4.11 PUBLIC SERVICES AND UTILITIES

The FORA Reuse Plan Final Environmental Impact Report (FORA FEIR) identified on a program-level potentially significant environmental impacts for public services and utilities as related to the need for new and upgraded utility systems and services and the need for new local water supplies. The FORA FEIR also identified on a program level potentially significant environmental impacts for public health and safety as related to increased demand on law enforcement, fire protection, and emergency response services. Impacts to schools were identified as less than significant in the FORA FEIR.

Site specific details and project-level information for the EGSP project was not known and not analyzed at the time of the FORA FEIR. New information between the time the FORA FEIR was certified and the release of the Notice of Preparation (NOP) for the currently proposed EGSP project includes changes in land use and land use intensities, and development of a site plan, phasing plan, and landscaping plan. Other changes in the environment such as regional demands for public services and utilities are of substantial importance and were not previously available.

This section provides additional analysis of potential impacts not previously analyzed in the FORA FEIR. This section is based upon consultation with the individual service providers that will service the project site. Specifically, this section will address Fire Protection/Emergency Medical Services, Law Enforcement Services, Educational Services, Library Services, Solid Waste, Water Supply, Wastewater, Recreational Services, and Energy Resources.

METHODOLOGY

To obtain information from public service and utility providers, MBA contacted the Salinas Rural Fire District (SRFD) and Monterey County Sheriff's Office (MCSO) to gather information on existing fire and police facilities, staffing for the project area, and current as well as target response times. The Monterey Peninsula Unified School District (MPUSD) was contacted to obtain information on student enrollment capacity and Monterey County Free Libraries (MCFL) was consulted for information on library facilities in the area. MBA also contacted the Monterey Regional Waste Management District (MRWMD) and the Marina Coast Water District (MCWD) to obtain information on available supply for landfills, and existing facilities, capacities, generation rates in regard to water supply, and wastewater generation, respectively. Utility providers such as Pacific Gas and Electric (PG&E) were also consulted to determine their ability to serve the project site.

4.11.1 Fire Protection/Emergency Medical Services

ENVIRONMENTAL SETTING

Staff, Equipment, and Resources

The Salinas Rural Fire District (SRFD) will provide service to the project site. The SRFD is a full service fire department that provides emergency response to fires, medical incidents, rescues, vehicle accidents, hazardous materials incidents, disasters (floods, earthquakes, etc.), including a full range of fire prevention engineering, education, and enforcement programs. Currently, the two stations nearest the project site are the Toro Fire Station located at 19900 Portola Drive in the Toro Park area and the Laureles Station located at State Route (SR) 68 and Laureles Grade. The Toro Station, which is nearest to the site, is staffed with three personnel at all times. Throughout the SRFD, the minimum staffing level is eight personnel on duty at all times, which is divided among the SRFD's three existing stations.

The SRFD is equipped with five structure-firefighting engines, four wildland firefighting engines, two 2,100-gallon water tenders, and a breathing support/light tower unit, four staff vehicles and three pick-ups, for firefighting. For emergency medical services, the engines are equipped with a full complement of first responder medical supplies including CPR equipment, semi-automatic defibrillators and rescue equipment such as the Jaws of Life. The SRFD employs 33 full time firefighting employees, two full-time staff employees, and 20 volunteer firefighters.

Emergency Medical Service

Emergency medical services at former Fort Ord (FFO) were previously provided by the Silas B. Hays Army Community Hospital (which has since been converted to non-medical use) and other regional facilities. At present, emergency medical services are provided exclusively by civilian hospitals in neighboring communities. These include Natividad Medical Center, Salinas Valley Memorial Hospital (located in the City of Salinas), and the Community Hospital of the Monterey Peninsula (located in the City of Monterey). Paramedic Ambulance transport is currently provided by American Medical Response.

Level of Service

Response time is a combination of travel time and get-away time (the time it takes the engine to leave the station once an alarm is received). The response time from the Toro Station to the project is 7 minutes, 26 seconds. The average response time throughout the SRFD is 6 minutes, 20 seconds. The SRFD does not maintain a population to staff ratio standard.

Mutual Assistance Programs

The SRFD maintains mutual aid agreements with all of the fire protection agencies located within Monterey County. The SRFD also maintains automatic aid agreements with all fire protection agencies that border the SRFD. Lastly, the SRFD has an informal agreement with the Marina Department of Public Safety.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project will result in a significant impact to fire protection and/or emergency medical services if it will:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities; or
- Result in the need for new or physically altered governmental facilities, the construction of
 which could cause significant environmental impacts, in order to maintain acceptable service
 ratios, response times, or other performance objectives.

Impacts Analysis and Mitigation Measures

Demand for Fire Protection and Emergency Medical Services

Impact 4.11.1-A Implementation of the EGSP will result in an increased demand for fire protection and emergency medical services in the project area. (Less than Significant With Mitigation)

The SRFD will serve the project site; however, the EGSP site is not currently within the SRFD's service boundaries and the project area will require annexation into the SRFD. SRFD policy allows

that an area may be annexed as long as it does not reduce service levels within the current SRFD boundaries. The EGSP project, when complete will introduce 1,470 residential units adding approximately 4,337 persons within the SRFD's service area. According to the SRFD, the increased service demand on the SRFD will result in increased response times, the need for additional staff, equipment, and the construction of a new and fully equipped and staffed fire station. The SRFD has hired a consultant to assist the SRFD with locating a station within the project area and to identify the appropriate timing for when the facility needs to be operational. The SRFD has identified a location at the southeast corner of Inter-Garrison and West Camp Roads as the preferred site for the new station.

The EGSP identifies a 1-acre plus site for a new station at this preferred location, which will be developed in conjunction with Phase I of the EGSP. Additionally, new development within the EGSP project will be required to meet a number of design criteria including fire flow, water storage, hydrant space, and access. As required, the water distribution system will be designed to meet the Uniform Fire Code requirements in conjunction with the Uniform Building Code, which takes into account the size of planned structures. Design of the project, including construction of a fire station will meet adopted national, state, and local regulations and standards. Moreover, project implementation will result in an increased need for fire prevention and public education programs. However, the plan check fee currently charged by the SRFD will offset the additional cost associated with the provision of this service. Fire station construction impacts are addressed in this DSEIR as part of construction of the overall community.

Project implementation will result in an increased demand on the current monetary resources of the SRFD for ongoing operational costs to provide service to the project. The majority of public infrastructure improvements, such as the construction of a fire station and the purchase of fire equipment apparatus, will be financed through a Mello-Roos or Fires Suppression Assessment, which will supplement property tax, and capital provided by the developer. However, according to SRFD to adequately determine funding needs a financial analysis must be conducted.²

Mitigation Measures

- **4.11.1-A-1** The project proponent shall pursue the application and fulfill the mandated requirements for annexation into the SRFD.
- **4.11.1-A-2** Staffing for the new station shall consist of a minimum of two firefighters on duty at all times by the end of Phase II of the EGSP and a minimum of three firefighters at all times by the end of Phase III of the EGSP.
- **4.11.1-A-3** The apparatus serving the EGSP area shall be a fully equipped 75-foot Quint fire apparatus.
- 4.11.1-A-4 The construction of the station shall meet the needs of the SRFD and fit the character of the community (designed consistent with the EGSP Pattern Book). The details of the construction pertaining to impacts to the environment shall follow the general guidelines of the entire project.

