CARPINTERIA VALLEY WATER DISTRICT
EL CARRO WELL REPLACEMENT AND CENTRAL ZONE PIPELINE IMPROVEMENTS PROJECT

INITIAL STUDY

April 2008

Project No. 0702-2831

Prepared for:
Carpinteria Valley Water District
1301 Santa Ynez Avenue
P.O. Box 578
Carpinteria, California 93014

Prepared by:
Padre Associates, Inc.
1861 Knoll Drive
Ventura, California 93003

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CARPINTERIA VALLEY WATER DISTRICT
INITIAL STUDY

Environmental Checklist Form

1.0 PROJECT TITLE:

El Carro Well Replacement and Central Zone Pipeline Improvements Project

2.0 LEAD AGENCY NAME AND ADDRESS:

Carpinteria Valley Water District (CVWD)
1301 Santa Ynez Avenue
P.O. Box 578
Carpinteria, California 93014

3.0 CONTACT PERSON AND PHONE NUMBER:

Mr. Charles Hamilton, General Manager
(805) 684-2816

4.0 PROJECT LOCATION:

The El Carro Well replacement site is located within the existing well site at El Carro Park located between Foothill Road and El Carro Lane in the City of Carpinteria. The assessor's parcel number is 004-005-004. Segment 1 of the project pipeline component is located within El Carro Park and extends from the well site, across the park along the western park boundary to El Carro Lane. Segment 2 of the pipeline extends along El Carro Lane to Linden Avenue. Segment 3 of the pipeline extends along the southern boundary of Franklin Creek Park and up Sterling Avenue. Segment 4 of the pipeline extends along El Carro Lane between Santa Ynez Avenue and Santa Monica Creek. Segment 5 of the pipeline extends adjacent to Santa Monica Creek, along Via Real, crosses U.S. Highway 101 from Via Real at the Santa Monica exit, and extends south down Plum Street to Carpinteria Avenue. The project's regional and site locations are shown on Figure 1.

5.0 PROJECT SPONSOR'S NAME AND ADDRESS:

Carpinteria Valley Water District
1301 Santa Ynez Avenue
P.O. Box 578
Carpinteria, California 93014

6.0 GENERAL PLAN DESIGNATION:

El Carro Well Site - Open Space/Recreation (OSR)

Central Zone Pipeline Segments - OSR (where the pipe crosses El Carro and Franklin Creek Park sites) and Public Facility (PF); Low Density Residential (LDR), Medium Density Residential (MDR), Public Facility (PF), Transportation Corridor, and General Commercial (GC) within road rights-of-way and adjacent to the channelized portion of Santa Monica Creek.

7.0 ZONING:

El Carro Well Site - Recreation (Rec)

Central Zone Pipeline Segments – Rec for portions of pipe not within street rights-of way at El Carro Park and Franklin Creek Park, Community Facility (CF), Single Family Residential (7,000 square feet minimum net lot area) (7-R-1), Public Utilities District (UT), Commercial Planned Development/Residential (CPD/R).

