

## 4.13 PUBLIC SERVICES AND UTILITIES

This section evaluates potential impacts to public services and utilities that could result from the proposed project. Potential impacts resulting from wildland fires on the project site are discussed in Section 4.9 (Hazards and Hazardous Materials); potential impacts associated with stormwater runoff and drainage facilities are discussed in Section 4.10 (Hydrology and Water Quality); and potential impacts on parks and recreation facilities are discussed in Section 4.14 (Recreation).

The following governmental agencies provided the data used to prepare the analysis in this section; refer to Appendix K (Service Availability Letters):

- Nevada County Sheriff's Office
- Nevada County Consolidated Fire Department
- Nevada County Fire Marshal Office
- City of Grass Valley Fire Department
- City of Grass Valley Police Department
- Nevada Joint Union High School District
- Grass Valley School District
- Nevada County Public Works Department
- City of Grass Valley Public Works Department
- Nevada Irrigation District
- Waste Management of Nevada County

In addition, information in this section utilizes analysis contained the *Water Supply Assessment for the Nevada County Housing Element Rezone Program*, prepared by RBF Consulting on behalf of the Nevada Irrigation District (NID) (January 2013). Refer to Appendix J.

### 4.13.1 ENVIRONMENTAL SETTING

#### NEVADA COUNTY

##### Fire Protection and Emergency Services

###### *Nevada County Consolidated Fire District*

Both the Nevada County Consolidated Fire District (NCCFD) and Nevada County Fire Marshal Office provide fire protection and emergency medical services within the County. The NCCFD serves the area generally north, west and south of the City limits. The NCCFD is a full-service emergency response agency. The NCCFD covers approximately 143 square miles through five service areas and 14 stations, and a population of over 35,000 with four District 24 hours per day/seven days per week staffed stations, two joint-staffed 24 hours per

day/seven days per week stations, and seven paid-call stations. Average response time into the project areas is approximately five to seven minutes.<sup>1</sup>

The NCCFD is broken down into the following areas:

- 49er Area - covers the areas of State Route 20, Cement Hill, Wet Hill, Newtown Road, Cascade Shores, Lake Ridge Estates, Deer Creek Park, Banner Mountain, Red Dog Road, and the areas around Nevada City. Stations: Station 80, Station 81, Station 82, Station 83, Station 84.
- Gold Flat Area - covers the Glenbrook Basin, Loma Rica Industrial area, Nevada County Airpark, and a portion of the rural areas between Grass Valley, Nevada City, and Banner Mountain. Stations: Station 54, Station 86.
- Alta-Oaks-Sunset Area - covers the Alta, Oaks, and Sunset areas. It also borders Watt Park, Penn Valley, and Gold Flat areas. Station: Station 87.
- Bullion Area - covers the area south of McKnight Way to George Brewer Road along the Highway 49 corridor, and all of the Alta Sierra Subdivision. Stations: Station 88, Station 89, Station 90.
- Watt Park Area - covers the area west of Grass Valley along McCourtney Road, and south of Hwy 20, including the Wolf Mountain area. Stations: Station 1, Station 91, Station 92.

### ***Penn Valley Fire Protection District***

Penn Valley Fire Protection District (PVFPD) has three fire stations, two of which are staffed. The closest to these projects is located at 10513 Spenceville Road, near the intersection of Penn Valley Drive and Spenceville Road. The closest station has a fire engine, water tender and a medic unit and is staffed with a minimum of two qualified personnel. The next closest station is located at Pleasant Valley Road and Lake Wildwood Drive and has a fire engine and a medic unit (along with a reserve engine) and is also staffed with a minimum of two personnel.

PVFPD, in addition to the normal fire suppression services, provides advanced life support (paramedics) and transport units. Average travel time to the project sites would be one to four minutes and an additional two to three minutes for dispatch reaction time.<sup>2</sup>

### ***Higgins Fire Protection District***

The Higgins Fire Protection District (HFPD) is a public agency, supported by public funds and governed by an at-large board of directors. This special district was established November 8, 1977. The goals and objectives of the HFPD consist of five equally important elements: fire prevention, fire protection planning, fire suppression/emergency incidents, emergency medical service/rescue, and training. The HFPD is a combination department, consisting of career staff and paid call firefighters. Additionally, the HFPD contracts with CAL FIRE (California Department of Forestry and Fire Protection) to provide 24-hour engine staffing during non-fire season. CAL FIRE response is not, however, limited to the contract period as the two agencies are co-located at the main station on Combie Road. The HFPD also maintains mutual and automatic aid agreements with surrounding fire districts and other fire agencies in Nevada and Placer Counties.

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<sup>1</sup> Nevada County Consolidated Fire District, Service Availability Letter, prepared by Terry McMahan, Deputy Fire Marshal, February 11, 2013.

<sup>2</sup> Penn Valley Fire Protection District, Service Availability Letter, prepared by Gene Vander Plaats, Fire Chief, April 15, 2013.

The HFPD provides fire protection and emergency service response to an estimated 12,000 permanent residents in southern Nevada County. The HFPD's 90-square mile area is primarily rural zoning, with the exception of the Lake of the Pines gated community, and is serviced by three fire stations located geographically at six-mile intervals.

While there are three Fire Stations in the HFPD, due to funding constraints, staffing is currently provided for two (not all three) stations 7 days a week, 24 hours a day.

- Station 21 - Combie Station is jointly shared with CDF. Station 21 serving Sites 14, 15, 16, 17, and 18 is currently open 24 hours per day, 7 days per week. While it does not close during the year, it must also cover the areas that Station 22 Dog Bar and Station 23 McCourtney used to cover before those stations started rotational closures.
- Station 22 – Due to budget constraints, Dog Bar Station is currently open even months of the year: February; April; June; August; October; and, December.
- Station 23 - McCourtney Station is currently open odd months of the year: January; March; May; July; September; and, November.<sup>3</sup>

### **Sheriff's Protection**

The Nevada County Sheriff's Department provides law enforcement to all the unincorporated areas of Nevada County. Sheriff's services include patrol, dispatch, investigations, search and rescue, boat patrol, correctional facilities, and coroner and court security services. The department's main office is located at 950 Maidu Avenue (Eric Rood Administration Center) in Nevada City. A substation is located in the Town of Truckee, which contains a small jail facility. The Sheriff's Department also has a satellite jail located on the campus of the main governmental/administrative complex along with a satellite court-holding facility in downtown Nevada City. Sheriff's deputies are dispatched and patrols initiated from these locations.

Sheriff's Department facilities also include two satellite volunteer service centers: one in the business center across from the main gate to Lake Wildwood and the other in a business complex near Lake of the Pines in the southern part of Nevada County. Both centers are staffed on certain days and hours by citizen volunteers and are utilized by patrol staff to meet with citizens and to complete their law enforcement reports. The department does not currently have any set standards as to the number of officers per 1,000 population. Response times in the vicinity of the proposed project area are estimated to be approximately 20 to 25 minutes as the main station, located in Nevada City, is approximately 20 miles north of the sites in both Penn Valley and Lake of the Pines. Average response times to individual address/areas within the County are separately tracked. Response times are tracked by the incident. The Nevada County Sheriff's Department records a "Response Times by Priority" report. "Priority 1" calls are those in-progress felonies, misdemeanors including death. "Priority 2" calls are those felonies and misdemeanors that are not in-progress. "Priority 3" calls are all others not falling into the prior two categories. On a three-year average, the response times are as follows: creation of call to dispatching resources is 12 minutes nine seconds, dispatch to on scene is 12 minutes nine seconds, and on scene to clear is thirty-two minutes fifty-two seconds.<sup>4</sup>

The Sheriff's Department has mutual aid assistance agreements with the California Highway Patrol (CHP), which provides police protection on all state and county roadways within

<sup>3</sup> <http://higginsfire.org/>

<sup>4</sup> Nevada County Sheriff's Office, Service Availability Letter, prepared by Keith Royal, Sheriff-Coroner-Public Administrator, February 7, 2013.

Nevada County. CHP also provides backup protection to the Sheriff's Department as needed, and the Sheriff's Department provides backup protection to the CHP.

### **Schools**

Nevada County has nine elementary/middle school districts feeding into the high schools, which provide secondary education to over 4,000 students with a variety of schools and programs.

#### ***Penn Valley***

The proposed project Sites 10 through 13 within the Penn Valley Area would be served by Williams Ranch School K-3, Pleasant Valley School 4-8, Ready Springs School, and Vantage Point Charter School K-12.

#### ***Lake of the Pines***

The proposed project Sites 14 through 18 are within the boundaries of the Pleasant Ridge Union School District (PRUSD) and the Nevada Joint Union High School District (NJUHSD). PRUSD is located in southern Nevada County beginning at the Placer/Nevada county line, along the Bear River, and extending north along State Route (SR) 49 until approximately 3 miles south of Grass Valley. PRUSD also extends from Yuba County on the west to the Placer county line at Taylor Crossing on Dog Bar Road on the east. The Lake of the Pines and Alta Sierra communities, as well as the residential developments along SR 49, are within the PRUSD boundaries. The NJUHSD district offices are located in Grass Valley with the district serving western Nevada County. Three high schools are within the NJUHSD jurisdiction: Bear River High School, Nevada Union High School, and Park Avenue Alternative Education.

### **Other Services and Facilities**

Other public services in the County include medical facilities and libraries. There are two hospitals in Nevada County; Tahoe Forest Hospital in Truckee and Sierra Nevada Memorial Hospital located at 155 Glasson Way in Grass Valley. Sierra Nevada Memorial Hospital is a full-service hospital offering a comprehensive range of services including 24-hour emergency medical services, a quick care center and a helipad for trauma care transportation. Additionally, there are several medical clinics in Nevada County. There are six public libraries located within the County, the Madelyn Helling Library located at 980 Helling Way, the Grass Valley Library - Royce Branch located at 207 Mill Street, the Truckee Library located at 10031 Levon Avenue, the Doris Foley Library for Historical Research located at 211 North Pine Street, the Penn Valley Station located at 11336 Pleasant Valley Road, and the Bear River Station located at 11130 Magnolia Road.

### **Wastewater**

The County does not comprehensively provide wastewater collection and treatment to all areas of the County. Primarily there are eight Community Regions, two Rural Regions, one Rural Area and two districts in Eastern Nevada County, that have access to public sewage disposal. Much of Nevada County is served by on-site sewage disposal/septic systems. Lack of extensive public sewage disposal can be viewed as the primary limiting factor to the development of affordable housing in Nevada County. All other services are viewed to be adequate to accommodate planned higher density multi-family housing.