¹ Personal communication, Steven E. Negro, Fire Chief SRFD, August 3, 2003.

Personal communication, David Sargenti, Division Chief SRFD, July 16, 2004.

- **4.11.1-A-5** On duty crews from the East Garrison Fire Station shall conduct Fire Prevention Safety Inspections at the commercial facilities and Public Education Safety Programs for the community.
- 4.11.1-A-6 A financial analysis to determine an adequate financing mechanism for the ongoing staffing and operational costs of the fire station shall be completed. This analysis should address the alternatives of using a combination of a proportionate share of the applicable property tax and/or a developer imposed special tax. This analysis shall address the ongoing costs verses the property tax allocation to the SRFD and determine the amount of any special tax needed to fund any negative difference.

This funding mechanism, the stipulations of the annexation process, the fire station site and construction, and the acquisition of the fire apparatus shall be a requirement of the *Development Agreement* between the County and the project proponents. This shall also be outlined in detail in a *Development and Stipulation Agreement* between the EGSP project proponents and SRFD.

Significance After Mitigation

Less than significant.

4.11.2 Law Enforcement Services

ENVIRONMENTAL SETTING

Staff, Equipment, and Resources

The MCSO services the project area. The nearest station that will serve the project site is the Central Station, located at 1414 Natividad Road, in Salinas. In an emergency, the Coastal Patrol Station, located at 1200 Aguajito Road in Monterey, may also respond to calls from the project area. Currently, there are seven sergeants and 49 deputies assigned to the Enforcement Bureau (patrol division) of the Central Station. The Coastal Station has five sergeants and 26 deputies assigned to the Enforcement Bureaus. In addition, both stations have deputy investigators and investigative sergeants assigned to the Investigations Bureau. The MCSO has established a target ratio of one deputy per 1,000 persons in denser communities; however, currently the MCSO is operating at approximately one deputy per 13,000 persons.

The Central Station and the Coastal Station are equipped with Crown Victoria patrol cars, Ford Expedition 4-wheel drive vehicles, K-9 units, Special Weapons and Tactics (SWAT) armored vehicles, two search and rescue trucks, search and rescue team-equestrian units, mountain bicycles, off-road motorcycles, all terrain 4-wheel drive vehicles, and a forensics van.

Response Time and Crime Statistics

The EGSP site is located within the MCSO's Beat 4. Currently, there is at least one and a maximum of two deputies per shift covering the Beat 4 area. Beat 4 handles an average of 200 calls for service per month. The response time for the Central Station, which handles Beats 1 through 5, varies from approximately 7 minutes, 40 seconds to 19 minutes, 7 seconds. The average response time is 16 minutes, which is considered to be about an average response time throughout the MCSO service area.

Mutual Aid Agreement

Overlapping jurisdictions require that the MCSO provides and receives assistance with the following entities: SRFD; California Highway Patrol; Marina Department of Public Safety; California State University Monterey Bay Police Department; Federal Bureau of Investigation; Presidio of Monterey Police Department; and the Bureau of Land Management.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project is considered to have a significant impact upon law enforcement services if it will:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or
- Result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

Impacts Analysis and Mitigation Measures

Demand for Law Enforcement Services

Impact 4.11.2-A Implementation of the EGSP will result in an increased demand for law enforcement services in the project area. (Less than Significant)

Population increases will affect the demand for law enforcement services in the project area. The introduction of 4,337 persons onto the EGSP site will add to the caseload of Beat 4. The increase demand would be generated by potential crimes and misdemeanors that could occur at the site, including traffic violations, thefts, vandalism, loitering, assaults, etc. Currently, Beat 4 is patrolled by at least one deputy per shift and at times two deputies per shift. The increased caseload and additional patrol area associated with the implementation of the EGSP will negatively affect the MCSD's response times. To meet response times, additional deputies will be needed to serve the area. In accordance with County staffing targets, implementation of the EGSP would require 4-plus additional officers to adequately provide law enforcement services to the site. The proximity of existing stations precludes the need for a full station within the EGSP area at project inception. However, in the interim to adequately serve the site, the project area will need a Community Field Office (CFO) constructed during Phase 1. The CFO will serve primarily as a space for deputies to write reports and return phone calls as well as provide community relation services, in an effort to perform administrative duties while reducing their distance from assigned beats. Typically, a CFO is housed within another public facility, such as a fire station or library. The CFO will likely be located with the library. The majority of public infrastructure improvements will be financed by capital provided by the developer. Moreover, to ensure adequate law enforcement services are provide upon project completion, the a Capital Project Plan shall be implemented during development to determine needs in the way of equipment, officers, clerical support, infrastructure, etc.

Mitigation Measures

4.11.2-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.3 Educational Services

ENVIRONMENTAL SETTING

Enrollment and Capacity

The EGSP project is within the service boundaries of the MPUSD; however MPUSD has no schools within the project area that are within the MPUSD's designated walking distances. The nearest elementary school, which is kindergarten through fifth grade (K-5), is Crumpton Elementary School, which is more than two miles from the project site. The nearest middle school (6-8) is Los Arboles Middle School, which is more than three miles from the site, and the nearest high school (9-12) is Seaside High School, which is more than six miles from the site.

Student enrollment at Crumpton Elementary School for the 2003/04 school year was 469 students. Capacity at Crumpton is 470 students. In 2003/04, Los Arboles Middle School had 668 students enrolled and a capacity of 688 students, while the Seaside High Schools had 1,379 students and a capacity of 1,188 students. According to the MPUSD, the schools nearest the EGSP site are currently using all classrooms for educational purposes and there is no room for expansion of classes into existing facilities.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project is considered to have a significant impact upon education services if it will:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or
- Result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

Impact Analysis and Mitigation Measures

Demand for Educational Services

Impact 4.11.3-A

The introduction of 1,470 residential units under the EGSP will result in an increased demand for educational services and the need for new school facilities. (Less than Significant)

The proposed project is anticipated to generate 500³ new students within the project area. The introduction of new students will result in placing further demands upon school services. Students generated by the proposed project are expected to attend Crumpton Elementary, Los Arboles Middle, and Seaside High School. Crumpton Elementary and Seaside High School are operating at or above capacity, respectively, and Los Arboles Middle School would have limited capacity for future students generated by the project. Therefore, according to MPUSD, the development of projects such as EGSP are likely to adversely affect their ability to adequately provide educational services, thereby contributing to the need for new schools in the project vicinity at some point in the future.⁴ The MPUSD is currently identifying future school sites needed to accommodate growth projected for the FFO area and is considering the construction of a new high school in Marina. However, the MPUSD

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³ This is based upon MPUSD's generation factor of 0.34 students per household (K-12).