8.0 DESCRIPTION OF PROJECT:

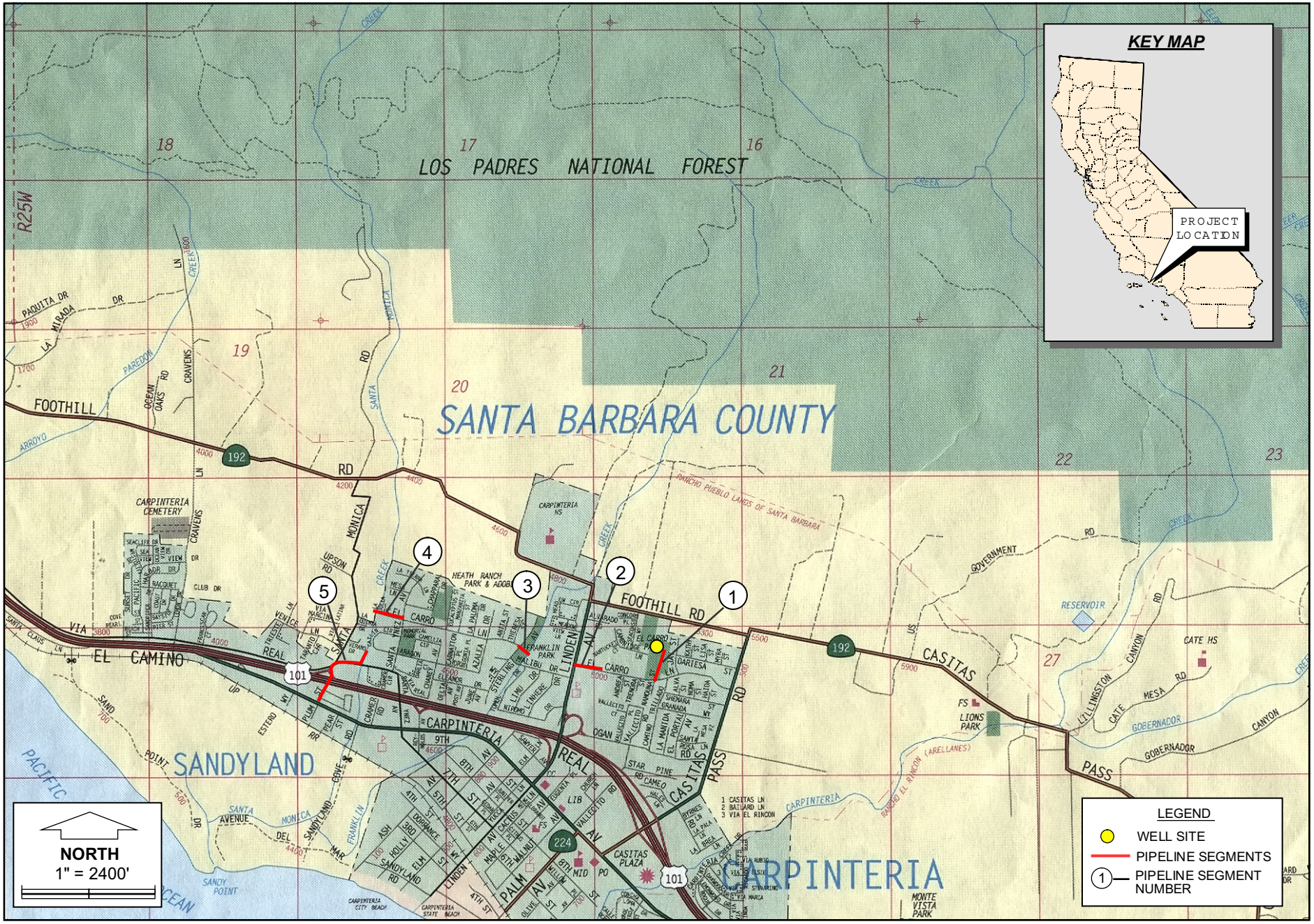
8.1 Background

The CVWD serves an area totaling approximately 11,380 acres within the City of Carpinteria and unincorporated Santa Barbara County. CVWD water supplies are derived from local groundwater, and Lake Cachuma and State Water Project entitlements. Presently the CVWD has three wells in production. The maximum capacity of its Headquarters, Lyon and Smillie, wells is 3.40 MGD. At an operation rate of 70 percent, these well can provide the CVWD with 2,631 AFY or 2.3 MGD. Current Lake Cachuma and State Water entitlements (including drought buffer) allow the CVWD an additional 5,013 AFY. Direct customer demand from 2002 to 2007 is estimated to average 4,196 AFY. Existing supplies are adequate to serve customer demand at this time.

Table 1 below identifies the major components of the District's system. The system includes a components owned by the United States Bureau of Reclamation (USBR) as indicated below.

The proposed replacement well site is also the site of the existing, but inactive (failed) El Carro Well and treatment facility. The original well was constructed in the fall of 1990 in response to the severe drought of the 1980's. The original well included pumping and disinfection facilities; however, the well remained idle because of high levels of manganese (Mn) until late 1997 when a Mn filtration system was constructed at the site. The initial production rate for the well was set at 1,050 gpm; however, production declined to under 800 gpm by the year 2000. Well rehabilitation was performed in 2000 with limited success. Pumping of the well was ultimately terminated in the spring of 2004 due to excessive

December 2007
Project No. 0702-2831



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CVWD - El Carro Well

REGIONAL AND PROJECT LOCATIONS MAP
FIGURE 1

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sand production in the well. Based upon the results of video inspection and testing of the well, this sanding was believed to be the result of enlarged screen perforations and corrosion of the carbon steel casing and screens.