The County of Nevada's Wastewater Division of the Public Works Department administers and maintains sewage collection systems and treatment facilities for Nevada County Sanitation District No. 1. The Sanitation District provides sewer service to 5,230 accounts in western Nevada County with a population of 14,000 persons. Currently, there are ten zones within the Sanitation District with facilities that collect and treat 1,245,000 gallons of wastewater each day. Three of these zones would be affected by the proposed project: Lake of the Pines, Penn Valley, and Lake Wildwood Zones. None of the sites are currently served by sewer but are near existing sewer lines or can be reached through the extension of existing sewer lines.

### ***Penn Valley Wastewater Treatment Plant***

The Penn Valley Wastewater Treatment Plant (PV-WWTP) is located south of the community of Penn Valley. The Penn Valley collections system conveys septic tank effluent from individual septic tanks through a network of force mains to the PV-WWTP. The PV-WWTF serves 347 active connections and was historically permitted monthly average dry weather flow limit of 89,700 gallons per day. The treatment facility consists of aerated lagoons, a storage reservoir, and 33 acres of pasture land for spray irrigation.

Due to deficiencies with the current PV-WWTP, including inadequate pond size and surface discharge area and discharge violations, the PV-WWTP is currently operating under a cease and desist order (CDO) issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). The CDO limits monthly average dry weather inflow to 60,000 gallons per day until facility improvements are made or another means of sewer treatment is developed. Upon the completion of a Facilities Improvement Design Report (FIDR) in December 2011, the construction of a pipeline from Penn Valley to the Lake Wildwood WWTP was determined to be the most cost-effective way to address the CDO. In April 2012, the Nevada County Sanitation District Board of Directors approved Resolution No. SD12-06 approving pursuit of a State Revolving Fund loan to construct a pipeline from Penn Valley to the Lake Wildwood WWTP. However, as of the preparation of this EIR, the pipeline has not been constructed and there is not sufficient capacity at the Penn Valley Wastewater Treatment Plant to serve those project sites (Sites 10-13) within the Penn Valley Wastewater Treatment Plant service area.

### ***Lake of the Pines Wastewater Treatment Plant***

The Lake of the Pines WWTP is located southeast of Sites 14 through 17 and northwest of Site 18, at 10803 Riata Way. As noted in the Nevada County General Plan, in 2008, the Lake of the Pines Wastewater Treatment Plan was expanded to accommodate an additional 500 equivalent dwelling units (EDUs) in addition to being upgraded. However, at the time of the preparation of this EIR there is not sufficient capacity at the Lake of the Pines Wastewater Treatment Plant facility to treat the wastewater from Sites 14 through 17.

## **Water**

Water is supplied to the both the County and City by the NID, an independent California special district that supplies irrigation, municipal, domestic and industrial water. NID was organized in 1921 under the California Irrigation District Act of 1897 as a nonprofit water agency, and operates under Division 11 of the State Water Code. Located on the western slope of the Sierra Nevada Mountain Range, NID encompasses 287,000 acres, mainly in Nevada and Placer Counties. NID's mountain watersheds cover 70,000 acres and include the upper portions of the Middle Yuba River above Milton Diversion, Canyon Creek above

Bowman Reservoir, and Deer Creek. NID stores water in ten reservoirs that have a storage capacity of approximately 280,380 acre-feet and operates seven water treatment plants (WTPs) that supply approximately three billion gallons, or approximately 9,000 acre-feet, of treated drinking water per year. The proposed project areas are located within NID's service area.

NID has water rights to the majority of its water supply. Approximately three percent of NID's water supply is from outside sources. These include water contract purchases from Pacific Gas and Electric (PG&E) and recycled water obtained from four municipal wastewater treatment plants: Grass Valley, Nevada City, Auburn, and Placer County at Joeger Road.

Each of the sites would be treated by one of four existing water treatment plants:

- East George Treatment Plant: Sites 1, 3 through 9;
- Loma Rica Treatment Plant: Site 2;
- Lake Wildwood: Site 10-13; and,
- Lake of the Pines: Sites 14 through 18.

The existing potable water infrastructure available to each of the sites varies by site. All sites have access to existing potable water systems, but some sites have more improvements that are required to get potable water to the site.

- Site 1: No additional improvements are required
- Site 2: No existing water main is in the area and additional improvements are required.
- Sites 3-9: An existing water main is located within Brunswick Road and only minimal improvements are required to bring water to the sites.
- Sites 10-13: Improvements to the Lake Wildwood Treatment Plant are required as the existing facility is at 85% capacity.
- Sites 14-17: Only minor improvements are required to get the water to the property.
- Site 18: An existing water main is located within Combie Road. An extension of the pipeline would be required to get water to the project site.

## **Solid Waste**

Nevada County provides solid waste collection service through a franchise for collection and disposal of waste from residential and nonresidential areas. The Nevada County Integrated Waste Management (Solid Waste) Division is responsible for all solid waste and hazardous materials disposal and recycling services. Waste Management of Nevada County (Waste Management) is the current hauler for both solid waste refuse and collection of recyclables. Refuse collected by Waste Management and self-hauled refuse are collected at the McCourtney Road Transfer Station and Recycling Center located at 14741 Wolf Mountain Road in Grass Valley. Nevada County does not have a solid waste landfill; all solid waste refuse is hauled to out-of-County landfills under the contract with Waste Management Systems, Inc.

Waste Management has an agreement with Lockwood Regional Landfill, located in Sparks, Nevada, which serves as the primary landfill disposal site during good weather conditions. The Lockwood Regional Landfill has a capacity of 302.5 million cubic yards, with a disposal

area of 856.5 acres. Currently, the daily volume of waste received at the landfill, based on a five day work week, is approximately 5,000 tons. Based on an April 2010 aerial survey, the landfill contains a waste volume of approximately 32.8 million cubic yards. The landfill opened in 1979 and has a life span of approximately 155 years. When inclement weather makes it infeasible to travel to the Lockwood Regional Landfill, solid waste is transported to the Anderson Landfill in Anderson, California. The Anderson Landfill has a capacity of approximately 16.8 million cubic yards with 11.5 million cubic yards of capacity remaining.

## **CITY OF GRASS VALLEY**

The City of Grass Valley Fire Department (Fire Department) provides fire protection and emergency medical services within the City. The Fire Department is part of a tri-agency Joint Operating Agreement that includes the Nevada City Fire Department and Nevada County Consolidated Fire District. Under the agreement, the three agencies operate under a closest resource response plan providing for the response of the closest fire unit to an incident regardless of jurisdiction. Additionally, each agency has the resources of the others to draw on in the event of a significant incident.

The Fire Department has three locations: Fire Station #1 (474 Brighton Street), Fire Station #2 (213 Sierra College Drive), and City Hall (125 East Main Street). The Fire Department is staffed with 15 career personnel and administrative staff. Equipment includes three front line engines, one reserve engine, one Office of Emergency Services (OES) engine, a ladder truck, one support unit, and five staff vehicles. The Fire Department's ladder truck is the only ladder truck in Nevada County and responds to many mutual aid requests.

The Fire Department provides service to an area of five square miles and protects a population of approximately 13,000 residents. The Fire Department responds to approximately 2,900 incidents per year, 75 percent of which are calls for emergency medical response services.

The Insurance Services Office (ISO) is an independent organization that analyzes approximately 46,000 fire districts/departments in the U.S. and assigns a number from one to ten to each station based on the station's fire protection capabilities. In this classification system, Public Protection Classification Class 1 represents exemplary fire protection, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria. The Fire Department has a current ISO rating of Class 4. The Fire Department was last rated in 2003 and generally is re-rated every 10 years.

The project area is in an Urban-Wildland Intermix area and has been classified by the California Department of Forestry and Fire Protection as being in a Very High Fire Hazard Severity Zone. Currently, the primary wildland fire protection responsibility rests with the State of California. With annexation by the City, the wildland fire protection responsibility for those areas retained in open space would be assumed by the City.

## **Police Protection**

The City of Grass Valley Police Department (Police Department) provides police protection services within the incorporated boundaries of the City. The headquarters building is located at 129 South Auburn Street. Authorized staffing for the Police Department consists of 20 sworn officers and 6 civilian support personnel. The Police Department includes a 24-hour per day Dispatch Center, a Special Incident Team, and a Community Oriented Policing

Program (COPP). Average response times were unknown during the preparation of this EIR.<sup>5</sup>

### **Schools**

The proposed project areas are within the Grass Valley School District and Nevada Joint Union High School District. Hennessy Elementary School, Scotten Elementary School, Lyman Gilmore Middle School, Silver Springs High School, Sierra Mountain HS/Adult School, and Nevada Union High School would serve the proposed project sites. Additionally, parents may elect to utilize the Grass Valley Charter School.

### **Other Services and Facilities**

Other public services in the City include medical facilities and libraries. There are two hospitals in Nevada County, including the Sierra Nevada Memorial Hospital located at 155 Glasson Way in Grass Valley. Sierra Nevada Memorial Hospital is a full-service hospital offering a comprehensive range of services including 24-hour emergency medical services, a quick care center and a helipad for trauma care transportation. Additionally, there are several medical clinics in Nevada County. There is one public library located within the City, the Grass Valley Public Library, Royce Branch located at 207 Mill Street.

### **Wastewater**

The City provides wastewater collection, treatment and disposal service to all properties within the City limits and to the Glenbrook Sanitation District, which is outside the City limits. The City's Wastewater Treatment Plant (WWTP) was originally built in 1950 and is located on a 29-acre site at 556 Freeman Lane in the southwest portion of Grass Valley. The WWTP has a rated capacity of 2.78 million gallons per day (mgd) average dry-weather flow (ADWF) and can accommodate a service population of 21,000 persons. The Grass Valley 2020 General Plan (2020 General Plan) anticipates that the City's population will grow to 23,395 by 2020. Solids produced during the wastewater treatment process are contracted to be removed from the WWTP site and the treated wastewater is discharged into Wolf Creek, a tributary of Bear River. None of the proposed project sites are currently served by sewer but are near existing sewer lines or can be reached through the extension of existing sewer lines.

### **Water**

As with the entire County, water is supplied to the City by the NID, an independent California special district that supplies irrigation, municipal, domestic and industrial water.