⁴ Personal communication, Colette Marie McLaughlin, Facilities Manager MPUSD, August 3, 2003.

does not have enough information at this point to consider the number or type of schools needed and potential school sites. The County will provide a school site outside of the EGSP area.

According to the MPUSD, costs for staff will be provided by State funding that is based upon average daily attendance counts. Costs to build needed school facilities will be provided by developer fees. These fees are assessed at a rate of \$2.24 per square foot of residential development and \$0.36 per square foot for commercial development. Pursuant to Section 65996 (3)(h) of the California Government Code, payment of these fees "is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Any environmental impacts resulting from construction of new schools will be analyzed by the MPUSD prior to construction.

Mitigation Measures

4.11.3-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.4 Library Services

ENVIRONMENTAL SETTING

Library Facilities

The Monterey County Free Libraries (MCFL) system is composed of 17 branch libraries. The MCFL is the public library service agency for the majority of the County of Monterey residents. The MCFL provides public library service to the entire County of Monterey with the exception of the municipal areas of the cities of Carmel, Monterey, Pacific Grove, and Salinas, which provide their own municipal library service. MCFL also operates two bookmobiles, a pre-school children's outreach vehicle, one deposit collection, and a Books-by-Mail service. The MCFL has no main library, but a system administrative services office operates from the Administrative Offices located at 26 Central Avenue in Salinas. Total MCFL staffing is about 60 career staff supplemented by an additional 70 to 80 hourly staff.

MCFL is a member of the Monterey Bay Area Cooperative Library System (MOBAC), which includes all public, academic, and many special libraries in the Monterey/Santa Cruz/San Benito County region. Cooperative services include the mutual loan of library materials between library systems, operation of a cooperative "union" catalog of library material holdings, and the operation of a "third" level reference service.

The MCFL provides interlibrary loan, youth services, and second level reference services (operated from the Seaside Branch Library) to the branch libraries along with support training in reference and other professional and managerial/supervisory skills. MCFL provides staff and expertise to branch libraries for community activities and programs that each library alone may not be able to support and provides extended reference, inter-library loan, and delivery services through membership in its local California Library State Association system, Monterey Bay Area Cooperative Library System (MOBAC).⁵

⁵ MCFL Library Plan of Service.

MCFL provides centralized automation services including catalog, circulation, and intranet and Internet service to its branch libraries. A countywide delivery system moves books and other library material between the community libraries as needed, providing library users relatively quick access to all the collections in the County. Particular collections, such as the video collection, rotate on a systematic schedule among the various library branches.

The closest MCFL branch to the project site is the Marina Branch, which presently has two career staff, one part-time Homework Center coordinator, and additional hourly branch staff of about 0.5 FTE. Substitute library staff members rotate through all of the branch libraries, as needed. The existing Marina Community Library operates out of a leased 1,830 square foot storefront space located in a strip shopping mall in a commercial area of the City of Marina. The current leased facility suffers from a lack of floor and shelving space, seating, and computer terminals. The current collection totals approximately 13,000 volumes.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project is considered to have a significant impact upon library services if it will:

- Result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or
- Result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

Impact Analysis and Mitigation Measures

Demand for Library Services

Impact 4.11.4-A The introduction of 1,470 residential units under the EGSP will result in an increased demand for library services and the need for new facilities. (Less than Significant)

Implementation of the EGSP will add 1,470 residential units in the project area, thereby resulting in an increased demand for library services. The nearest existing library facility, the Marina Branch of the MCFL, is not able to support the needs of the existing population within the greater project area and project implementation will place further constraints on the Marina Branch of the MCFL. As part of the EGSP project, the developer has set aside land and allocated funding for a new library, which will be a community library that will be a branch of the MCFL system. The library will contain an estimated total number of 24,000 volumes (18,000 projected volumes on shelf) in book, periodical, and multi-media material format. The Library will contain approximately 70 meeting room seats with 7 meeting room tables; 70 reader's seats with 15 tables and 3 carrels; 20 public computers with technology workstations chairs and an equal number of technology carrels; and six staff computers with task chairs and an equal number of workspace. As a branch of MCFL, the proposed East Garrison Branch would benefit from the system-wide collection and certain centralized services provided by the MCFL.

According to the MCFL a full-service 7,000 square foot community library facility would not be economically advisable until the population in the project area reaches a level of at least 7,500

residents (approximately 2,400 to 2,500 single-family homes)⁶. However, the new East Garrison library could be constructed prior to that time with incrementally expanded use of the floor space as needed until such time that it is economically feasible to use the full 7,000 square foot community library. Potential impacts from construction of the library within the EGSP area are addressed as part of the construction of the community in other sections of the DSEIR.

Mitigation Measures

4.11.4-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.5 Solid Waste

ENVIRONMENTAL SETTING

Solid Waste Service

Solid waste generated within the project area is hauled to the MRWMD Materials Recovery and Monterey Peninsula Landfill and Recycling Facility located within the Monterey Regional Environmental Park at 14201 Del Monte Boulevard, two miles north of the City of Marina. Currently, the landfill's daily permitted capacity is 1,200 tons per day of waste and it receives an average of 750 tons per day from Monterey Peninsula cities, Carmel Valley, Big Sur, Moss Landing, Spreckels, and the SR 68/Toro Park area. The landfill has a capacity of approximately 33 million tons and the facility is anticipated to operate until the year 2092. However, the MRWMD has proposed changes in the design and operation of the landfill. If, approved, these changes will increase the permitted remaining waste capacity of the landfill to 48 million tons, extending the life of the landfill to the year 2104. MRWMD contracts with Waste Management, Inc. and the Monterey City Disposal Company to haul waste to MRWMD facilities.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project will result in significant impacts to solid waste if it is not:

• Served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Impact Analysis and Mitigation Measures

Solid Waste Generation

Impact 4.11.5-A

Implementation of the EGSP will result in an increase in solid waste generation in the project area during both the short-term construction period and long-term operation of the project. (Less than Significant)

The proposed project will incrementally increase the amount of solid waste hauled to the Monterey Peninsula Landfill and Recycling Facility. The proposed project would generate solid waste that is typically associated with residential and commercial development. The amount of solid waste generated by the EGSP project would depend on a variety of factors, such as the number of residents. According to the MRWMD, the project will generate an estimated 13 tons per day⁷ of solid waste,

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⁶ Personal communication, Judith Collins, Library Consultant MCFL, August 3, 2003.

