 - █ Bore Pits
 - Workspaces
 - Municipal Boundary
- | | |
|--|--|
| Fire Hazard Severity Zone | |
| █ Very High | █ High |
| █ Moderate | █ Non-Wildland/Non-Urban |
| █ Urban Unzoned | |

Key:
 ROW Right-Of-Way

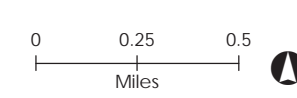


Figure 3.8-3
Fire Hazard Severity Zones in the Study Area
 Page 8 of 11
 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600
 San Diego County, CA

Sources: ESRI 2012, 2018; SanGIS 2009, 2016a; SDG&E 2017; USMC 2017b

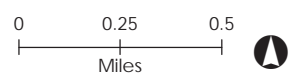
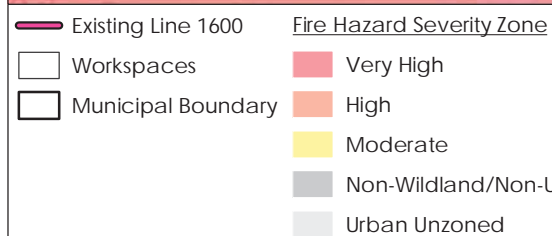
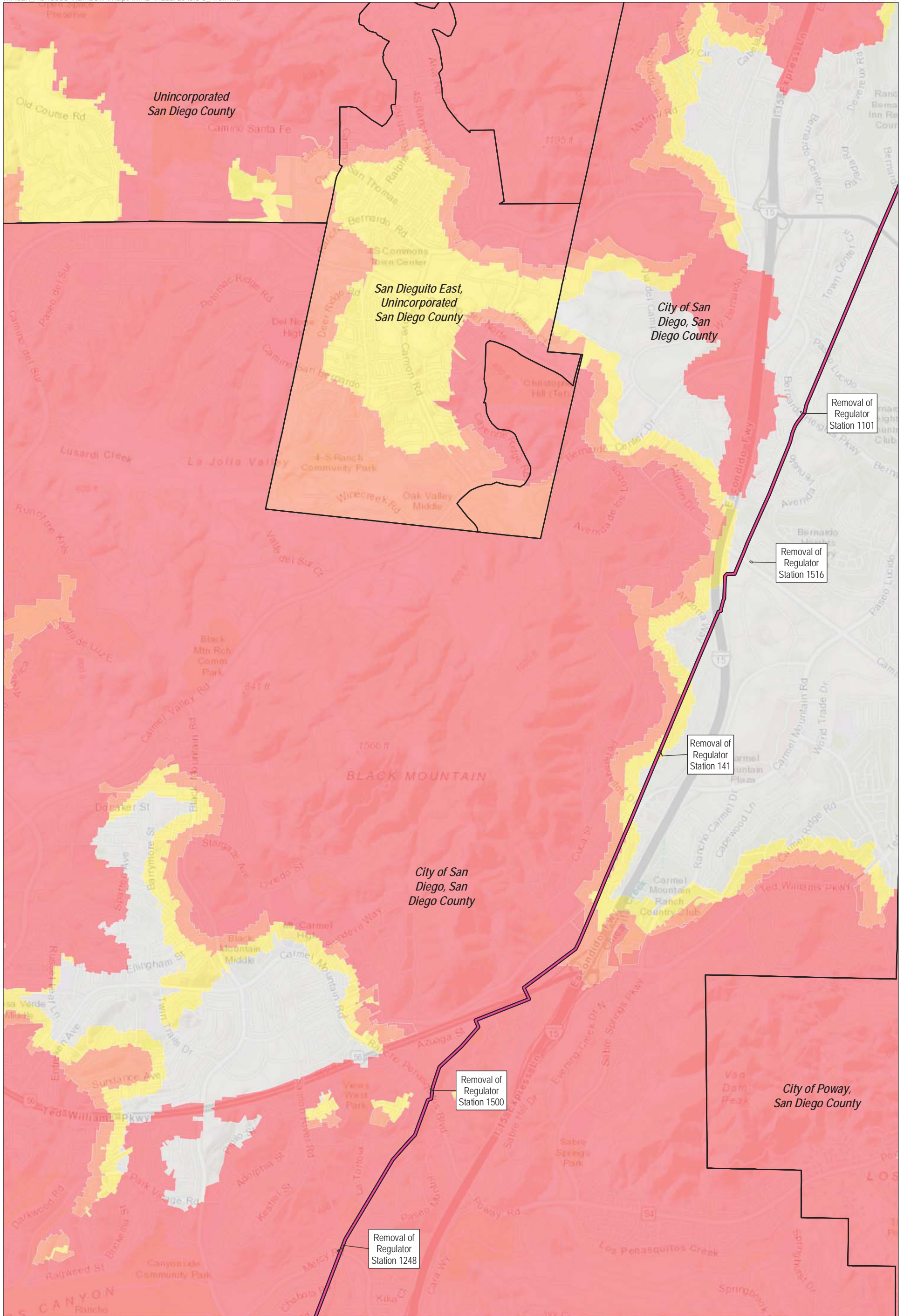