### **Solid Waste**

Solid waste collection service within the City of Grass Valley is provided in the same manner as the County (see previous discussion regarding solid waste in the County).

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<sup>5</sup> City of Grass Valley Police Department, Service Availability Letter, prepared by John Foster, February 14, 2013.

## 4.13.2 REGULATORY SETTING

### STATE FRAMEWORK

#### Fire Protection

The California Fire and Building Codes address general and specialized fire safety requirements for buildings. Topics addressed in the code include, but are not limited to, fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, and industrial processes.

#### Schools

Senate Bill (SB) 50 created various methods of generating revenue to pay for school construction and remodeling. These methods consist of state school bond funds, local school bonds, and developer fees. There are three levels of developer fees: Level I, Level II and Level III. Level I fees are set by law, but can be adjusted for inflation. Level II fees require that developers pay for the entire local share of construction costs, which is 50 percent of total construction costs. Level II fees may be imposed by a school district on a yearly basis, but only if certain conditions are met. Level III fees require developers to pay for 100 percent of construction costs, and are imposed if the state is no longer allocating bond funds.

SB 50 stipulates that if a school district conducts a School Facilities Needs Analysis and meets certain other requirements, it may impose a statutory developer fee that may be significantly higher than the previously permitted Level I fees of \$2.63 per square foot of residential development. At this time, the Grass Valley School District and Nevada Joint Union High School District mitigation fee is \$2.97 per square foot of living space for residential uses and \$0.47 per square foot for retail, office and commercial uses.

#### Water

SB 610 requires the preparation of a Water Supply Assessment (WSA) to examine existing water supply entitlements, water rights and water service contracts relevant to the water supply for a proposed project. Projects required to prepare a WSA must meet one of the following criteria as defined by SB 610:

- Residential development of more than 500 dwelling units
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor area
- Commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor area
- Hotel or motel, or both, having more than 500 rooms
- Industrial, manufacturing or processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area
- Mixed-use project that includes one or more of the projects specified above
- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units

Under Assembly Bill (AB) 325, all developer-installed landscaping must be accompanied by a landscape package that documents how water use efficiency would be achieved through design. In addition, Title 24 of the California Administrative Code incorporates the California Building Standards, included as the California Plumbing Code (Part 5), which promotes water conservation. Title 20 addresses public utilities and energy and includes appliance and efficiency standards that promote water conservation. In addition, a number of state laws require water-efficient plumbing fixtures in structures.

The California Fire Code, Appendix B, outlines fire flow and storage reserve requirements for fire protection.

### **Solid Waste**

The Integrated Waste Management Act (AB 939) mandates that communities reduce their solid waste. AB 939 requires local jurisdictions to divert 25 percent of their solid waste by 1995 and 50 percent by 2000, compared to a baseline of 1990. AB 939 also establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance.

## **LOCAL FRAMEWORK**

### **Nevada County General Plan**

The Nevada County General Plan includes the following goals, policies and objectives regarding public services, utilities and service systems that would be applicable to the proposed project:

- Goal 3.1 Provide for public facilities and services commensurate with development type and intensity.
- Objective 3.1 Public facilities and services shall be directed as follows: a higher level to Community Regions and a lower level to Rural Regions.
- Policy 3.1 The levels of service and provision of public facilities in Community Regions shall be based upon improving the capacity of public facilities to serve higher levels of development directed to Community Regions. Planning for future public facilities and services in Community Regions shall be based upon the following criteria:
- a. public water and sewer
  - b. retention of existing emergency response time
  - c. intercommunity-transit
- Policy 3.2 The County shall encourage development within Community Regions where higher density development can more efficiently be provided with a full range of public facilities and services.
- Policy 3.3 The land use pattern reflected in the Nevada County General Plan Land Use Map is correlated with the future provision of public facilities to adequately serve said land uses based upon the service criteria and levels of service identified in Policy 3.1 and Policy 3.10. All General Plan amendments shall be required

- to show that the public facilities and services necessary to serve the proposed development are also correlated with the future provision of facilities and services according to the same criteria.
- Policy 3.4 To enable public services to be provided with the greatest degree of efficiency and cost-effectiveness, development within Community Regions shall be encouraged at the maximum density under the respective land use designations shown on the General Plan Land Use maps, consistent with environmental, infrastructure and other site constraints.
- Policy 3.5 Within Community Regions with existing public sewer and water systems, all new residential land divisions shall be required to connect to public sanitary sewer and water systems. Temporary use of private on-site systems may be allowed where public systems are not yet available but where a specific improvement plan and funding mechanisms are in place. A legally binding mechanism shall be required to insure that the development will connect to the public systems when available, and that the private systems will be discontinued.
- Objective 3.2 Ensure that the capacity, availability, financing, and capability of public services and facilities are sufficient to meet levels of service requirements for development.
- Policy 3.14 In order to ensure that capacity of public facilities is coordinated with the timing of development the County shall require for any development requiring a discretionary permit, and for any General Plan amendment, a determination of the adequacy of public facilities, or an impact fee program, to serve the proposed development.
- Policy 3.16 Where community sewer or water systems are installed or required as a condition of development, there shall be a contract, development agreement, formation of an area service district, or other legally enforceable mechanism to insure long term maintenance of the community system.
- Policy 3.17 The use of community sewer and/or water systems are encouraged where such systems are economically feasible for the intended service area.

### **City of Grass Valley 2020 General Plan**

The 2020 General Plan includes the following goals, policies and objectives regarding public services, utilities and service systems that would be applicable to the proposed project:

- Policy 37-LUP Assure that new development pays its fair share of the cost of municipal services.
- Policy 39-LUP Assure that acceptable inter-agency agreements regarding future service and facility provision are in place prior to approval of any major new development.

Policy 40-LUP	Refer all development proposals to potentially affected governmental entities for review and comment.
Policy 10-SP	Adopt and implement appropriate standards for access roads, onsite driveway standards, fuel reduction and emergency water supply.
Policy 11-SP	Maintain appropriate standards for water supply, pressure and distribution for fire suppression purposes.
Goal 1-COSG	Provide a balance between development and the natural environment, protecting and properly utilizing Grass Valley's sensitive environmental areas/features, natural resources and open space lands.
Objective 6-COSO	Assurance of appropriate resource conservation and environmental protection measures as prerequisites to development.
Policy 21-COSP	Continue to implement water quality improvement plans, including storm water separation and sewage treatment plant expansion.

### 4.13.3 ENVIRONMENTAL ANALYSIS

#### THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the *CEQA Guidelines*, the proposed project would have a significant impact to public services, utilities and service systems if it would result in:

- Substantial adverse physical impacts associated with the provision of, or 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 for any of the public services such as fire protection, police protection, schools, parks, or other services
- Exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB)
- Construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (discussed in Section 4.10, Hydrology and Water Quality)
- Insufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements
- A determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to provide the project's projected demand in addition to the provider's existing commitments
- Service by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs

- Inability to comply with federal, state and local statutes and regulations related to solid waste

Section 15131 of the *CEQA Guidelines* addresses economic and social effects of a project. Pursuant to Section 15131(a), “Economic or social effects shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical change.”

## POTENTIAL IMPACTS AND MITIGATION MEASURES

### Public Services

#### **4.13-1 THE PUBLIC SERVICE NEEDS OF THE PROPOSED PROJECT COULD RESULT IN SUBSTANTIAL ADVERSE IMPACTS.**

**Level of Significance Before Mitigation:** Potentially Significant Impact

#### **Impact Analysis**

##### *Fire Protection and Emergency Services*

The Nevada County Consolidated Fire Department, Nevada County Fire Marshal Office, and the City of Grass Valley Fire Department have standards for residential and commercial development within their respective jurisdictions, and the proposed project would be required to comply with these standards prior to issuance of building permits. The fire departments or fire marshal office would be involved in the review of project plans and the project developer would be required to incorporate the Fire Department’s requirements into the final project design as conditions of approval.

The proposed project would result in an increase in population of approximately 2,960 residents in Grass Valley and 2,438 residents in the County (refer to Section 4.12 [Population and Housing], for additional information on population). The introduction of residential development in the project vicinity would intensify density and uses in the area. This could result in an increase in demand for services and subsequently an increase in response times and reduced level of service. Therefore, the proposed project could result in potentially significant impacts to fire protection services requiring mitigation.

Sites 1 through 9, located within the Grass Valley Sphere of Influence, would be required to pay development fees as follows: Site 1, \$0.28 to \$0.72 per square foot of development; Site 2, \$0.23 to \$0.45 per square foot of development; and Sites 4 through 9 \$0.22 to \$0.44 per square foot of development. Sites 10 through 13, located within the jurisdiction of the Penn Valley Fire Protection District, will be required to pay - one-time – into the new development fire impact fee program. In addition to the property taxes, the Penn Valley Fire Department District also imposes a Special Fire Suppression Benefit Assessment District and a Special Tax – Rescue. Although new developments increase the demand on existing fire and emergency services, as a result of the taxes paid by developers, each new development bridges the fire districts closer to additional fire stations, apparatus and equipment. The required fees are intended to cover the fees of that equipment. As such, the required

development fees, property tax, Special Assessment Fee and the Special Tax are intended to provide the means which allow the District to maintain the current level of service. In addition, as noted in Mitigation Measure 4.13-1a, future developments on all sites will be required to provide documentation ensuring adequate fire service response times. As such, payment into the required tax programs would reduce potential impacts related to adequate services times to less than significant.

Sites 14 through 18, located within the Higgins Fire Protection District would be required to pay into the 1980 development parcel fee of \$25.00. Currently this fee does not cover the cost of the increase in demand resulting from new developments. As Higgins Fire Protection District has been unsuccessful at passing measures to increase the development fee, existing services are strained and two stations have had to cut back to operating half time. However, they have been successful at fundraising to acquire equipment and supplies as well as are staffed with volunteer firefighters. It should be noted that the Station 21 serving project Sites 14 through 18 operates 24 hours per day, 7 days per week. As such, it is anticipated that these sites would be adequately served and impacts would be less than significant. In addition, as noted in Mitigation Measure 4.13-1a, future developments on all sites will be required to provide documentation ensuring adequate fire service response times.