Table 1. CVWD Facilities Summary

Item	Description	Ownership
Production Facilities		
Smillie Well	0.26 MGD Production Well	CVWD
Lyons Well	1.08 MGD Production Well	CVWD
High School Well	0 MGD Production Well/ inactive	CVWD
El Carro Well	0 MGD Production Well/ inactive	CVWD
Headquarters Well	2.02 MGD Production Well	CVWD
Conveyance Facilities		
South Coast Conduit	27" transmission main, 28,000 ft.*	USBR
Distribution Mains**	4"-12", 75 miles total	CVWD
Pump Stations (4)**	Gobernador, Shepard Mesa, Lateral 10, and Smillie	CVWD
Storage Facilities		
Carpinteria Reservoir	14 MG, Covered (380 elev.)	USBR/CVWD
Gobernador Reservoir**	0.5 MG, Covered (610 elev.)	CVWD
Shepard Mesa Tank**	0.05 MG, Elevated Tank (760 elev.)	CVWD

* Portion within CVWD boundary.

As indicated above, over half of the CVWD's water supplies are currently imported from sources outside of the CVWD's boundaries. All imported water (both Cachuma Project and State Project Water) is conveyed to the CVWD through the United States Bureau of Reclamation's South Coast Conduit (SCC). In addition to conveying all of the CVWD's imported water entitlements, the SCC also is the main conveyance conduit for the Goleta Water District, the City of Santa Barbara, and the Montecito Water District. The CVWD lies at the terminus of the SCC, therefore, there are three water agencies with 28 turnout connections prior to the CVWD's first point of connection. This conveyance situation constitutes a geographic and hydraulic supply reliability constraint for delivery of these imported water supplies.

On an annual basis, the groundwater and imported water supplies available to the CVWD have historically met the District's needs and are projected to provide adequate entitlements until at least 2025, based upon current water use trends. Although the annual entitlement of water to CVWD is adequate from an annual allotment standpoint, the District is limited in its ability to produce and/or convey this water at rates sufficient to meet instantaneous peak demands. Existing District storage is inadequate to meet the water supply shortfall during prolonged, intense peak periods, (i.e., the periodic 3-5 day "heat wave" periods along the South Coast when all water purveyors simultaneously experience sustained high demands).

Additional local production is needed to meet these short term demands, as well as to add system reliability if other wells are out of service.