Based upon MRWMD's average of 6 lbs per day per person and an average of 2.95 persons per household.

resulting in a 1.7 percent increase in the existing daily average tonnage accepted at the landfill. According to the MRWMD, implementation of the proposed project will not substantially shorten the lifespan of the landfill and no new or expanded facilities are required to serve the EGSP site.⁸ The solid waste and recycling program for the project will be managed by the Homeowners' Association (HOA) in conjunction with guidelines set forth by the MRWMD and Monterey County. More specifically, waste disposal practices for the project will comply with the provisions of Chapter 10.41 of the Monterey County Code, which requires that all residences and businesses separate recyclables from solid waste and store trash in approved containers for weekly removal by either an existing franchisee or another Board of Supervisors approved vendor. Additionally, as required by law, the proposed project will be in adherence with the Waste Management Act of 1989 (AB 939), which requires that the County implements source reduction, recycling, and composting. Thus, while the project may result in an increase in a generation of solid waste, there is a greater opportunity for the project to divert and recycle solid waste. In addition, demolition of existing structures on the project site would generate solid waste. Existing buildings slated for demolition would be deconstructed as opposed to demolished. Wood and other recyclable construction materials such as large-scale roof timbers, roof decking, wall-framing timbers, and concrete slabs would be separated out and recycled to the fullest extent possible, further reducing solid waste generated by project construction.

Mitigation Measures

4.11.5-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.6 Water Supply

ENVIRONMENTAL SETTING

Two regional water management agencies have jurisdiction within the FFO: the Monterey County Water Resources Agency (MCWRA) and the Monterey Peninsula Water Management District (MPWMD). The MCWRA is responsible for regulation and supply of water from the Salinas Valley Groundwater Basin and the MPWMD is responsible for regulation and supply of water from the Seaside Groundwater Basin. The MCWD is the purveyor of water for the project site, which is within the Ord Community Service Area. The MCWD's water supply is currently from groundwater sources and a small desalination plant, which is temporarily idle. As discussed in the MCWD's Urban Water Master Plan (UWMP), the MCWD has ongoing conservation programs and is executing plans to introduce recycled water and/or additional desalination supplies for the FFO.

MCWD's potable water supply comes from wells developed in the Salinas Valley Groundwater Basin. This groundwater basin underlies the Salinas Valley from San Ardo to the coast of Monterey Bay and is divided into four hydrologically linked subareas; the Pressure, East Side, Forebay and Upper Valley subareas. The Salinas Valley Groundwater Basin consists of what has been historically considered as three main aquifers: an upper aquifer known as the upper or 180-foot aquifer, a middle or 400-foot aquifer, and a deep aquifer known as the 900-foot aquifer. Recent stratigraphic analysis has indicated that these aquifers are likely connected hydraulically, with water from the upper layers recharging the lower layers. Additionally, the 900-foot aquifer appears to be a series of aquifers, not all of which are hydraulically connected.

Richard D. Shedden, P.E, Senior Engineer, Monterey Regional Waste Management District. Personal communication with MBA, November 12, 2003.

Both the U.S. Army and the MCWD have agreements with the MCWRA. The U.S. Army's agreement allows for a combined annual withdrawal of up to 5,200 acre-feet per year (AFY) from the 180-foot and 400-foot aquifers, with an additional annual withdrawal of up to 1,400 AFY from the 900-foot aquifer, totaling 6,600 AFY, or about the historic demand from Army uses at FFO. The groundwater available to the Ord Community Service Area has been allocated by the Fort Ord Reuse Authority (FORA) among the land use or land owning jurisdictions as shown in Table 4.11-1. This table also indicates available groundwater supply to the MCWD via its agreements with the MCWRA that are for a maximum withdrawal of potable water of 3,020 AFY.

Table 4.11-1: Water Supply Currently Available to MCWD

Fort Ord Reuse Authority Allocation (Groundwater)	Annual Acre-feet Allotment or Supply
City of Marina	1,175
City of Seaside	748
California State University-Monterey Bay	1,035
University of California-MBEST Center	230
City of Del Rey Oaks	75
City of Monterey	65
Monterey County	560
U.S. Army	1,691
County/State Parks	45
City of Marina (Sphere)	10
Allowance for line losses (10%)	532
FORA Strategic Reserve	431
Rounded Subtotal	6,600
Marina Coast Water District by Agreement with MCWRA (groundwater)	3,020
Armstrong Ranch (groundwater)	920
Lonestar Property (groundwater)	500
Subtotal Groundwater	10,040
MCWD Desalination Plant (temporarily idle)	300
Recycled Water-MWPCA Plant	300
Total	11,540
Source: Byron Buck & Associates, June 2004.	

Total basin groundwater demands are approximately 463,000 AFY, and the basin is overdrafted by an estimated 15,000 acre-feet annually (*Salinas Valley Water Project EIR 1998*). Withdrawals by the MCWD are shown in Table 4.11-2. Other than the MCWD, only a small number of wells, some of which also draw from the 400-foot aquifer, tap the 900-foot aquifer. Prior to receiving recycled water, agricultural lands in the Castroville area to the north received their water supplies from the 180, 400, 900-foot aquifer. Most of these agricultural wells are currently idle but remain part of the monitoring network overseen by the MCWRA, manager of the Salinas Groundwater Valley Basin. However, some agricultural use of groundwater continues for purposes of blending with recycled water.

Table 4.11-2: MCWD Groundwater Production 1998-2003

Year	City of Marina	Ord Community
1998	2160 AFY	_
1999	2241 AFY	2396 AFY
2000	2300 AFY	2371 AFY
2001	2285 AFY	2228 AFY
2002	2306 AFY	2137 AFY

Source: Byron Buck and Associates, June 2004.

Existing Water Facilities

The project site is located in the eastern reaches of the Ord Community potable water distribution system (see Exhibit 4.11-1). Potable water is currently delivered to the project site by a transmission main varying in size from 12 to 18 inches in diameter. The general location of this main is at the existing Inter-Garrison Road right-of-way and connects Storage Reservoir "F" to East Garrison. Storage Reservoir "F" has a capacity of two million gallons (mg) and was constructed in 1990. The reservoir is in good condition and is an operable piece of the MCWD system. Within the project site, there is a system of 6 to 8-inch distribution mains, two 200,000-gallon storage reservoirs, and two booster pump stations. The system throughout East Garrison has been shut down by MCWD at Inter-Garrison Road, near the northwest corner of the project site (near the Track Zero boundary) to reduce water losses that were occurring through the existing distribution mains. All existing facilities will be removed during construction of new facilities and disposed of in an approved manner.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The EGSP is considered to have a significant impact upon water services if it will:

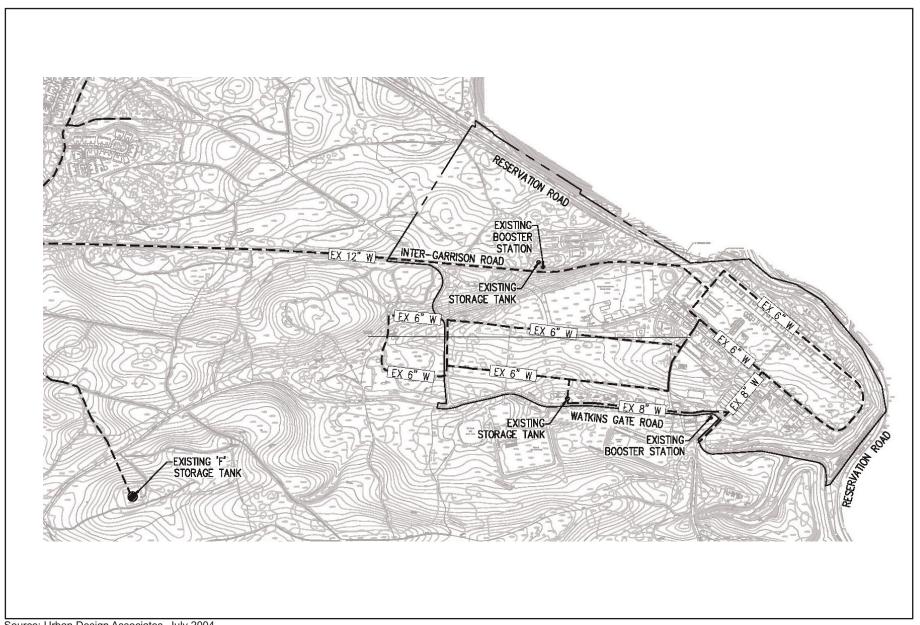
- Require the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Not have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements needed;

Impact Analysis and Mitigation Measures

Water Demand

Impact 4.11.6-A Implementation of the EGSP project will result in an increase demand for water and the construction of new water supply, storage and distribution facilities. (Less than Significant After Mitigation)

Table 4.11-3 identifies the projected water demands of the proposed project. As indicated, when operational, the project is anticipated to have a water demand of 470 AFY.



Source: Urban Design Associates, July 2004.

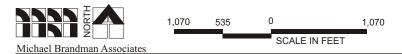


Exhibit 4.11-1 Existing Water Supply Facilities

Table 4.11-3: EGSP Water Demands

Unit Type	Number of Units	Use Factor (AFY/unit)	MCWD Estimated Use (AFY)
Apartments Carriage Units	280 70	0.23 0.2	64.4 14.0
Towncenter Condos Live-Work Unit (22'x70') Art Habitat Unit Townhouse (22'x70')	40 49 65 186	0.2 0.23 0.23 0.25	8.0 11.3 15.0 46.5
Grove Lot (35'x70') Garden Lot (35'x70) Bungalow Lot (40'x100') Courtyard Lot (70'x65') Village Lot (50'x100') Bluff Lot (50'x100')	192 201 176 50 140 21	0.3 0.3 0.3 0.3 0.3 0.3	57.6 60.3 52.8 15.0 42.0 6.3
Total Residential	1470		393.1
Commercial (sq ft) Office Retail Deli Restaurant (320 seats) Cultural Educational (sq ft) Public Facilities/Civic (sq ft) Active Parks (acres) Landscape Parkways(acres)	35000. 20000. 4000. 16000. 100,000. 11,000. 10.44 4.94	0.0002 0.0004 0.00027 0.029 ^b 0.00001 0.0003 2.5 af/ac 2.5 af/ac	7.0 0.8 1.1 11.9 14.4 3.3 26.1 12.4
Native Landscape ^a (acres) Unit Type	23.37 Number of Units	2.5 af/ac Use Factor (AFY/unit)	0 MCWD Estimated Use (AFY)
Total Non-Residential			76.9
Total Development			470.0

Notes:

AFY= Acre-feet per year af/ac= Acre foot per acre

Source: Byron Buck & Associates, June 2004.

The County of Monterey may approve development in the Ord Community only within the water use allocation provided to the County by FORA. As shown in Table 4.11-1, FORA has allocated the County of Monterey 560 AFY of water to serve lands within the FFO that are under the jurisdiction of the County of Monterey. The MCWD will approve connections in the Ord Community Service Area up to the point at which the FORA allocations are expected to be exhausted, unless other water resources can be secured. Of the County's 560 AFY allocation, the County has already allocated 52.5 AFY to the Monterey Peninsula College. The County also reserved up to 470 AFY for the East Garrison project, pending processing and environmental review of the EGSP project. For the EGSP project to proceed, the County will need to take action to allocate the water. After allocation of water

^a Three-year temporary irrigation only 55.9 AFY

b Per seat

to EGSP, the County would have 37.5 AFY remaining to be allocated to future uses on the Monterey County lands within FFO.

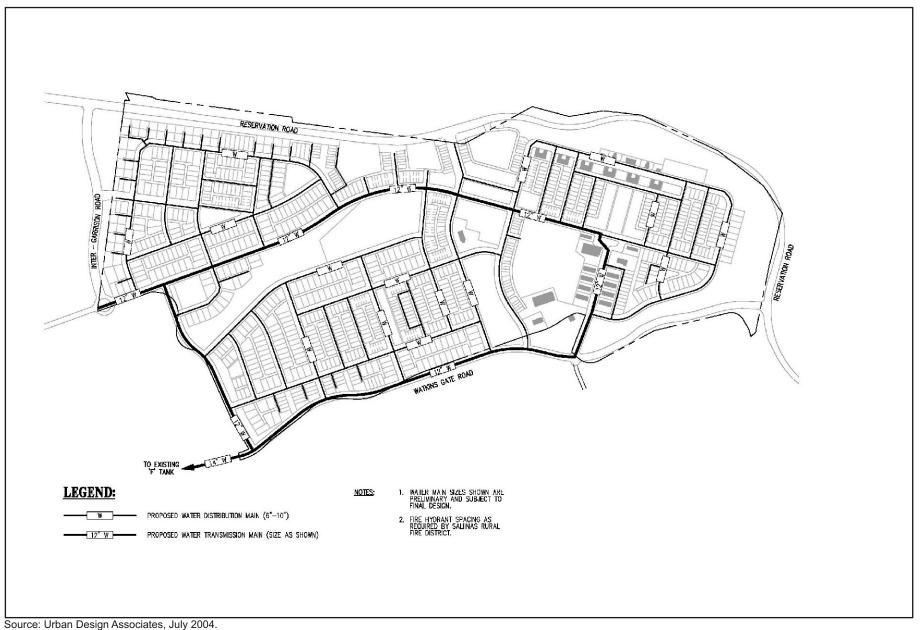
A Water Supply Assessment (WSA) for the project was prepared for the EGSP project and was adopted by the MCWD Board on July 14, 2004. According to the WSA, the MCWD's current groundwater wells have sufficient production capacity to meets the needs of the EGSP project. To meet the full buildout of the MCWD service area as described in their UWMP, MCWD is planning additional water supply capacity. Such facilities are described in the *Water Distribution System Master Plan* (Water Master Plan). The EGSP project's demands are consistent as a component of FORA demands and are within the amount allocated to the County under the Reuse Plan. Therefore, the EGSP project is consistent with the water use projected and analyzed under the Reuse Plan and does not affect the overall water balance in the Salinas Valley Groundwater Basin in excess to the impact caused by the historical water use at Fort Ord.