All project sites would include a defensible space of 100 feet around the residential structures, as required by law, and would be required to implement Mitigation Measure 4.13-1b. As part of required vegetation management plans included in Mitigation Measure 4.13-1b, it is recommended that an area of 30 feet immediately surrounding the structures be maintained to reduce or eliminate ignition hazards presented by vegetation. Vegetation management for the remaining 70 feet (or to property line) will depend on the steepness of the final site designs and will also be included in the vegetation management plan. In summary, the proposed project would result in an increase in property taxes and sales taxes that would generally offset the increase in the cost of fire and emergency services required by the project. In addition, the project would be required to pay development impact fees to cover the incremental costs of the additional manpower, new equipment and infrastructure required for the proposed project. Implementation of Mitigation Measures 4.13-1a and 4.13-1b, which would require measures to provide adequate response times and vegetation fuel management, would reduce impacts to a less than significant level.

### *Emergency Water Supply System*

As noted in Chapter XVI of the County of Nevada Land Use Development Code, all future multi-family developments on any of the project sites would be required to install a water supply system, as required in Section 10.301(c) of 1988 Uniform Fire Code. All emergency water to meet fire flow requirements is in addition to the domestic water source. Since the adoption of the Land Use Development Code, the State of California has adopted the 2010 California Fire Code, which is based on the 2009 International Fire Code (IFC). The IFC is a model code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The IFC is a design document and provides development guidelines including requiring that before one constructs a building, the site must be provided with an adequate water supply for fire-fighting operations. Section 501.3 *Construction Documents*, requires that construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. Fire flow requirements for buildings or portions of buildings and

facilities shall be determined by an approved method or Appendix B of the 2010 California Fire Code, Table B105.1 which establishes fire flow requirements depending on building square footage. Coordination with the local water agency will be required to ensure the demand of such flows can be served by existing water supplies. As such, coordination with the local water agency, through adherence to the 2010 California Fire Code, will ensure impacts will be less significant in this regard.

### *Police Protection/Sheriff Service*

As previously mentioned, the proposed project would result in an increase in population of approximately 2,960 residents in Grass Valley and 2,438 residents in the County. The number of traffic accidents, auto thefts, burglaries, police reports, and similar incidents increases when new development occurs, resulting in greater demands on police protection and other services. As such, the proposed project could generate the need for additional police officers, dispatchers or new facilities.

Similar to fire protection services, and for all of the project sites, future developments would bring additional annual revenue in the form of increased local property taxes and sales taxes that would help offset the increased demand for police services by funding increases in police personnel, training and equipment. Furthermore, the project developer would be required to pay development impact fees which are intended to provide the means which allow the local police and sheriff to maintain the current level of service. As such, impacts are considered to be less than significant. Implementation of Mitigation Measure 4.13-1c, which would require the project to provide documentation noting adequate response times, would reduce impacts to less than significant.

### *Schools*

The increase in multi-family residential uses on the proposed project sites would generate new students and subsequently an increase in demand on existing school facilities. Development within the proposed project areas would be subject to school impact fees in accordance with the provisions of SB 50. The mitigation fee set by the Grass Valley School District and Nevada Joint Union High School District is \$2.97 per square foot of living space for residential uses. Pursuant to Section 65995(3)(h) of the California Government Code (SB 50), "the payment of statutory 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 . . . ." Therefore, with payment of statutory fees, school impacts would be considered less than significant.

### *Other Services and Facilities*

The population increase from the proposed project would increase the demand for other services or facilities, such as public libraries, hospitals, or civic uses. The proposed project would increase the resident population of approximately 2,960 residents in Grass Valley and 2,438 residents in the County, which in turn would increase the demand for library services. The space standard for libraries in California is 0.5 square feet per capita.

### *Nevada County*

As previously noted there are six public libraries throughout the County. However, based on the distance from the proposed project sites it is anticipated that only the Penn Valley Station and the Bear River Station would be utilized by the new residential units within

Penn Valley and Lake of the Pines; respectively. The proposed project would result in 1,090 new residents within Penn Valley Area and 1,348 new residents within the Lake of the Pines Area. The County requires a level of service standard of 300 feet of library space for each increase of 1,000 persons in county-wide population. Future development associated with the proposed project would be required to ensure the level of service standards for libraries is not exceeded. As such, the proposed project would result in less than significant impacts.

The increase in residents may increase the number of hospital visitors. The Sierra Nevada Memorial Hospital is a regional hospital serving approximately 78,518 people in western Nevada County. The incremental increase of 5,398 residents (i.e., approximately 6.9 percent) over a 10- to 20-year buildout would not result in a substantial increase in the use of hospital services. Additionally, the Sierra Nevada Memorial Hospital recently underwent renovations to provide expanded services, including a 15 million dollar diagnostic imaging and women's center (opened in the fall of 2006). Therefore, no new physical facilities associated with hospitals would be needed as a result of the proposed project, and no adverse physical impacts associated with the provision of new or altered hospital facilities would occur. Therefore, impacts related to health care facilities would be less than significant.

### ***Grass Valley***

The Grass Valley Library, Royce Branch (5,600 square feet) does not currently meet the library space standard of 6,500 square feet for the City (based on the California Department of Finance population projections of approximately 12,817 people). However, there are two libraries in Nevada City (located approximately five miles northeast of the City) that also serve Grass Valley, the Madelyn Helling County Library located at 980 Helling Way (15,000 square feet) and the Doris Foley Library for Historical Research located at 211 North Pine Street (5,324 square feet).

The 2,960 new residents within Sites 1 through 9 would require 1,480 square feet of library space (approximately 5.7 percent of the existing library space of approximately 25,924 square feet). Therefore, the incremental increase of 2,960 residents, over a 10- to 20-year buildout would not result in a substantial increase in the use of library services. The existing libraries would meet the proposed project's needs, as the libraries have sufficient space to meet the needs of the increased population. There are no planned or proposed libraries under construction at this time, and the additional demand from the proposed project would not result in the expansion of existing facilities or the construction of a new library. Therefore, impacts related to libraries would be less than significant.

### **Mitigation Measures:**

The following mitigation measures apply to all sites:

- 4.13-1a Prior to Building Permit issuance, the project developer shall provide written documentation from the Fire Department ensuring adequate fire service response times to the project site.
- 4.13-1b Construction Plan applications (or as part of the annexation request for Sites 1-9) submitted for all sites shall include a vegetation fuel management plan, which addresses overall fuels management for achieving a reduction in wildland fire intensity, subject to review and approval of the Fire Department. The plan shall also address management of the vegetative fuels in those areas that may be considered environmentally sensitive.

- 4.13-1c Prior to Building Permit issuance, the project developer shall provide written documentation from the Police or Sheriff services ensuring adequate police response times.

**Level of Significance After Mitigation:** Less Than Significant Impact.

## Wastewater

### **4.13-2 THE PROPOSED PROJECT COULD RESULT IN A DETERMINATION BY THE WASTEWATER TREATMENT PROVIDER THAT IT HAS INADEQUATE CAPACITY TO PROVIDE FOR THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS.**

**Level of Significance Before Mitigation:** Potentially Significant Impact

## Impact Analysis

### Nevada County

The proposed project sites would be served by the Penn Valley WWTP (Sites 10 through 13), and Lake of the Pines WWTP (Sites 14 through 18) in the County. However, as previously noted the Penn Valley WWTP is currently operating under a Cease and Desist Order (CDO) from the CVRWQCB and pending State Revolving Fund loan to construct a pipeline from Penn Valley to the Lake Wildwood WWTP. As such, there is currently not enough sewer capacity to serve all of the proposed project areas. Table 4.13-1, *Sewer Availability*, breaks out each of the three zones showing connected, standby and unallocated EDUs. As noted in Table 4.13-1, there are approximately 915 standby equivalent dwelling units (EDUs) and 500 unallocated EDUs in those zones. It has been noted by the County that several projects are already approved or in the planning process in the Lake of the Pines area and will need the EDU allocation from Lake of the Pines in order for them to develop to their planned potential. County Sanitation staff estimate that the approved or planned projects will require approximately 500 to 604 EDUs to accommodate the build out of those projects. Therefore, the unallocated EDUs shown the Table 4.13-1 will likely be used for projects already approved. The County has established sewer capacity service requirements for development within their jurisdiction. Without proposed improvements to existing WWTPs there would not be sewer service available for the proposed project Sites 10 through 18 and the proposed project would result in potentially significant impact. However, with implementation of Mitigation Measure 4.13-2, impacts would be reduced to less than significant.

**Table 4.13-1  
Sewer Availability**

Zone	Connected EDUs	Standby EDUs	Unallocated EDUs
Lake Wildwood	2,919	648	0
Lake of the Pines	2,057	156	500
Penn Valley	347	111	0
<b>TOTAL</b>	<b>5,323</b>	<b>915</b>	<b>500</b>

Source: Department of Public Works, Sanitation Division, 2009.

### *Grass Valley*

Based on existing capacity of the City's WWTP and projects of similar size currently being processed through the City, upon annexation of Sites 1 through 9 into the City of Grass Valley, these sites would be served by the City's WWTP and would contribute a small portion of the overall increase in flows that would bring the WWTP to near the capacity. However, regardless of the added flow from the proposed project, the City's WWTP will need to be enlarged to handle future flows from throughout the City's system to meet the City's projected population in the Year 2020. The City has established sewer capacity service requirements for development within their jurisdiction. Without proposed improvements to the City's existing WWTP, there would not be sewer service available for the proposed project sites and the proposed project would result in potentially significant impact.

#### **Mitigation Measure:**

This mitigation measure applies to all sites:

- 4.13-2 Prior to approval of a Site Plan, grading plan, or any permit authorizing construction (or as part of the annexation request for Sites 1-9) for a property within the RH Combining District, the project developer shall to the satisfaction of the Director of the County Planning Department (or City of Grass Valley Planning Department for Sites 1-9):

Provide written documentation that adequate sewer capacity is available for the proposed development. The project developer may provide written documentation that the wastewater treatment plant has been upgraded to increase capacity or a report from a registered civil engineer demonstrating that adequate capacity is available. If adequate sewer capacity does not exist, the developer will pay for WWTP upgrades to account for the additional effluent. The developer may develop a reimbursement agreement, if needed, to recuperate fair-share costs associated with other proposed developments nearby.

***Level of Significance After Mitigation:*** Significant and Unavoidable. This impact remains significant because it is unknown what the capacity of the wastewater treatment facilities would be at the time of project construction. It is also unknown if completion of the required wastewater facility improvements would be feasible for a single project developer. Furthermore, the County does not have jurisdiction over the timing of when wastewater improvements would occur within the City of Grass Valley.

