

Mission Trails Regional Park Master Plan Update
Utilities Easement Review

GHD Inc.

June 2016



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1. Purpose

The purpose of this Utility Easement Review (Review) is to evaluate the Mission Trails Regional Park (MTRP) Master Plan Update (MPU) as a whole, to identify utility easements within the existing limits of the Park, and to identify any potential conflicts with the existing utility infrastructure supporting the needs of the project. This Review presents the current regulatory framework addressing utility service issues, as well as recommendations for addressing potential environmental effects generated from implementing elements of the updates MTRP Master Plan.

2. Project Location and Existing Utilities

The Project is located in San Diego County, within the MPU boundary as identified in the approved 1985 MTRP Development Master Plan and is approximately 2,259 acres of the East Elliot Community Planning Area and approximately 1,450 acres known as West Sycamore, as part of the Rancho Encantada Precise Plan area. Existing utilities (sewer, water, gas, storm water, electric, and solid waste) are provided by the City of San Diego (City) and San Diego Gas and Electric (SDG&E). In total, six areas within MTRP contained existing utilities (see **Table 2.1**).

Table 2.1: Existing Utilities Identified Within Project Location

	Sewer	Water	Gas	Storm Water	Electric	Solid Waste
West Sycamore		✓			✓	✓
East Elliott Community Planning Area	✓	✓	✓		✓	
Fortuna Mountain	✓	✓	✓		✓	
Mission Gorge Area	✓	✓		✓		
Cowles Mountain Area		✓		✓		
Lake Murray Area		✓		✓		

3. MTRP Setting

3.1 Environmental Setting

With a property size of nearly 7,600 acres, MTRP consists of open space and recreational uses, including mountains, valleys, two lakes, a major river and scenic gorge, historical landmarks, wildlife habitats, and cultural resources. Surrounded by residential development, the close proximity and diversity of the park services a broad cross-section of the population who may have difficulty reaching the remote locations of other recreational facilities.

3.2 Utilities

The MTRP space encompasses a number of existing utilities in each of its subparts, as illustrated in the Major Utilities figure of the MTRP MPU (**Appendix A**).

3.2.1 Sewer Mains

The City's Public Utilities Department (PUD) operates and maintains major sewer facilities in MTRP including the Lake Murray Trunk Sewer 32, Mission Gorge Trunk Sewer 33, and associated sewer mains.

The Lake Murray Trunk Sewer 32 is located along the west side of Murray Reservoir in the Del Cerro and San Carlos communities. The pipeline runs under portions of MTRP, Lake Murray Trail, Lake Murray Community Park and Mission Trails Golf Course. The northern end of the pipeline lies under Jackson Drive, ending near Cowles Mountain Boulevard. The southern end of the pipeline is south of Murray Dam. The trunk sewer consists of nearly three miles of 18-inch to 27-inch diameter durable plastic sewer mains.

The Mission Gorge Trunk Sewer 33 is located along the west side of the San Diego River. The pipeline runs under portions of the MTRP, Oak Canyon and Hollis Lake. The northern end of the pipeline lies under Father Junipero Serra Trail, ending near Kumeyaay Campground. The southern end of the pipeline is north of Mission Gorge Road. The trunk sewer consists of seven miles of a 48-inch diameter steel pipe.

3.2.2 Water Supply

A number of water pipelines exist within MTRP. Therefore, any new development will need to address the protection and continuing operation of water transmission pipelines that are within this area, including:

- Pipeline 3, consisting of one mile of 72-inch diameter pipeline in Baltimore Drive passing through the southern portion of MTRP;
- Pipeline 4, consisting of three miles of 72-inch diameter pipeline beginning north of State Route (SR) 52 and crossing under SR-52 in a southeasterly direction on the eastern edge of the community of Tierrasanta through MTRP, and passing through Mission Gorge Road and Jackson Drive in the community of San Carlos until the southern portion of MTRP near the northeast side of Lake Murray;
- Scripps Ranch Pipeline, connecting to the Mission Trails Pipeline at SR-52 and delivering treated water to the Padre Dam Municipal Water District through a connection near Mission Gorge Road

before turning south again into a tunnel along the edge the Cowles Mountain area and to the Alvarado Water Treatment Plant;

- Mission Trails Pipeline, consisting of one mile of 96-inch diameter welded steel pipeline flowing through the Second Aqueduct; and
- Mission Trails Second Aqueduct Flow Regulatory Structure (FRS), located along the Mission Trails Pipeline near the western ridgeline in the Fortuna Mountain Area and delivering water from Twin Oaks Valley Diversion structure to the Alvarado Water Treatment Plant.