Planned Water Facilities

New facilities must be constructed within and outside the project site in order to provide potable water service and water for fire protection (see Exhibit 4.11-2). MCWD recently adopted an update to their Water Distribution System Master Plan, which includes plans to construct a new four-million gallon storage reservoir and booster pump stations adjacent to existing Storage Reservoir "F." The new reservoir is required to meet the water storage requirements of the Fort Ord Community (as identified in MCWD's Water Master Plan) in Year 2004. A portion of the new reservoir capacity is estimated to be needed to meet the fire flow and fire suppression requirements of the commercial portion of the proposed project, with the remaining capacity used to accommodate water storage requirements of future development on the remaining portion of the Ord Community (as addressed in the Reuse Plan). The volume required to accommodate the fire flow requirements of the project has been estimated to be less than 40 percent of the total storage volume planned for construction.

Based on existing analysis and modeling efforts, there may be excess capacity remaining in Pressure Zone C to accommodate the maximum day storage volume for the proposed 1,470 residential units. If MCWD proceeds with implementation of its Water Master Plan within the timeframe identified in their Capital Improvement Program (Table 7-1, *Water Distribution System Master Plan*), there would be sufficient water storage capacity to meet both residential and commercial fire flow/fire suppression requirements for project buildout. Should timing of construction of the new reservoir be extended beyond either the date identified in the Water Master Plan or that required to accommodate commercial fire flow requirements, and/or the timing of the commercial square footage identified in the EGSP be accelerated, a potentially significant impact could result. If MCWD has not given final approval following environmental review, the construction of the new facilities may not occur and MCWD will not issue a will serve letter.

The Water Master Plan adopted by MCWD in August 2004 indicates that the reservoir is planned for a location adjacent to Storage Reservoir "F." Construction of the reservoir is under the jurisdiction of MCWD. Potential impacts to biological or archaeological resources could occur from construction of the water tank and any new pipelines. The location indicated is in an area designated in the HMP as a habitat corridor. Although specific plans for the storage reservoir do not exist at this time and therefore its precise impacts cannot be identified, the construction of the reservoir in the designated habitat corridor would result in a potentially significant impact to biological resources. Construction could also result in significant impacts to archaeological resources. The ability to select the location for the reservoir and to develop and require project-specific mitigation measures applicable to the





815 SCALE IN FEET

Exhibit 4.11-2 Proposed Water Supply and Distribution

reservoir, such as preconstruction surveys for biological resources and surveys for archaeological resources, rest with MCWD.

In addition, the MCWD plans to construct a large water transmission main from Reservation Road to Watkins Gate Road. This main would most likely be constructed in the proposed Inter-Garrison connector road that will be located just to the north of the project site, and the realigned West Camp Road that will be constructed within the EGSP boundaries.

Other MCWD improvements will be required to adequately serve the proposed project. These include the replacement of an existing 12-inch main from Storage Reservoir "F" to the existing Inter-Garrison Road and within that road to the project site with a new 16-inch main, construction of a new 14-inch main in Watkins Gate Road from Storage Reservoir "F" to West Camp Road between existing Inter-Garrison Road and Watkins Gate Road.

The MCWD's current plans for upgrading the Fort Ord Community well and transmission network will accommodate the water capacity and supply needs for the proposed project. Onsite distribution systems will be designed to accommodate necessary demand and fire flows for the project in accordance with MCWD's design standards. Some on-site pipelines will be sized to accommodate growth for the entire East Garrison area as identified in the Water Master Plan and the MCGP.

The development within the EGSP site will be served by a new potable water distribution system consisting of 6 to 12-inch diameter water mains, service connections, and appurtenances. The Regional Urban Recycled Water Distribution Project by MCWD has developed preliminary engineering plans for the construction of a new recycled water distribution system that includes service to the project site. To further reduce the increased demand on water supply from the EGSP, new recycled water distribution pipelines and appurtenances will be constructed in the existing Inter-Garrison Road if required by MCWD. Within the project site, new recycled water distribution pipelines and appurtenances will need to be constructed to tie into the regional system. Uses of recycled water will be limited to non-potable use for irrigation or landscapes, medians, parks, and playgrounds. To eliminate the need for reconstruction of infrastructure for future development in the East Garrison area as identified in the *Water Distribution System Master Plan* and the MCGP Update, oversized water and sewer lines will be installed within the East Garrison boundaries.

Mitigation Measures

4.11.6-A-1

Based on MCWD's *Water Distribution System Master Plan, Capital Improvement Program,* Table 7-1, MCWD will be required to construct a new 4.0 mg reservoir by Year 2004 based on water demands modeled within their system. Prior to issuance of the first building permit for commercial development within the EGSP, the project applicant shall be required to obtain written verification from MCWD that sufficient fire flow/fire suppression capacity is available in the Existing Reservoir "F", or excess storage in Zone C or that the capacity in the new reservoir is available to accommodate the commercial fire flow suppression requirements associated with commercial development of the EGSP. If any portion of the commercial development is accelerated within the EGSP area to occur in earlier phases of project implementation, the project applicant shall be required to coordinate with MCWD to determine whether a portion of the existing excess storage in Zone C could be reserved for commercial fire flow. Such reservation would need to be confirmed and validated in writing by MCWD, and would need to be balanced against any remaining capacity for residential development.

Significance After Mitigation

Significant and Unavoidable.

4.11.7 Wastewater

ENVIRONMENTAL SETTING

The Monterey Regional Water Pollution Control Agency (MRWPCA) and the MCWD are the agencies responsible for wastewater transmission and treatment in the project area. Existing wastewater facilities within the EGSP site include a non-operating wastewater treatment plant, three pump stations, and wastewater collection mains primarily located in the existing streets. The pump station located adjacent to the main gate at Reservation Road was constructed recently and has a capacity of 350 gallons per minute (gpm). However, it is not currently in service since no wastewater-producing uses exist on the site at this time. Exhibit 4.11-3 shows the existing wastewater facilities.

MRWPCA maintains a regional wastewater treatment plant (WTP) north of the City of Marina that has a treatment capacity of 29.6 million gallons per day (mgd); however currently the WTP is only permitted to treat 27 mgd of wastewater, of which it treats 21 mgd of wastewater.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