### **Water Supply**

- 4.13-3 SUFFICIENT WATER SUPPLIES ARE AVAILABLE TO SERVE THE PROPOSED PROJECT FROM EXISTING ENTITLEMENTS AND RESOURCES; NO NEW OR EXPANDED ENTITLEMENTS WOULD BE REQUIRED.**

***Level of Significance Before Mitigation:*** Potentially Significant Impact.

### ***Impact Analysis***

The proposed project area is located within the water service area of NID. Pursuant to SB 610, a WSA was prepared for the proposed project and is included as Appendix J. The WSA

was prepared based on information contained in the 2010 Urban Water Management Plan (UWMP) adopted by NID in June 2011.

The 2010 NID UWMP provides estimates of the water supply and water demand during normal, single-dry, and multiple-dry years. Tables 4.13-2 through 4.13-6 are based on the supply and demand comparison tables of the 2010 UWMP. Although the tables calculate a projected deficit in supplies during water shortage years, the quantified supplies do not include NID's supply entitlements to the Bear River and the South Yuba River. Also, the NID's water shortage contingency plan calls for mandatory reduction in water usage by its customers, which is not quantified in the UWMP supply and demand comparison tables.

**Table 4.13-2 (UWMP Table 7-1)**  
**Normal Year Water Supply and Demand Comparison, ac-ft/yr**

	2010	2015	2020	2025	2030	2035
Supply totals	410,633	410,828	410,828	410,828	410,828	410,828
Demand totals	129,894	180,046	187,360	195,729	200,646	203,542
Supply Surplus	280,739	230,782	223,468	215,099	210,182	207,286

**Table 4.13-3 (UWMP Table 7-2)**  
**Single Dry Year Water Supply and Demand Comparison, ac-ft/yr**

	2010	2015	2020	2025	2030	2035
Supply totals	183,113	183,113	183,113	183,113	183,113	183,113
Demand totals	129,894	180,046	187,360	195,729	200,646	203,542
Supply Surplus/Deficit	53,219	3,067	-4,247	-12,616	-17,533	-20,429

**Table 4.13-4 (UWMP Table 7-3)**  
**First Year of Multiple-Dry Year Events Water Supply and Demand Comparison, ac-ft/yr**

	2010	2015	2020	2025	2030	2035
Supply totals	255,439	255,439	255,439	255,439	255,439	255,439
Demand totals	129,894	180,046	187,360	195,729	200,646	203,542
Supply Surplus/Deficit	125,545	75,393	68,079	59,710	54,793	51,897

**Table 4.13-5 (UWMP Table 7-4)**  
**Second Year of Multiple-Dry Year Events Water Supply and Demand Comparison, ac-ft/yr**

	2010	2015	2020	2025	2030	2035
Supply totals	192,422	192,422	192,422	192,422	192,422	192,422
Demand totals	129,894	180,046	187,360	195,729	200,646	203,542
Supply Surplus/Deficit	62,528	12,376	5,062	-3,307	-8,224	-11,120

**Table 4.13-6 (UWMP Table 7-5)**  
**Third Year of Multiple-Dry Year Events Water Supply and Demand Comparison, ac-ft/yr**

	2010	2015	2020	2025	2030	2035
Supply totals	333,944	333,944	333,944	333,944	333,944	333,944
Demand totals	129,894	180,046	187,360	195,729	200,646	203,542
Supply Surplus/Deficit	204,050	153,898	146,584	138,215	133,298	130,402

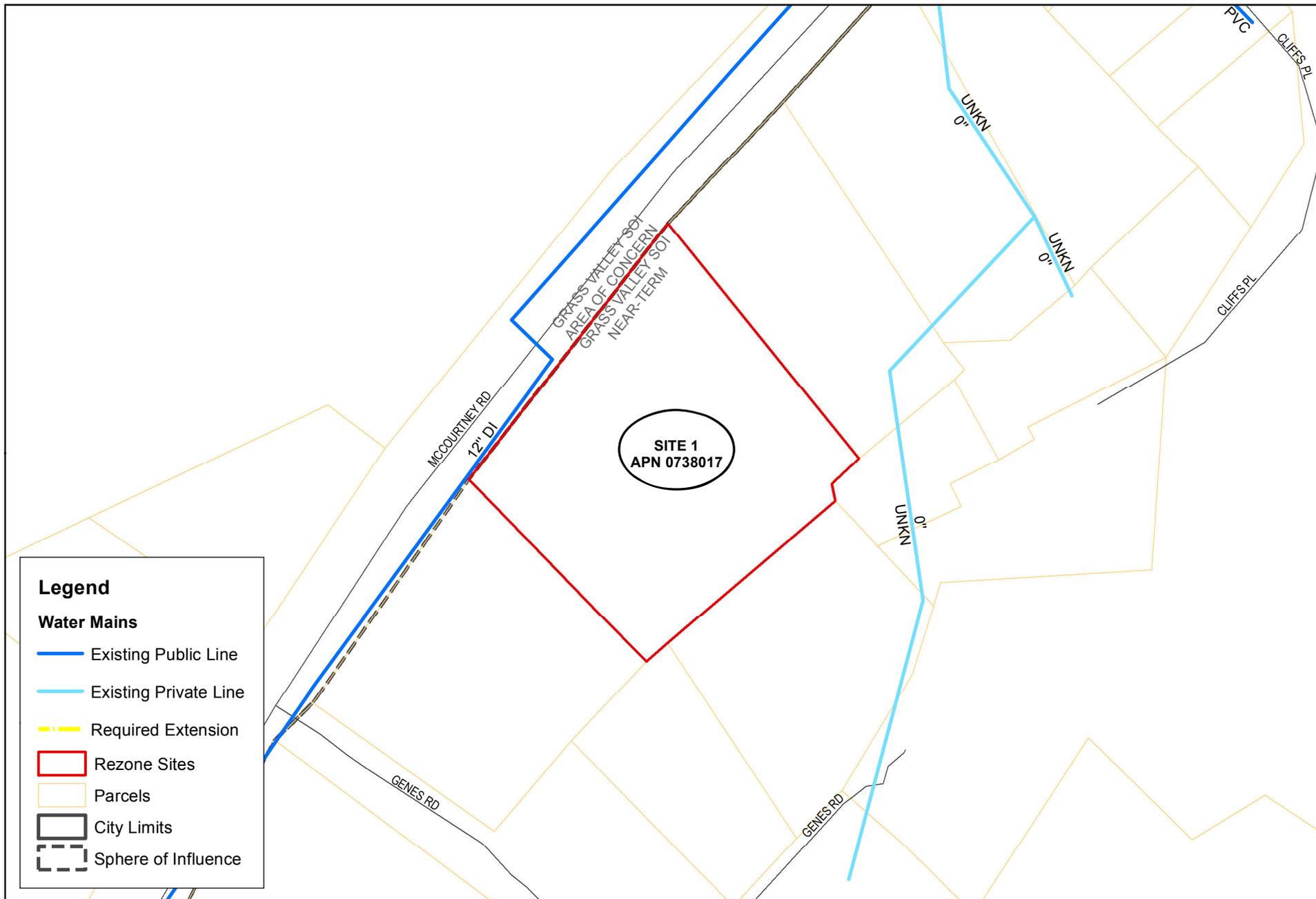
As stated previously, water shortages are projected to occur during single dry years and multiple dry years in the future because NID's quantified supply during single dry years and multiple dry years is projected to be less than demands during those years. However, the quantified supply in the 2010 UWMP does not include supply from the Bear River and the South Yuba River, NID is likely to receive in dry years. There is a high probability that with these additional supplies, NID would likely not have a supply deficit in single and multiple dry years. In addition, the demands shown do not include any demand reductions as a result of NID implementing their water shortage contingency plan. NID has a drought contingency plan in place to reduce demand up to 50 percent. Therefore, the UWMP projects sufficient reductions in demands, and increases in supplies from Bear River and South Yuba River, to mitigate for the calculated 17 percent supply deficit.

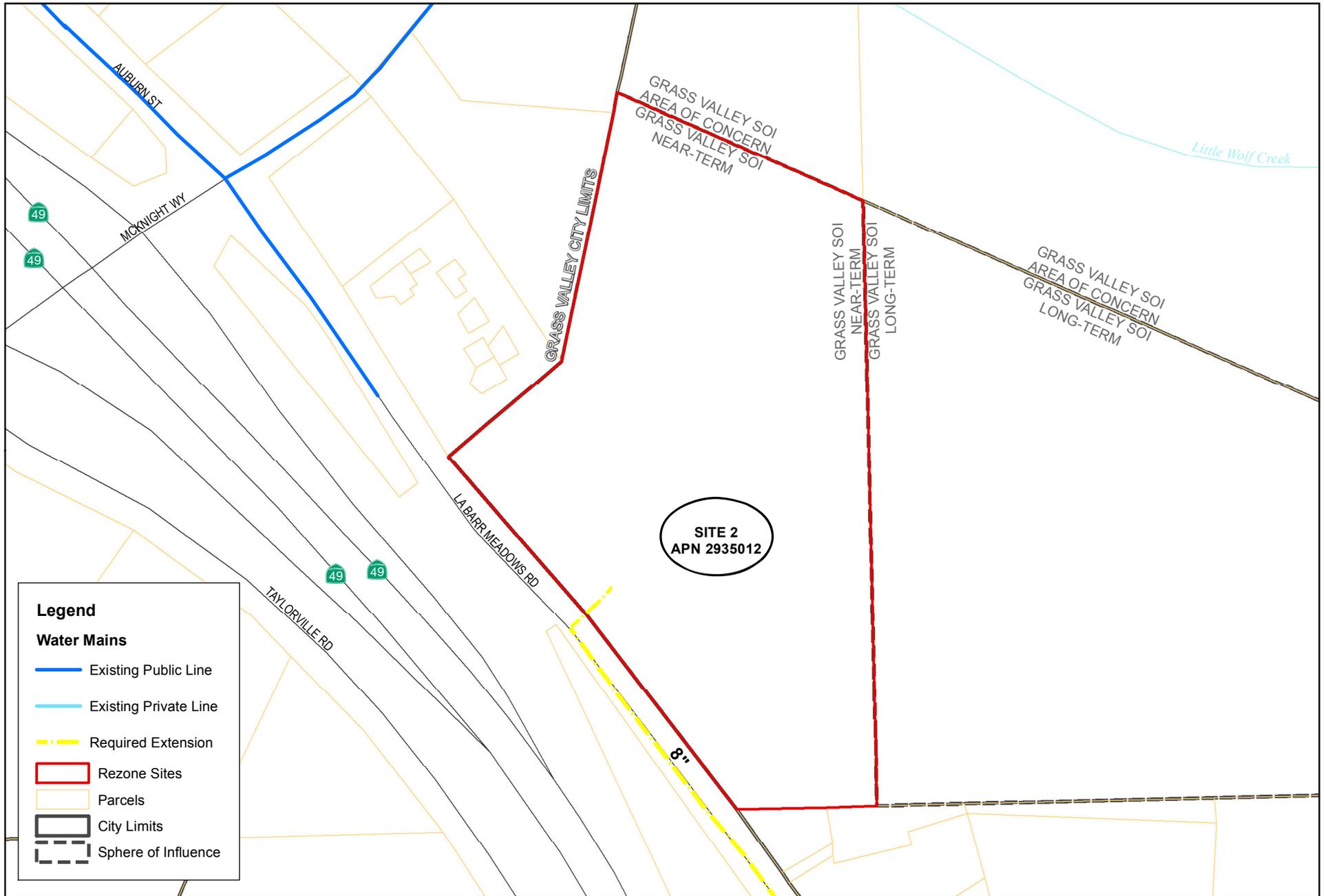
As noted in the WSA, the proposed Nevada County Housing Element Rezone Program has an estimated water demand of 1,235 acre-feet per year. The NID 2010 Urban Water Management Plan identifies future low-income housing projects with an estimated 3,099 acre-feet per year demand by 2015, and 4,346 acre-feet per year demand by 2035.