Located in the West Sycamore Area is the San Vicente Pipeline, which is 11 miles of 8.5-foot diameter pipeline. The pipeline runs from the San Vicente Reservoir in Lakeside through the West Sycamore area ending at the San Diego County Water Authority's (SDCWA) Second Aqueduct west of Interstate (I) 15.

PUD operates and maintains several water pipelines and associated facilities in the park, including the Murray First Pipeline, El Cajon Pipeline, College Ranch Feeder Pipeline, and the San Carlos Water Reservoir. They also operate the Alvarado Water Treatment Plant, which can currently process up to 200 million gallons per day (MGD) of water (City PRD 2013).

3.2.3 Storm Water Systems

A number of storm water pipelines exist within MTRP. Therefore, any new development will need to address the protection and continuing operation of storm water transmission pipelines that are within this area, including:

- On the southern end of the Mission Gorge Area along Mission Gorge Road;
- On the southwest, south, and southeast sides in the Cowles Mountain Area along Golfcrest Drive, Navajo Road, and Barker Way, respectively; and
- On the northern end of the Lake Murray Area along Murray Park Road and Jackson Drive, and through the Mission Trails Golf Course as well as Lake Murray Park.

3.2.4 Gas Main

SDG&E has a major high pressure gas transmission line runs from the main system backbone near east of I-15 through Miramar across SR-52 into MTRP, continuing east through the northern Fortuna Mountain area to the Equestrian Staging Area. This line provides gas to the Cities of La Mesa and El Cajon (City PRD 2013).

3.2.5 Electrical Transmission and Generation

There are numerous locations in MTRP where SDG&E lower voltage primary overhead power lines cross. These overhead power lines interconnect to two electrical substations in MTRP:

- East Elliott Substation in the Tierrasanta Community; and
- Sycamore Substation in the West Sycamore Area (City PRD 2013).

If acquired, the Carlton Hills Substation in the East Elliott Area will provide an additional electrical transmission source to the Master Plan Study Area.

3.2.6 Solid Waste

The City's Environmental Services Department (ESD) provides solid waste collection services for MTRP. Assembly Bill (AB) 939 was passed in 1989, which, along with its subsequent amendments, required all California city and county waste programs to divert at least 50 percent of their waste. The City reached a 68 percent diversion rate in 2012, predominately due to two City-wide recycling ordinances:

- the City Recycling Ordinance, which requires all commercial properties and multi-family residences to recycle unless they fall below a specified service level thereby making them exempt; and
- the Construction and Demolition (C&D) Debris Deposit Program, which requires certain permitted demolition, new construction and remodeling projects to divert 50 percent of the waste produced during the project (City ESD 2014).

Sycamore Canyon Landfill is within the East Elliott Area. Per CalRecycle, the landfill is estimated to remain in operation until approximately 2031 (see **Table 3.1**).

Table 3.1: Sycamore Canyon Landfill Remaining Capacity

Max Permitted Throughput	Remaining Capacity	Ceased Operation Date
3,800 Tons/Day	42,246,551 cubic yards (yd ³)	2031

The latest remaining capacity of the Sycamore Canyon Landfill was measured on February 28, 2011 at 42,246,551 cubic yards (yd³). As the Sycamore Canyon Landfill reaches its capacity in accepting solid waste, the landfill will need to halt additional deliveries. Its estimated ceased operation date is estimated to be October 1, 2031.

4. Applicable Laws and Regulations

The following is a discussion of the federal, state, and local laws, regulations, and other applicable guidance addressing utilities. The inclusion of these legal provisions herein should not indicate that implementation of any of the MTRP MPU element would be subject all of these provisions, but only those as applicable.

4.1 Federal Regulations

There were no identified federal regulations regarding utilities that pertain to the MPU.

4.2 State Regulations

There were no identified state regulations regarding utilities that pertain to the MPU.

4.3 Local Regulations

The Countywide Siting Element, City of San Diego Municipal Code, and City of San Diego Public Utilities Department were reviewed for applicability to the utilities that pertain to the MPU.

4.3.1 Countywide Siting Element

The Countywide Siting Element is a planning document that details the solid waste management needs of the region, including the existing shortage of disposal capacity, and presents strategies for responding to this shortfall, including increasing the waste diversion rate. The City's Source Reduction and Recycling Element, as updated in annual reports, details the City's strategy for achieving this mandate, relying largely on the voluntary efforts of the community. In San Diego County, publicly funded solid waste management is not a simple matter of building and operating landfills. Instead, it is a matter of using multiple strategies to reduce and manage waste.

4.3.2 City of San Diego Municipal Code

The Municipal Code incorporates the D&D Debris Diversion Deposit Program, Recycling Ordinance, and Refuse and Recyclable Materials Storage Regulations in an effort to meet its goals and policies regarding waste management and diversion.