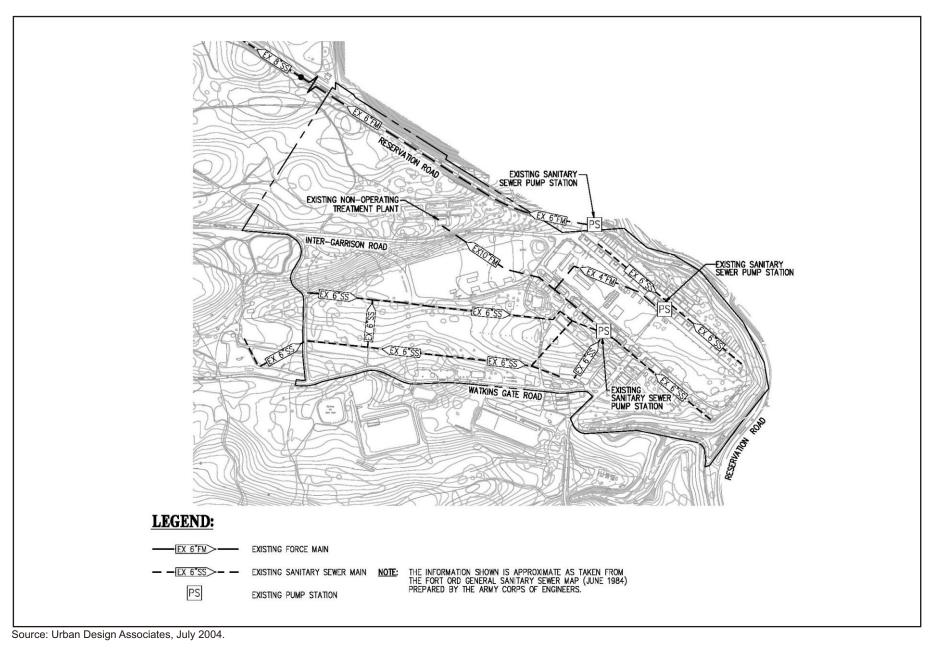
The proposed project is considered to have a significant wastewater impact if:

- Wastewater flow generated by the project cannot be accommodated by the local wastewater treatment system;
- Wastewater distribution lines are not capable of conveying the sewage generated by the project to the wastewater treatment plant; or
- Project implementation will result in substantial adverse physical impacts associated with the
 provision of new or physically altered wastewater facilities or the need for new or physically
 altered wastewater facilities, the construction of which will cause a significant environmental
 impact.

Impact Analysis and Mitigation Measures

Impact 4.11.7-A	The EGSP will result in an increased generation of wastewater and an increased demand for wastewater transmission and treatment services (Less Than
	Significant).

The MCWD is the wastewater service provider for the EGSP site. As identified in Table 4.11-4, the average dry weather wastewater flow from the project is 299,205 gpd and the peak wet weather wastewater flow from the project is 688,172 gpd.



1,000 500 0 1,000 SCALE IN FEET

Exhibit 4.11-3 Existing Wastewater Facilities

Generation **Average Dry Peak Wet Dwelling Building Sq.** Generation Weather Flow Land Use Factor Weather Units (du) **Footage** Factor (qpd/sf) (qpd/DU) (gpd)) Flow (gpd)* 161,253 Residential-Medium 780 207 Residential-Medium-620 162 100,602 High Residential-High 70 135 9,450 Commercial 75,000 0.27 20.250 Cultural/Educational 100,000 0.27 27,000 Public Facilities/Civic 0.27 11,000 1,980 1,470 Total 186,000 320,535 737,231 * A Peaking Factor of 2.3 was used in this analysis based on MCWD Standards.

Table 4.11-4: EGSP Wastewater Generation

* A Peaking Factor of 2.3 was used in this analysis based on MCWD Standards. Source: EGSP, 2004.

New wastewater facilities will need to be constructed to serve the EGSP. These facilities are shown in Exhibit 4.11-4. The new collection system consists of 8 to 12 inch diameter gravity mains, service laterals, and related appurtenances. These facilities will collect wastewater flows and convey them to the existing pump station near Reservation Road. Currently, the existing pump station, which has a capacity of 350 gallons per minute (gpm) can serve approximately 750 residential dwelling units; thus, it will need to be expanded to provide additional capacity to accommodate the wastewater flows generated by the project. The design of the pump facility will provide sufficient capacity to meet the demands of the EGSP. There is an existing 6-inch force main in Reservation Road that will carry wastewater flows from the pump to the station to an existing 8-inch gravity sewer in Reservation Road approximately 800 feet northwest of the EGSP site. The wastewater flows from the EGSP site will continue through the MCWD system to the MRWPCA Regional Wastewater Treatment Plan (WTP) located north of the City of Marina. The MCWD is evaluating whether any of the existing facilities in their system between the pump station and the WTP will require upgrading independent of this project.

MRWPCA WTP has a remaining capacity to treat 8.6 mgd of wastewater. Implementation of the proposed project will result in depleting this capacity by 0.29 mgd during dry conditions and 0.68 mgd during wet conditions. Thus, the existing WTP can accommodate the increased wastewater that will be generated from the EGSP. The EGSP project is within the planning parameters of the County of MCGP and as such, the MRWPCA has accounted for the project related growth in its planning efforts. Additionally, MRWPCA maintains a financial plan for capacity expansions as they become necessary. All of MRWPCA's facilities are designed to facilitate future capacity increases.

Physical impacts resulting from the construction of the pump station and other wastewater facilities needed to serve the site are addressed in this DSEIR as part of construction of the overall community. No additional impacts than those identified within this DSEIR will occur and no additional mitigation will be needed.

Mitigation Measures

4.11.7-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.8 Recreational Services

ENVIRONMENTAL SETTING

The Monterey County Parks Department (MCPD) operates and maintains 19,400 acres of land and water for public recreation. The MCPD operates six parks providing a variety of park and recreational opportunities. The two regional parks closest to the project area are Toro Park and the Laguna Seca Recreation Area.

The Toro Park area is located eight miles from the EGSP site, six miles from downtown Salinas, and 13 miles from the Monterey Peninsula. First opened to the public in 1971, the park is comprised of 4,756 acres. The park is home for many types of wildlife including deer, coyote, and an occasional rare mountain lion or golden eagle. Toro Park facilities include an equestrian staging area and riding trails, two softball fields, playgrounds, horseshoe pits, mountain biking, volleyball courts, and over 20 miles of riding and hiking trails. In addition to MCPD parks, there is approximately 12,000 acres of land owned by the Bureau of Land Management near the project site. A number of local parks and trails owned and operated by the City of Marina and Seaside are scattered throughout the Fort Ord area.

Laguna Seca Recreation Area is located approximately 5 miles from the project area. Laguna Seca Recreation Area contains the Mazda Raceway at Laguna Seca. The Recreation Area is comprised of 540 acres. RV and tent camping is allowed at Laguna Seca Recreation Area. In addition to camping facilities, Laguna Seca Recreation Area has large group meeting facilities and picnic areas available for rent, as well as a rifle and pistol range.

The Monterey County Subdivision Ordinance, Section 19.12.010 guides the MCPD in determining the amount of parkland dedicated and the type of recreation requirements needed to satisfy the intent of the Ordinance. General Standards of the Monterey County Subdivision Ordinance require the dedication of three acres of parkland for each 1,000 persons residing within the unincorporated area of the County of Monterey for local parks and recreational purposes. The Monterey County Subdivision Ordinance provides a formula for determining the amount of acreage for dedication for single- and multi-family residential uses.