As NID's UWMP calculates a deficit in water supply sources excluding consideration of drought contingency measures and Bear River and South Yuba River entitlements, which are expected to make up for the deficit, and the low-income housing projects have been identified in the 2012 UWMP, NID determines that the Rezone Program is included in the 2010 UWMP and, therefore, sufficient water supplies are available to meet the estimated demands for project sites. Therefore, the project has a less than significant impact on water supply for all Sites 1 through 18.

With regard to existing water infrastructure, Figures 4.13-1 through 4.13-8 identify the existing NID water lines in relative to each site location. Sites 1 and 3 through 9 have existing water facilities within the existing streets that front these sites. Additional infrastructure is not required for these sites and potential impacts on existing water infrastructure systems are less than significant.

Development of Sites 2, and 10 through 18 would require new water infrastructure improvements to bring potable water to these sites. Water line extensions would be within existing roadways or right of ways. These improvements would have to be in place prior to construction on each of these sites. With unknown timing or enforcement mechanism for these improvements, a potentially significant impact would occur as a result of insufficient infrastructure.





**Legend**

**Water Mains**

- Existing Public Line
- Existing Private Line
- Required Extension

**Other Features**

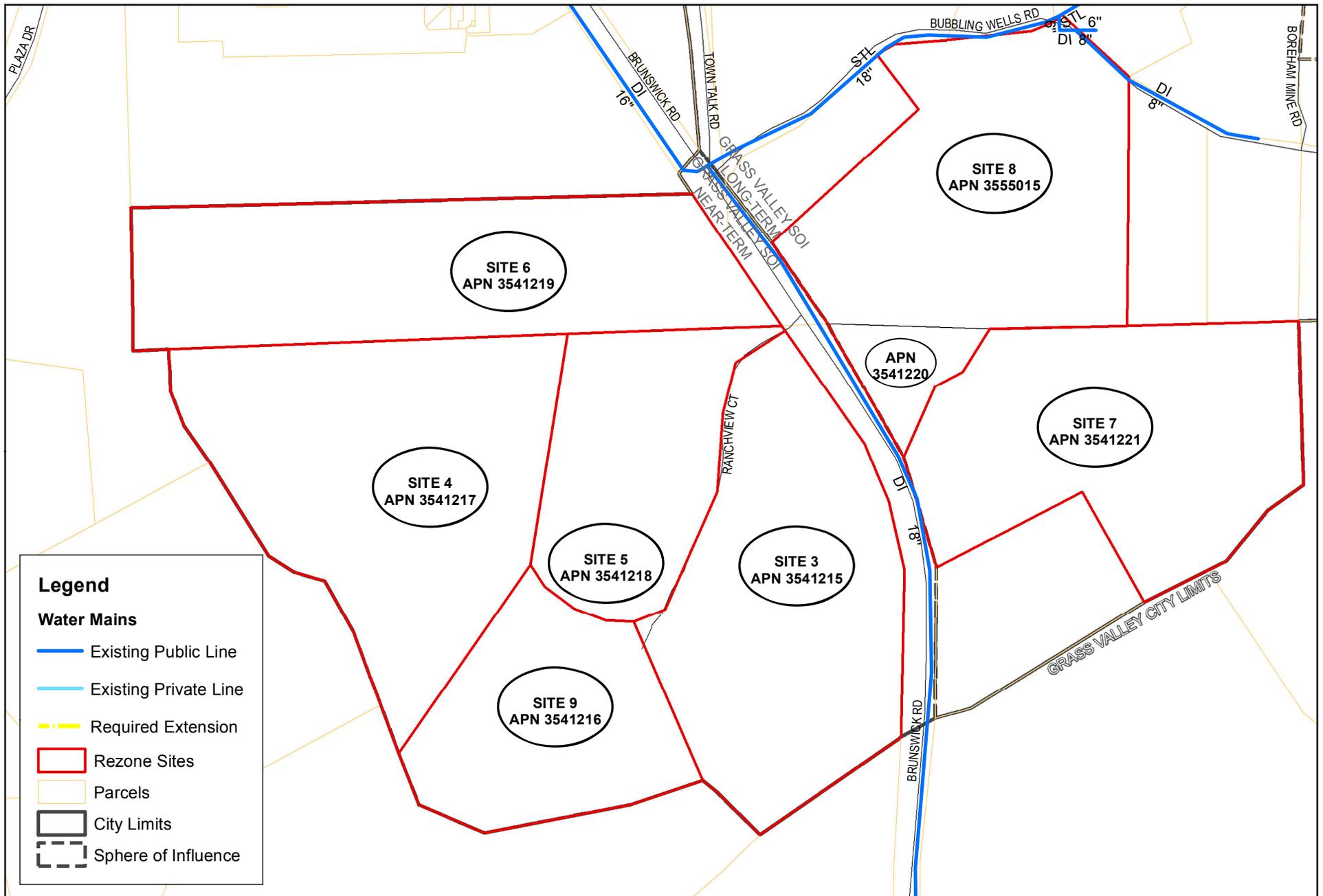
- Rezone Sites
- Parcels
- City Limits
- Sphere of Influence

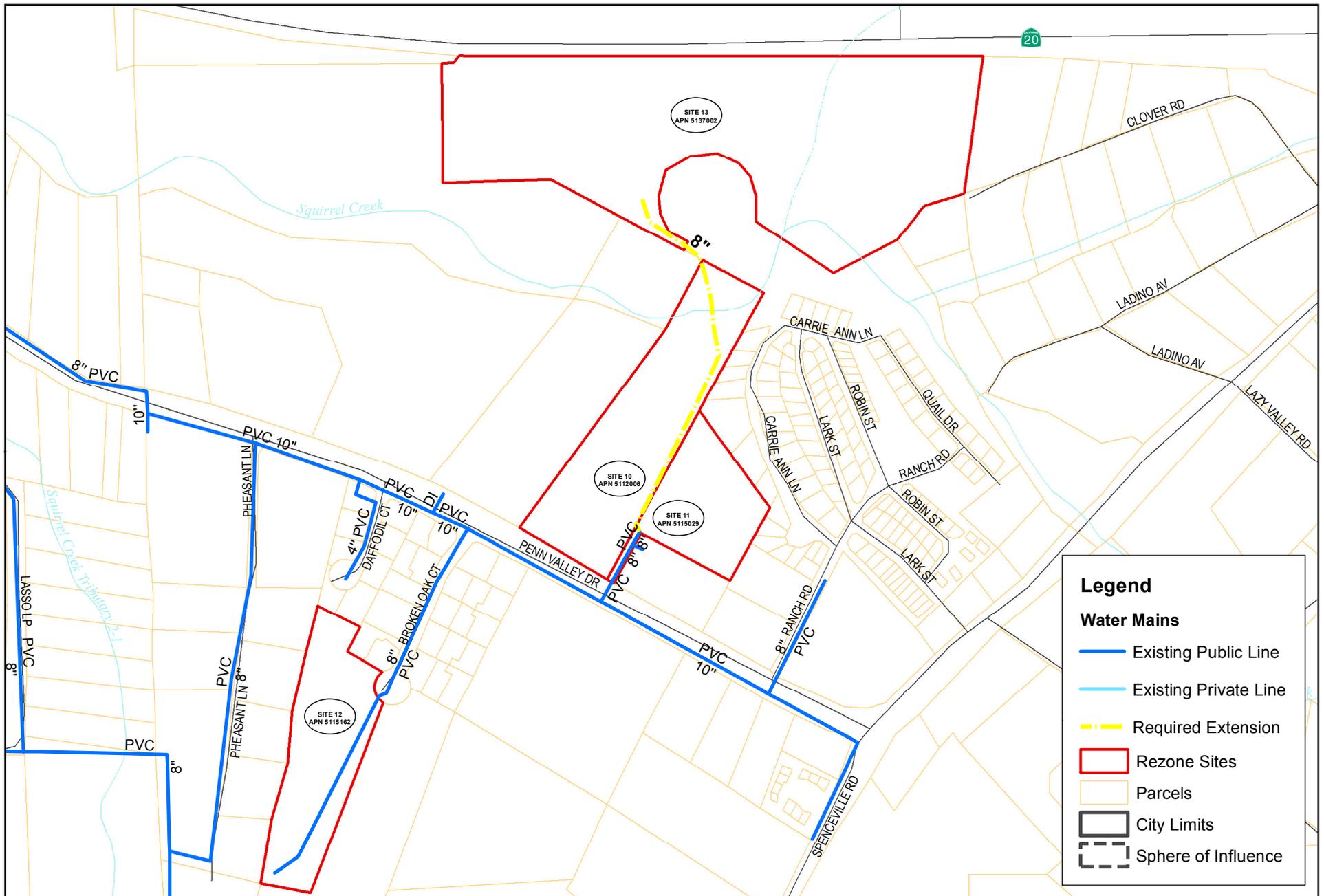


Source: Nevada County GIS 2013; ESRI 2013.