4.3.3 City of San Diego Public Utilities Department

The City's PUD has utilities throughout MTRP, as described above. All potential conflicts with existing utilities, including sewer mains and water mains, shall be further evaluated and coordinated with the City of San Diego Public Utilities Department for approval.

Discharges of raw sewage into the River caused by blocked or overflowing sewer mains have been a major problem in the past and continue to this day in spite of the best efforts of the City to prevent such occurrences. In 2001, the Metropolitan Wastewater Department initiated a Sewer Spill Reduction Program

funded by sewer rate increases. This program includes cleaning and inspecting thousands of miles of sewer as well as accelerating the replacement and rehabilitation of older facilities. General guidance for sewer facility replacement and management in environmentally sensitive lands is provided by City Council Policies 400-13 and 400-14, both adopted in January 2002. Council Policy 400-14 makes the redirection of sewer flow away from environmentally sensitive lands a priority. Encroachments allowed into utility easements include the following:

Landscaping for Environmentally Sensitive Lands

Environmentally Sensitive Lands (ESL) are susceptible to the built environment for the impact that human activity or climate have on the area. A landscape with high sensitivity would be difficult to restore once lost, and require care and consideration for the region to survive. Therefore, special precaution should be taken around these areas to help preserve their natural habitats.

Pursuant to the Canyon Habitat Restoration 101 Manual, planting or seeding over sewer lines located within Open Space or ESL shall be as follows:

- a. No trees shall be planted within 10 feet of any sewer main or lateral.
- b. No shrubs that mature over 5 feet in height shall be planted within 5 feet of any sewer main or lateral.

Additionally, no threatened or endangered¹ plant species shall be planted or seeded on sewer access paths, within 3 feet of the edge of access paths, or within 10 feet of sewer mains or lines.

No trees or shrubs exceeding 3 feet in height at maturity shall be installed within 10 feet of any sewer main and within 5 feet of any water facilities.

Trees or shrubs that mature over 3 feet in height shall not be planted on the sewer access paths, and shrubs that will overgrow the access paths shall not be planted adjacent to the edges of the path area. Planting on the paths must be consistent with the approved planting palette included in the MPU. Additional or alternate plant species not included may be approved by the PUD, Environmental Permitting Section.

No structures are allowed within 15 feet of any sewer or water crossing.

4.3.4 City of San Diego Significance Determination Thresholds

The MTRP MPU constitutes a “project”, as defined by the California Environmental Quality Act (CEQA). In 2011, the City of San Diego established Significance Determination Thresholds for use in the evaluation of a project’s potential environmental impact pursuant to CEQA. Following are the City Thresholds that would apply to the analysis of the MPU project, with the application of each to the Key Environmental Issue discussed in Section 5 parenthetically noted:

- Would the proposal result in the need for new systems or require substantial alterations to existing utilities, the construction of which would create physical impacts (related to natural gas, water, sewer, communication systems or solid waste disposal) (Issue 1)?

¹ As described by the USFWS (<http://www.fws.gov/endangered/wildlife.html>) and by the CDFW (<http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEPlants.pdf>).

5. Environmental Issues

This section describes the key environmental issues relating to utility services as they relate to the MPU. It recommends the methods used to determine the potential effects of Master Plan implementation. Recommendations to avoid, minimize, rectify, reduce, eliminate, or compensate for potentially significant effects accompany the discussion of each key issue.

5.1 **Issue 1: Would the proposed project result in the need for new systems or require substantial alterations to existing utilities including water infrastructure, wastewater infrastructure, storm water drainage, water conservation, energy or solid waste disposal, the construction of which would create a physical effect on the environment? These systems include communications systems, water, reclaimed water, sewer, storm water drainage and solid waste disposal.**

As most of the land uses in the MTRP are designated as open or recreational space, implementation of the MPU would not change these designations and contribute to growth-inducing impacts requiring alterations to or expansion of existing utilities. Therefore, future projects would continue to adhere to the applicable laws, regulations, and other guidance addressing utility services. It is anticipated that implementation of the elements of the MPU would have a limited effect on utility services and, thus, generated very little if any physical effect on the environment related to such services.

Sewer and Water Utilities

Major sewer utilities extend around MTRP along with a number of interceptor sewers (**Appendix A**). Both trunk sewer lines and interceptor sewer lines are located within the Master Plan Study Area. The construction and grading of amenities, such as pedestrian trails and overlooks, could potentially be proposed in areas with underlying utilities. These improvements could result in significant alterations to the floodway within MTRP and potential need to relocate existing adjacent utilities and pump stations. The relocation of these facilities to undisturbed areas could generate physical effects to the environment associated with utility services.