Figure 3.8-3
**Fire Hazard Severity Zones
 in the Study Area**
 Page 9 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA

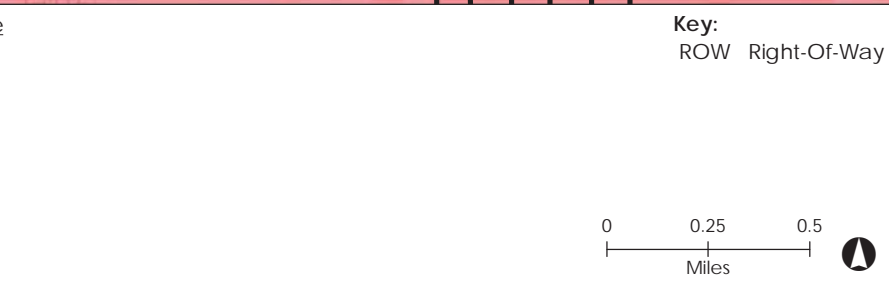
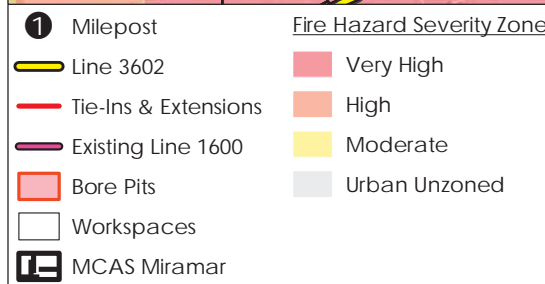
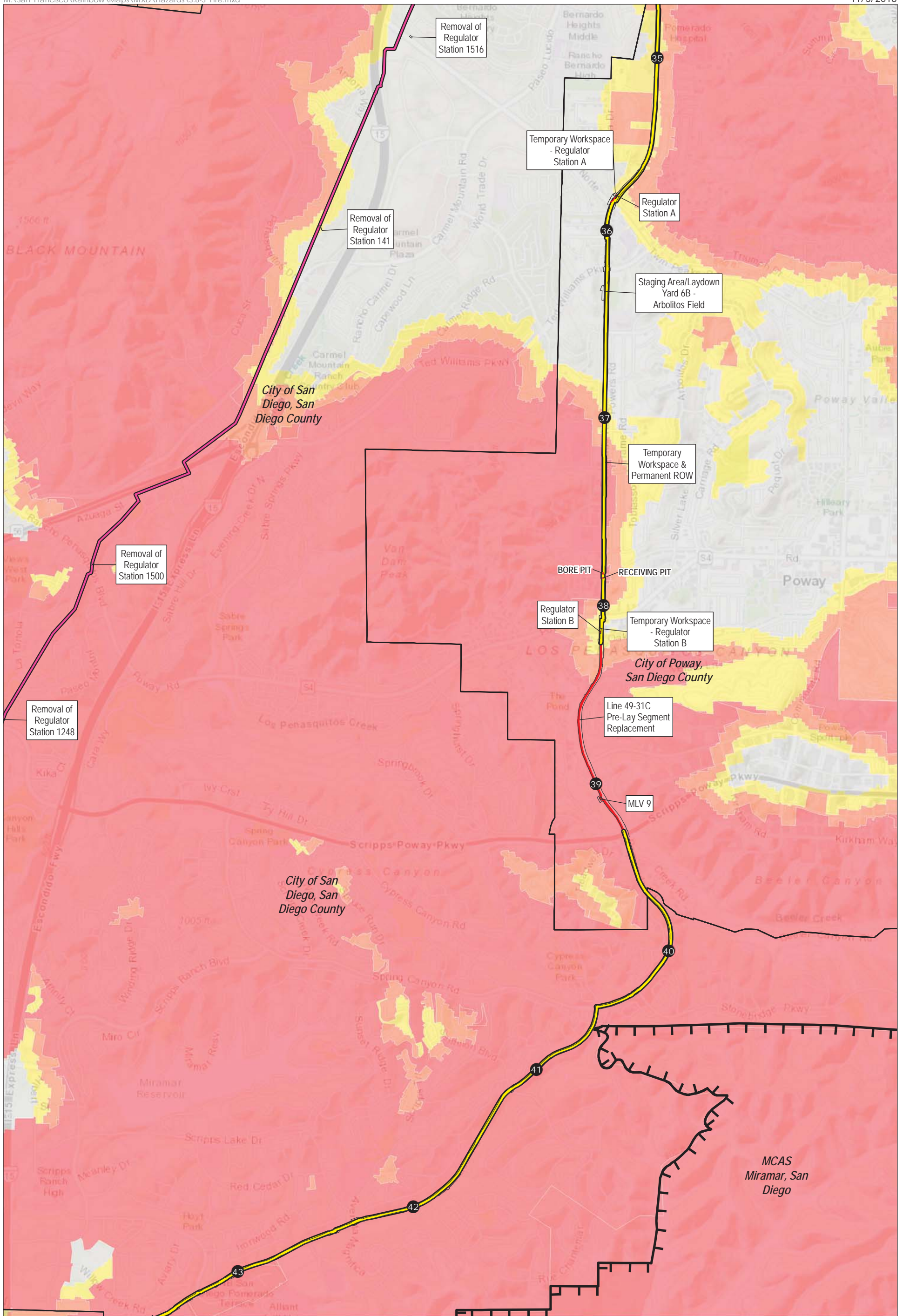
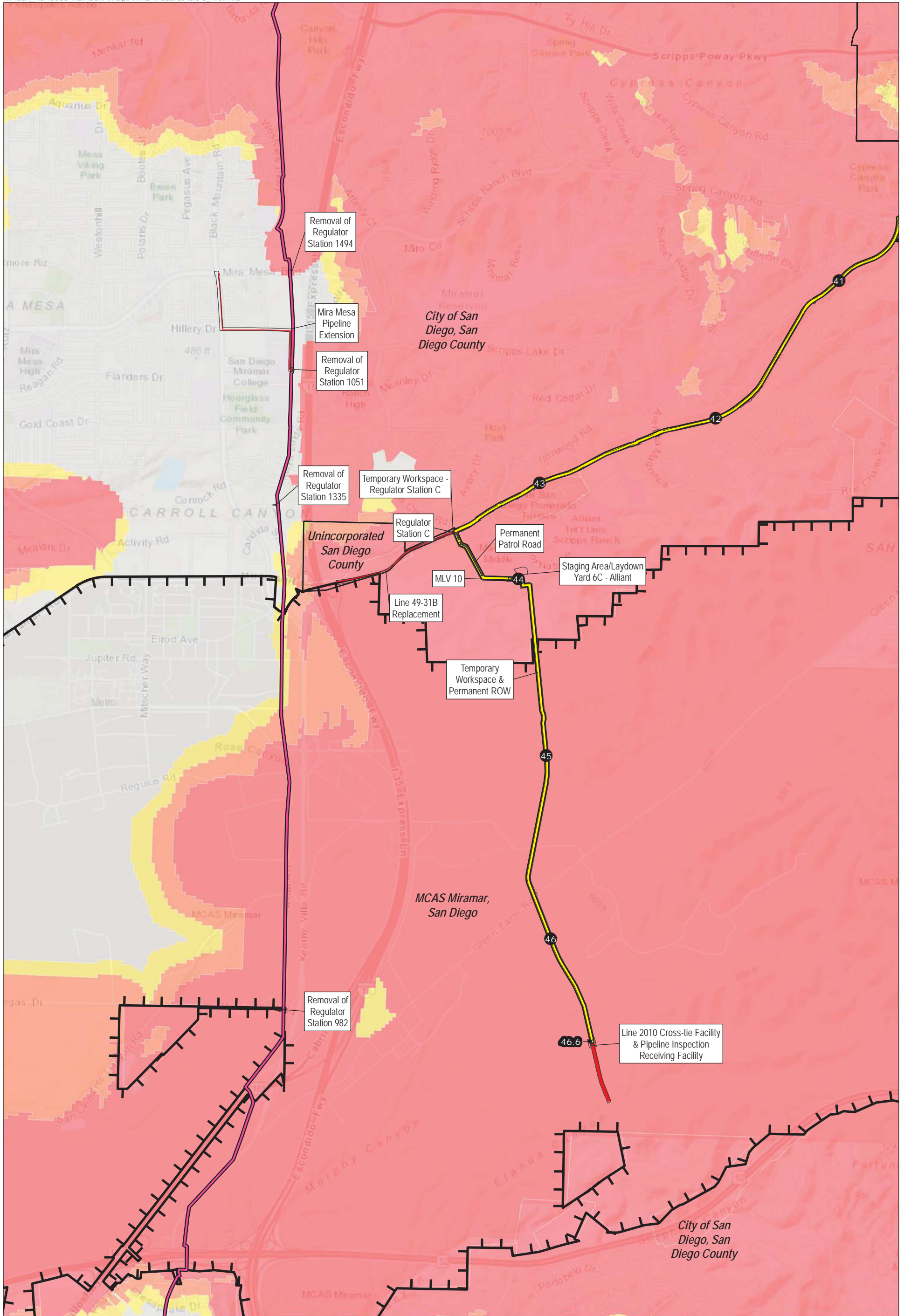