# Site 2 - Water Utility Infrastructure

Figure 4.13-2





**Legend**

**Water Mains**

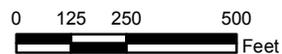
- Existing Public Line
- Existing Private Line
- Required Extension

Rezone Sites

Parcels

City Limits

Sphere of Influence

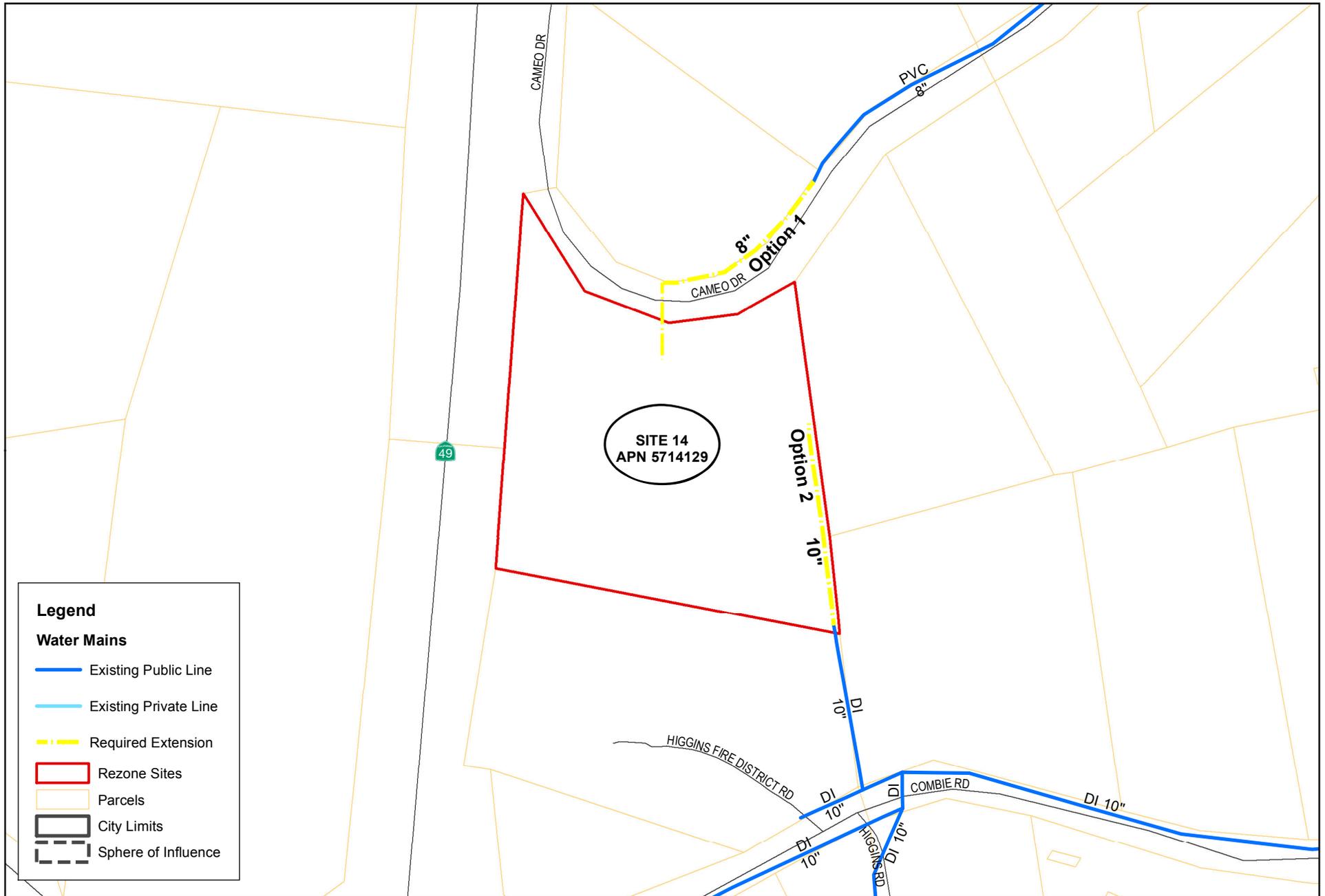


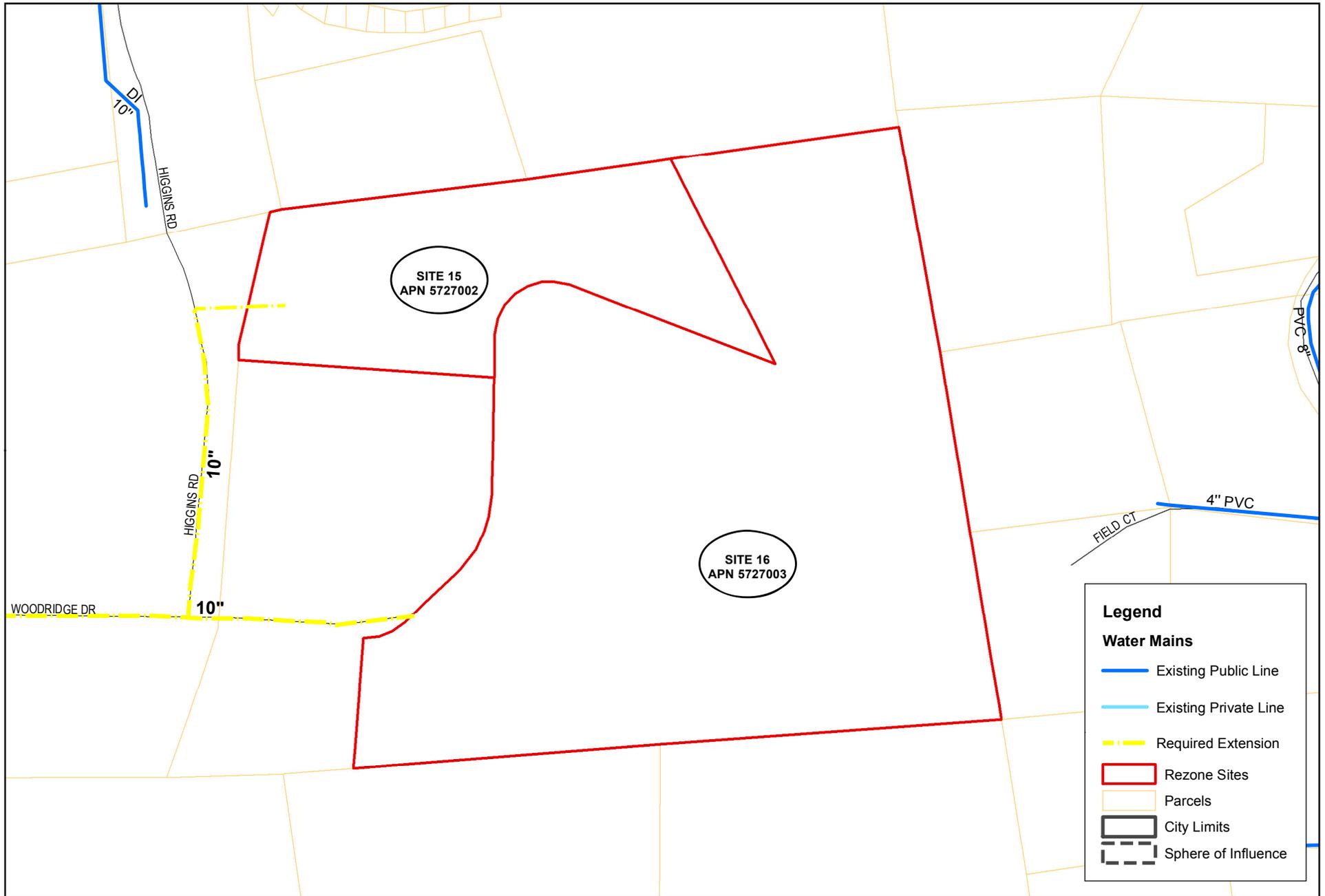
Source: Nevada County GIS 2013; ESRI 2013.