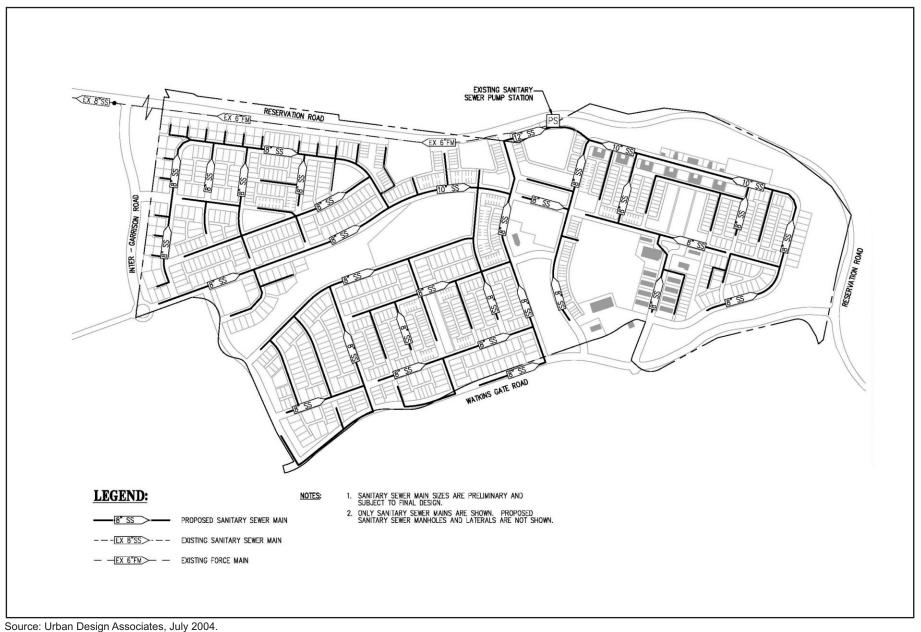
In addition to the General Standards, the MCPD has established the following standards and formulas for the dedication of land:

Single-Family Residential Uses:

0.003 (acres/person) multiplied by 3 (persons/dwelling unit) multiplied by (x) (number of dwelling units) = (x) (acres of land required for dedication)

Multi-Family Residential:

0.003 (acres/person) multiplied by 2.1 (persons/dwelling unit) multiplied by (x) (number of dwelling units) = (x) (acres of land required for dedication)





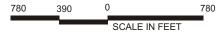


Exhibit 4.11-4 **Proposed Wastewater Facilities**

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project is considered to have a significant recreational services impact if it will:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that a physical deterioration of the facility will occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of facilities that might have an adverse physical effect of the environment.

Impact Analysis and Mitigation Measures

Demand for Recreational Services

Impact 4.11.8-A The pro

The proposed project will introduce 4,337 persons into the project area, which will create an increased demand for parkland and recreational opportunities. (Less than Significant)

The EGSP project proposes a range of housing, from 700 to 860 single-family units and from 535 to 695 multi-family housing units. The proposed project will result in 4,337 new residents in the project area, which in turn will result in an increased demand for project area recreational facilities. Based upon Section 19.12.010 (C)-General Standard, the project would be required to provide 10.14 acres of parkland. Based upon Section 19.12.010 (D)-Standards and Formula for Dedication of Land, the project would be required to provide 10.95 acres of parkland. The project would include the development of parklands during all three phases of the EGSP. More specifically, Phase 1 would provide 3.79 acres of parkland, and 4.07 and 3.78 acres would be provided during Phase 2 and 3, respectively. Construction of the Town Center would also provide 1.01 acres of parkland as well. In total, the project would provide 12.65 acres, an amount in excess of both the General Standard and the Standards and Formula for Dedication of Land. Therefore, the project would not have any adverse effects on parkland. Potential impacts from construction of the parks are addressed as part of construction of the project in other sections of this DSEIR.

Mitigation Measure

4.11.8-A-1 No mitigation measures are necessary.

Significance After Mitigation

Less than significant.

4.11.9 Energy Resources

ENVIRONMENTAL SETTING

Electrical and Natural Gas Services

PG&E supplies electricity and natural gas to the project area. Their transmission facilities are well maintained and meet current California Public Utilities Commission (CPUC) standards. The existing gas and electric distribution systems within the project site have been operated and maintained by the Army and are mostly substandard, in poor condition and/or obsolete. PG&E has a pole-mounted substation in the project site located near Reservation Road. This substation distributes power at 5.16 kilovolts (kv). According to PG&E, existing electrical facilities in the project area include 4 kilovolt

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⁹ Based on 1,470 housing units with a household population of 2.95 persons per household.

¹⁰ Assuming an average of 781 single-family and 620 multi-family residential units.

(kv), 12 kv, and 21 kv overhead and underground lines. This includes 120/240, 120/208, and 277/480 volt secondary lines and services. There is also a PG&E 115 kv transmission line in an 80-foot wide easement that traverses the southeast corner of the site. All facilities are located in easements, which have been operated by the Army, are in poor condition, and do not meet current CPUC standards.

The EGSP site is currently served by PG&E with a regulator and meter station located in the eastern portion of the site at the intersection of Watkins Gate Road and Sloat Street. PG&E owns and operates a 10-inch feeder main that passes southwest of the project site and runs easterly to Barloy Canyon Road, where it branches off to the metering station. The Army has owned and been responsible for the maintenance of their low-pressure distribution system throughout the former base operation. The current system consists of plastic, steel, and galvanized iron gas mains ranging in sizes from 0.75-inch to 14 inches in diameter. The precise condition of the mains within the EGSP site area is unknown, but since they are not cathodically protected, it is assumed that they are in poor shape and will be abandoned and replaced with new mains.

PROJECT IMPACTS AND MITIGATION MEASURES

Thresholds of Significance

The proposed project will result in significant impacts to electric and natural gas services if:

- Existing or future planned electrical/natural gas facilities or supplies are not available to meet the demand of the project; or
- Existing electric or natural gas services are notably disrupted.

Impact Analysis and Mitigation Measures

Increased Energy Service Demand

Impact 4.11.9-A Imple

Implementation of the EGSP will create an increased demand for energy (i.e., electricity and natural gas) and result in the construction of new electric and natural gas distribution systems. (Less than Significant)

Under the EGSP, the site will be constructed with a variety of residential and commercial uses, which would require electricity and natural gas supplies. New facilities are typically installed as projects, such as the EGSP, are implemented. According to PG&E, the project will not result in any adverse effects on PG&E's services¹¹. Existing PG&E operated gas mains and electrical distribution systems will be extended and new distribution mains will be installed in a new joint trench adjacent to roadways. In addition, the expansion of existing gas and electrical transmission facilities outside of the project site may be required. The need for these improvements will be determined by PG&E. More specifically, applications for service will be required for both electrical and natural gas service. Once an application and payments are received, planning for gas and electrical services can begin concurrent with approval of tentative subdivision plans. PG&E estimates that engineering of structures can be developed within four weeks for trenching construction to begin. Potential impacts from construction of the underground lines are addressed as part of construction of the project in other sections of this DSEIR.

Mitigation Measures

4.11.9-A-1 No mitigation measures are necessary.

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¹¹ Personal communication, Jose Saldana, Planner PG&E, March 11, 2004.

Significance After Mitigation

Less than significant.