Figure 3.8-3
Fire Hazard Severity Zones
 in the Study Area
 Page 10 of 11
 Pipeline Safety and Reliability
 Project - New Natural Gas
 Line 3602 and De-rating
 Line 1600
 San Diego County, CA



<ul style="list-style-type: none"> ① Milepost Line 3602 Tie-Ins & Extensions Existing Line 1600 Workspaces MCAS Miramar Municipal Boundary 	<p>Fire Hazard Severity Zone</p> <ul style="list-style-type: none"> Very High High Moderate Urban Unzoned 	<p>Key:</p> <ul style="list-style-type: none"> ROW Right-Of-Way 	<p>Figure 3.8-3 Fire Hazard Severity Zones in the Study Area Page 11 of 11 Pipeline Safety and Reliability Project - New Natural Gas Line 3602 and De-rating Line 1600 San Diego County, CA</p>
<p>0 0.25 0.5 Miles</p>			

Sources: ESRI 2012, 2018; SanGIS 2009, 2016a; SDG&E 2017; USMC 2017b

3.8.5 References

- AirNav. 2017. Pomerado Hospital Heliport, Blackinton Airport, Miramar Marine Corps Air Station, Montgomery Field San Diego County, California, USA. Accessed August 28, 2017. <http://www.airnav.com/>
- ALUC (Airport Land Use Commission of San Diego County). 2011. *MCAS Miramar Airport Land Use Compatibility Plan*. Accessed August 31, 2017. <http://www.san.org/Airport-Projects/Land-Use-Compatibility#118076-alucps>
- _____. 2017. *Airport Land Use Compatibility Plans*. Accessed August 31, 2017. <http://www.san.org/Airport-Projects/Land-Use-Compatibility#118076-alucps>
- Blanchard, B. Wayne, Ph.D., CEM. 2008. *Guide to Emergency Management and Related Terms, Definition, Concepts, Acronym, Organization, Programs, Executive Orders and Legislation*. Federal Emergency Management Authority (FEMA).
- CA DTSC (California Department of Toxic Substances Control). September 2014. “EnviroStorCleanupSites” EnviroStor. Accessed June 15, 2017. http://www.envirostor.dtsc.ca.gov/public/data_download.asp
- _____. 2017. Envirostor Database. Accessed August 9, 2017. <http://www.envirostor.dtsc.ca.gov/public>
- CAL FIRE (California Department of Forestry and Fire Protection). 2007. Local Fire Hazard Severity Zones GIS data. Accessed August 9, 2017. http://www.fire.ca.gov/fire_prevention/fhsz_maps_sandiego
- _____. 2009. State Fire Hazard Severity Zones GIS data. Accessed August 9, 2017. http://www.fire.ca.gov/fire_prevention/fhsz_maps_sandiego
- _____. 2017a. Communities at Risk from Wildfire Map. Accessed July 31, 2017. <http://frap.fire.ca.gov/>
- _____. 2017b. Communities at Risk. Accessed July 31, 2017. http://frap.fire.ca.gov/http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk
- City of Escondido. 2012. *City of Escondido General Plan, Community Protection Element*. Accessed July 5, 2017. <https://www.escondido.org/general-plan-update.aspx>
- City of Poway. 2005. *City of Poway General Plan, Community Development*. Accessed July 17, 2017. <http://poway.org/286/General-Plan>
- City of San Diego. 2015. *City of San Diego General Plan, Safety Element*. Accessed July 10, 2017. <https://www.sandiego.gov/planning/genplan>
- County of San Diego. 2010. *San Diego County 2010 Multi-Jurisdictional Hazard Mitigation Plan*. Accessed August 29, 2017. <http://www.sandiegocounty.gov/content/dam/sdc/oes/docs/2010-HazMit-Final-August-2010.pdf>