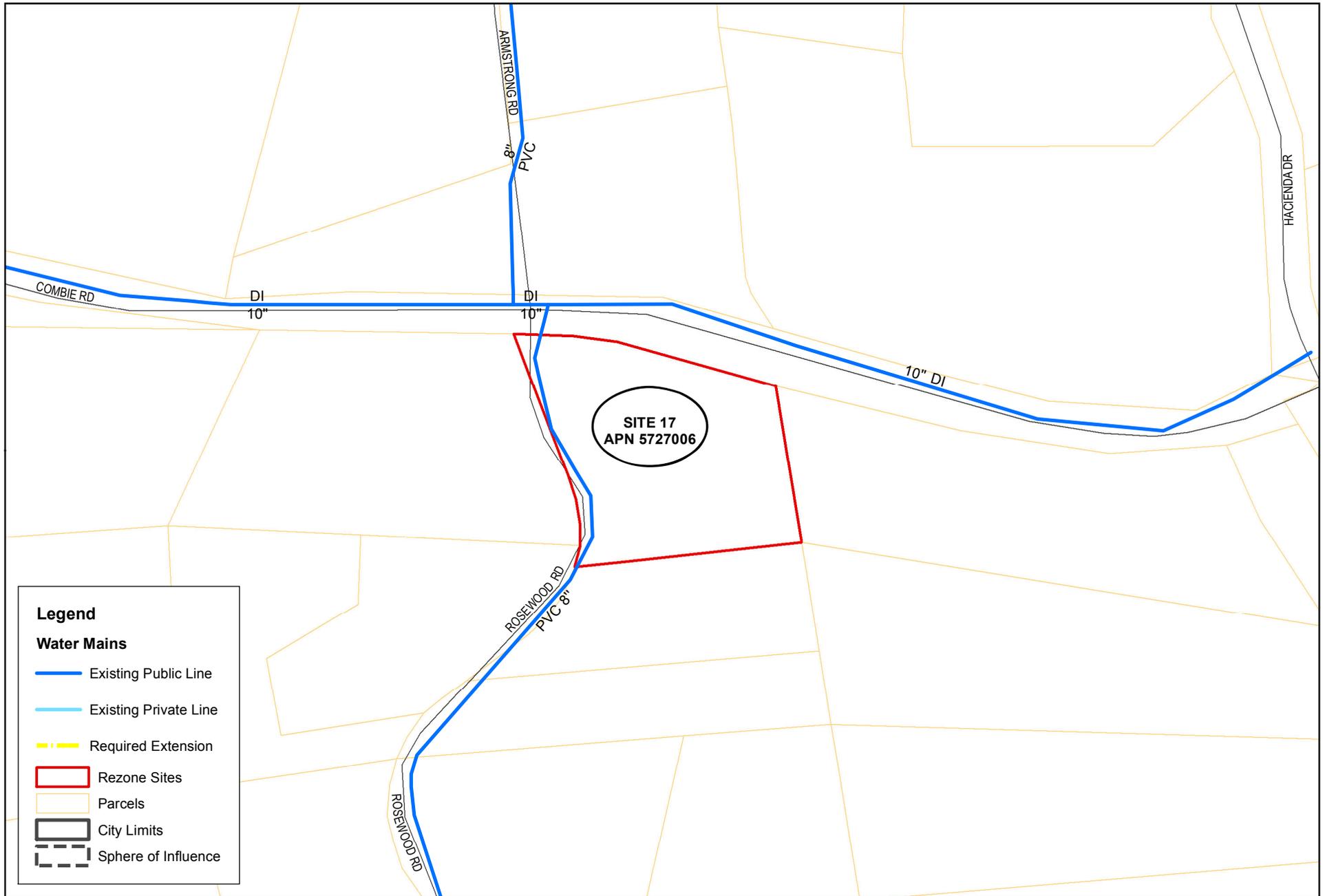
COUNTY OF NEVADA  
2009-2014 HOUSING ELEMENT REZONE PROGRAM IMPLEMENTATION EIR

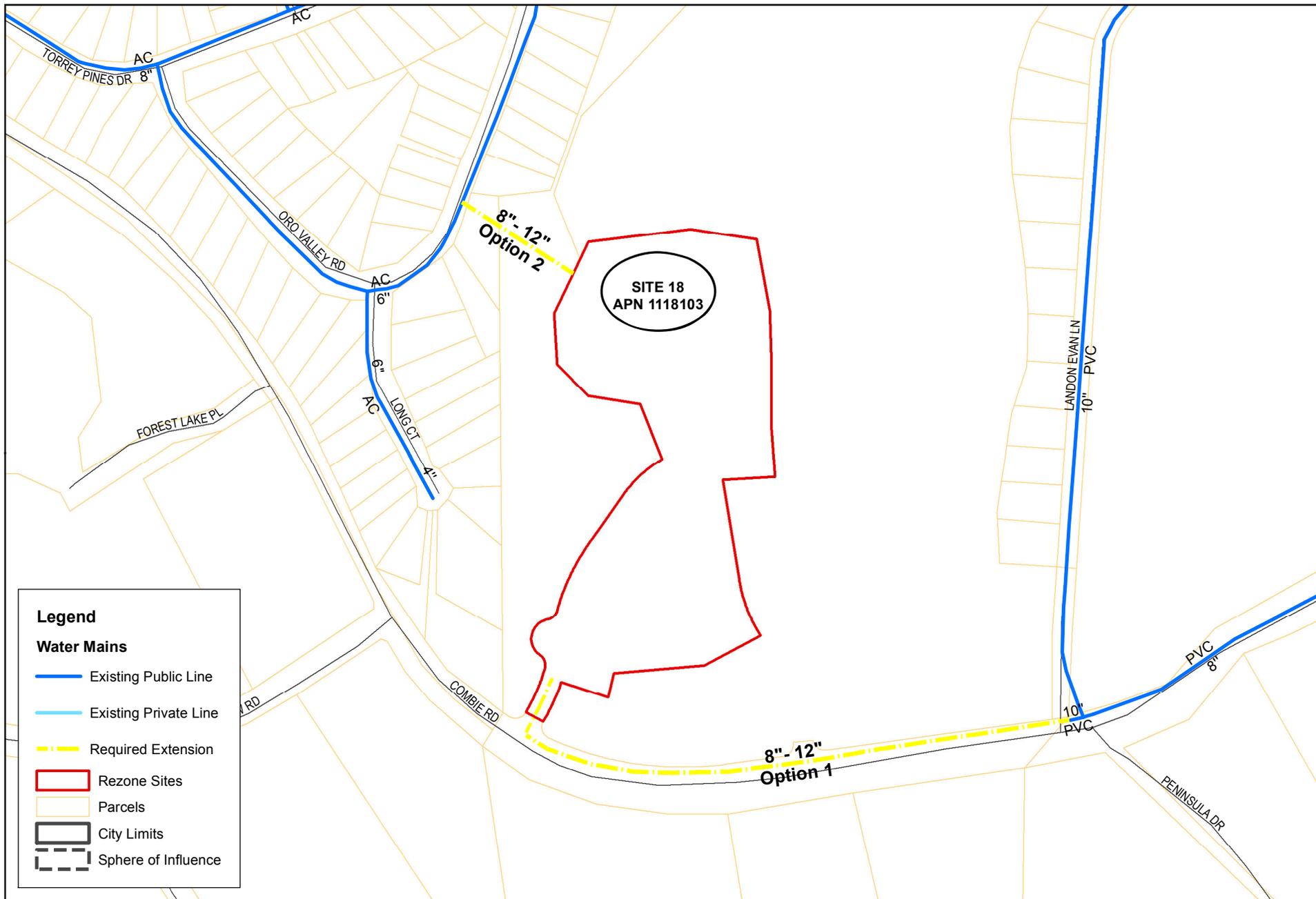
# Sites 10, 11, 12 & 13 - Water Utility Infrastructure

Figure 4.13-4









**Mitigation Measures:**

The following mitigation measure applies to all sites:

- 4.13-3 Prior to approval of a Site Plan, grading plan, or any permit authorizing construction (or as part of the annexation request for Sites 1-9) for a property within the RH Combining District, the project developer shall to the satisfaction of the Director of the County Planning Department (or City of Grass Valley Planning Department for Sites 1-9):

Provide the County (or the City for Sites 1 through 9) with an approved set of improvement plans accepted by NID, which include the following:

- Quantification of anticipated water usage by parcel.
- A comprehensive water system design for distribution piping and connection to the existing NID distribution system.
- Appropriate pipe sizing to accommodate minimum fire flow water pressures (as determined by CAL FIRE, NID, and the HFPD).
- Identification of pipe sizing, pipe location, and the location of the tie-in with NID facilities.
- Provisions for easement, rights-of-way, and in-fee land to NID for water facilities.

***Level of Significance After Mitigation:*** Significant and Unavoidable. This impact remains significant and unavoidable because it is unknown what the capacity of the potable water facilities would be at the time of project construction. It is also unknown if completion of the required water infrastructure improvements would be feasible for a single project developer. Furthermore, the County does not have jurisdiction over the timing of when wastewater improvements would occur within the City of Grass Valley.

**Solid Waste**

***4.13-4 THE LANDFILL THAT WOULD SERVE THE PROPOSED PROJECT HAS SUFFICIENT PERMITTED CAPACITY TO ACCOMMODATE THE PROJECT'S SOLID WASTE DISPOSAL NEEDS. THE PROJECT WOULD COMPLY WITH FEDERAL, STATE AND LOCAL STATUES AND REGULATIONS RELATED TO SOLID WASTE.***

***Level of Significance Before Mitigation:*** Less Than Significant Impact.

***Impact Analysis:***

The California Integrated Waste Management Board (CIWMB) has collected solid waste generation rates from a variety of sources. The rates vary widely and present a broad range of potential estimated solid waste demands. Rates for multi-family units range from 3.6 to 8.6 pounds per unit per day. Based on these rates, the proposed project, at a 10- to 20-year buildout would generate between 9,630 and 23,005 pounds (4.82 to 11.5 tons) of waste per day. Table 4.13-7, *Estimated Solid Waste Generation*, summarizes the estimated waste generation for the proposed project.

**Table 4.13-7  
 Estimated Solid Waste Generation**

Proposed Land Use	Units/Square Footage	Solid Waste Generation Rates	Estimated Solid Waste Generation			
Multi-Family Dwelling	2,675 Units	3.6 to 8.6 pounds/unit/day	9,630	to	23,005	pounds/day

Source: California Department of Resources Recycling and Recovery (CalRecycle) website, accessed January 22, 2013, <http://www.calrecycle.ca.gov/wastechar/wastegenrates>.

The project’s proportion of solid waste disposal would not be substantial relative to the daily disposal rate of 5,000 tons at the Lockwood Regional Landfill.<sup>6</sup> Therefore, the Lockwood Regional Landfill would have sufficient capacity to receive the solid waste that would be generated by the proposed project.

As previously stated, AB 939 requires cities and counties in California to implement recycling programs, reduce refuse at the source, and compost waste to achieve the established 50 percent diversion of solid waste from landfills. Several recycling programs help the City and County meet their requirements under AB 939. Nevada County has an adopted Countywide Source Reduction and Recycling Element (SRRE) that establishes goals and methodologies for compliance with AB 939. On April 23, 2002, the County adopted the “Green Procurement and Sustainable Practices Policy” to encourage the reduction of solid waste entering landfill sites. This policy requires waste prevention, recycling, market development, and use of recycled/recyclable materials through lease agreements, contractual relationships and purchasing practices with vendors, contractors, businesses, and other public and governmental agencies. In addition, Nevada County Department of Sanitation (formerly the Department of Transportation and Sanitation) recently received a \$100,000 grant from the CIWMB to fund the program Nevada County Recycles, which is dedicated to educating schools, businesses, and individuals about recycling.

The City of Grass Valley Solid Waste/Recyclable Materials Storage Ordinance, adopted on April 10, 2007, requires developers for certain projects, such as new construction of multi-family and nonresidential developments, to provide solid waste and recyclables storage areas in the number, dimensions and types required by the department or review authority. Additional storage areas may be required, as deemed necessary.

All future developments on the proposed project sites would be required to participate in the above-mentioned programs and comply with City and County recycling and waste diversion ordinances. This would entail submitting a plan to divert at least 50 percent of the construction waste generated by the project from landfill disposal as well as incorporating recycling collection and storage areas into the project design. Doing so would avoid significant solid waste disposal impacts related to construction and operation of the proposed project.

**Mitigation Measures:** No mitigation required.

**Level of Significance After Mitigation:** Not applicable.

<sup>6</sup> Lockwood Regional Landfill, Personal Communication with Chris Thomas, July 17, 2013.