Solid Waste

The potential exists that visitors using the recreational amenities to be implemented by the MPU would generate litter/solid waste that would need to be collected and transported to area landfills. However, MPU implementation would not change the intensity of existing or planned land uses or convert any areas planned for open space to urban uses, which would potentially generate higher volumes of solid waste. Therefore, the MPU would not result in development that would induce growth and would not result in a significant increase in the demand for disposal of solid waste. This would not require any need for additional capacity at area landfills, the construction of which would create physical environmental impacts. Additionally, the MPU contains policies to minimize the amount of litter or solid waste associated with visitor use and/or construction of recreational amenities.

6. List of Preparers

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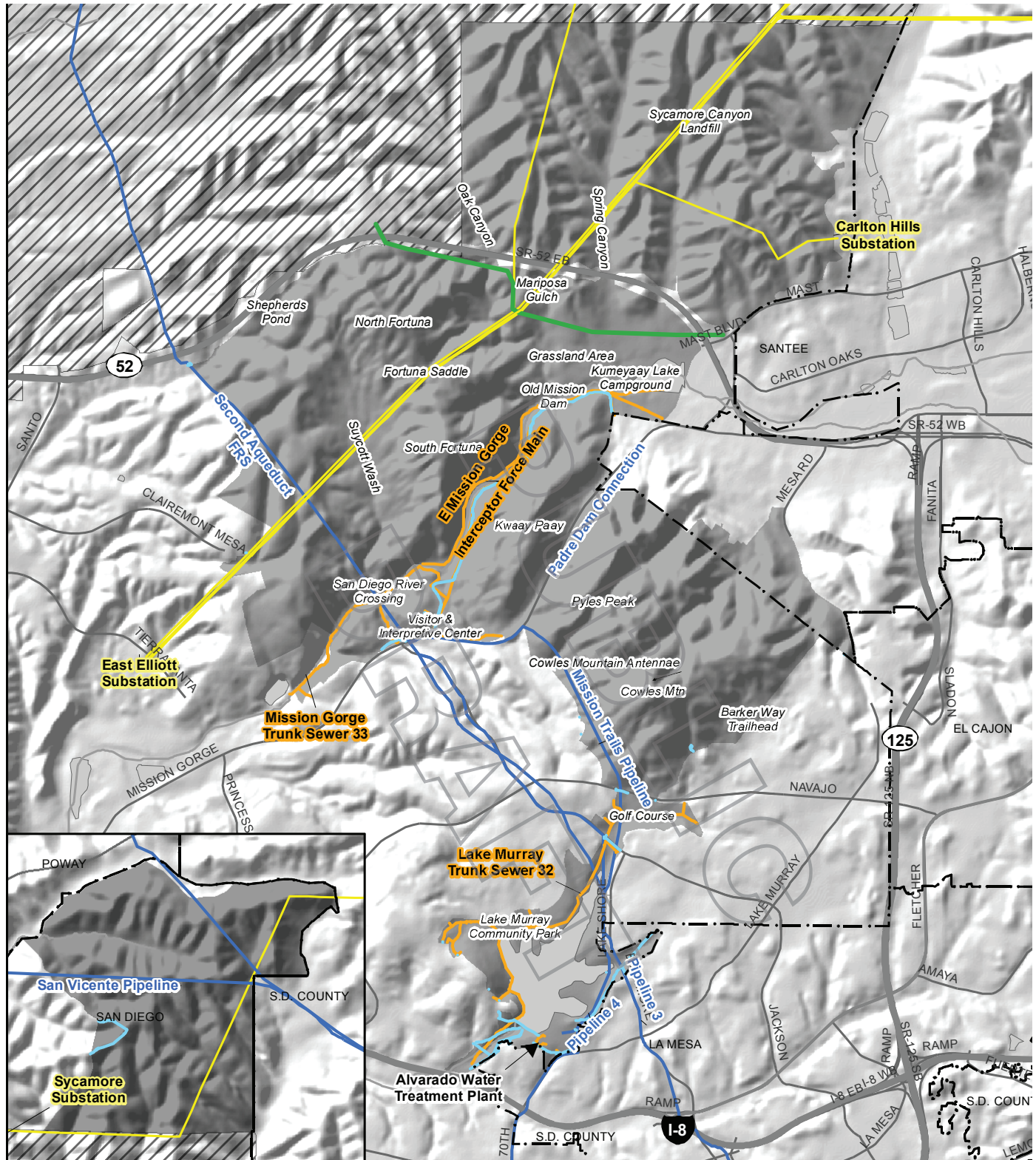
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Appendix A

Major Utilities within MTRP

MISSION TRAILS REGIONAL PARK

Figure 3-9: Major Utilities within MTRP



Legend

Municipal Boundaries

MCAS Miramar

MTRP Boundary and Expansion Areas

Utility/High Voltage Lines

Electric Lines

High Pressure Gas Main

Trunk Sewer/Force Main

Water Supply Pipelines

Water Mains



0 0.25 0.5 1 Miles



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