- _____. 2014. *Unified San Diego County Emergency Services Organization And County of San Diego Operational Area Emergency Operations Plan Annex Q Evacuation*. September 2014.
- _____. 2015. *County of San Diego General Plan, Public Facilities, Services and Safety Element*. June 2015. Accessed on June 29, 2017. <http://www.sandiegocounty.gov/pds/generalplan.html>
- _____. 2017. *2017 Consolidated Fire Code*. 6th Edition. Effective April 14, 2017. Accessed July 31, 2017. <http://www.sandiegocounty.gov/pds/docs/cosd-fire-code.pdf>
- DigAlert (Underground Service Alert of Southern California). 2015. FAQs. Accessed May 12, 2017. <https://www.digalert.org/calaw>
- Earth Systems Research Institute (ESRI). 2012. "Detailed Counties." Data & Maps for ArcGIS® version 10.1. Redlands, California.
- EFD (Escondido Fire Department). 2017. Fire Severity Zones Map. Accessed July 14, 2017. <https://fire.escondido.org/fire-severity-zone.aspx>
- Google. 2017. Google Earth Version 6.2.1.6014 Software. Program used August 2017.
- GSO (GreatSchools.org). 2017. Accessed April 1 2017. <http://www.greatschools.org>
- Haley & Aldrich, Inc. 2015. *ASTM Phase I Environmental Site Assessment – Pipeline Safety & Reliability Project. San Diego, California. For Insignia Environmental, Encinitas, California*. September 2015.
- NAVFAC (Naval Facilities Engineering Command). 2005. *Marine Corps Air Station, Miramar, Air Installation Compatible Use Zones (AICUZ) Update*.
- NG.org (NaturalGas.Org). 2017. "Overview of Natural Gas." Accessed August 28, 2017. <http://naturalgas.org/>
- SanGIS. 2009. CalFire. Jan 9 2009. Fire Hazard Severity Zones. Accessed August 9, 2017. <http://rdw.sandag.org/Account/gisdtview?dir=Fire>
- _____. 2016a County Assessor. "Municipal Boundaries." SanGIS Data Warehouse. Aug 10, 2016. San Diego Geographic Information Source - JPA. Accessed Feb 13, 2017. <http://www.sangis.org/download/>
- _____. 2016b. County of San Diego. "Schools" SanGIS Data Warehouse. Feb 10, 2016. San Diego Geographic Information Source - JPA. Accessed Jun 2, 2017. <http://www.sangis.org/download/>
- _____. 2017. Regional Data Warehouse. Accessed August 18, 2017. <http://www.sangis.org/download/index.html>
- SDG&E (San Diego Gas & Electric Company). 2017. Project features provided by the applicants.
- SDG&E and SoCalGas (San Diego Gas & Electric and Southern California Gas Company). 2015. Proponent's Environmental Assessment for the Pipeline Safety & Reliability Project. September 2015.

SWRCB (State Water Resources Control Board). 2017. GeoTracker Database. Accessed August 9, 2017. <http://geotracker.waterboards.ca.gov/>.

US EPA (United States Environmental Protection Agency). July 15, 2016. FRS Facilities. Geospatial Download Service. Accessed June 15, 2017. <https://www.epa.gov/enviro/geospatial-data-download-service>

USMC (U.S. Marine Corps). 2011. *Marine Corps Air Station Miramar, California, Integrated Natural Resources Management Plan 2011-2015*. Accessed June 22, 2017. <http://www.miramar-ems.marines.mil/Divisions/Natural-Resources-Division/Natural-Resources/>

_____. 2017a. “East Miramar Encroachment Notice.” Accessed August 28, 2017. <http://www.miramar.marines.mil/Resources/Encroachment/East-Miramar-Encroachment>.

_____. 2017b. MCAS Miramar boundary data provided to Ecology and Environment, Inc. on May 8, 2017.