8.2 Project Objectives

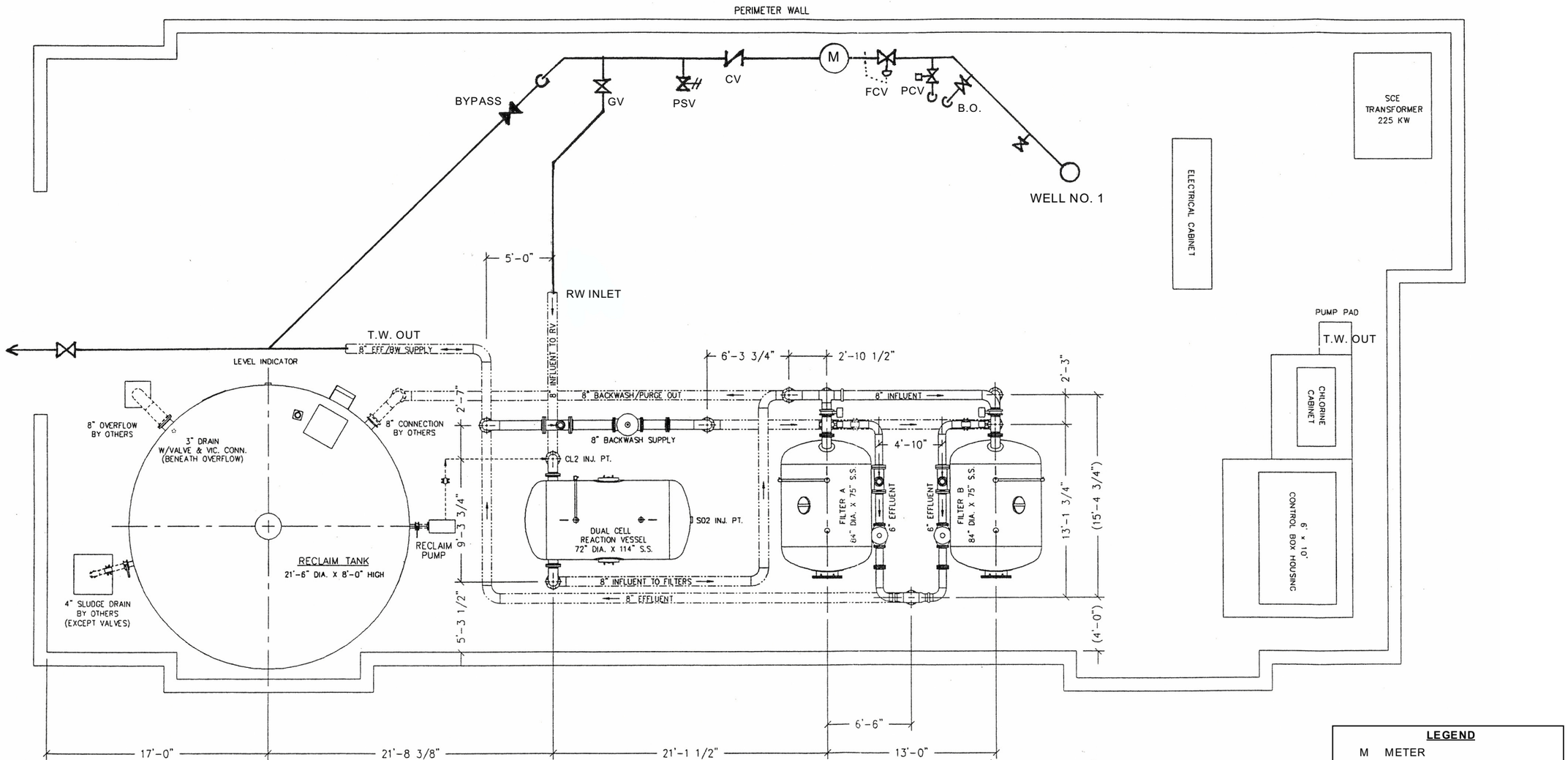
The replacement El Carro Well is proposed to increase the District's current groundwater production capacity by restoring lost capacity and therefore increase blending capacity to reduce the impact of Cachuma water which has high levels of disinfection byproducts. As such, the project would increase the quality of the drinking water for District customers and reduce the District's reliance on imported water. Additionally, the proposed well is proposed to enhance the reliability of the District's groundwater production capability by adding redundancy to the system.

The pipeline improvements in the Central Zone are proposed to improve water movement through the District's water distribution system reducing the need to flush mains. These improvements are also proposed to facilitate improved drinking water quality for District customers. Central pressure zone customers will receive a greater percentage of groundwater which will result in reduced levels of disinfection byproducts in the water delivered to those consumers. It will also enable the District to target higher quality water to its residential and commercial (drinking water) customers. The improved hydraulics will lower pipeline velocities and thus reduce the scouring of pipe scale from the system, improving the aesthetic quality of the water, and lowering "red water" complaints from District customers. The elimination of dead ends and looping of mains will improve (.i.e., reduce) the overall age of water in the distribution system which also improves both the aesthetics and health benefits of the water.

8.3 Project Components

The project considered in this environmental document is the construction and operation of the proposed replacement El Carro Well and associated Central Pressure Zone pipeline improvements.

Proposed Replacement Water Supply Well Site Improvements. The proposed well would be constructed approximately 120 feet west of the existing well, which failed in 2004, and would allow for resumption of production associated with the old well (Figures 2 and 3 show the existing and proposed El Carro Well Site Plans). Based upon performance of the previous well and proposed improvements in the original design, the new well should be capable of producing the District's production target rate of 1,500 gpm (2.16 million gallons per day [MGD]). The well will consist of an 18-inch diameter casing set in a 30-inch borehole. The annulus would be gravel packed to retain the formation sands. Total depth would be



NORTH
1" = 8'-6"

LEGEND

M	METER
PSV	PRESSURE SUSTAIN VALVE
GV	GATE VALVE
CV	CHECK VALVE
FCV	FLOW CONTROL VALVE
PCV	PRESSURE CONTROL VALVE
BO	BLOW OFF VALVE

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CVWD - El Carro Well

EXISTING EL CARRO WELL SITE PLAN
FIGURE 2

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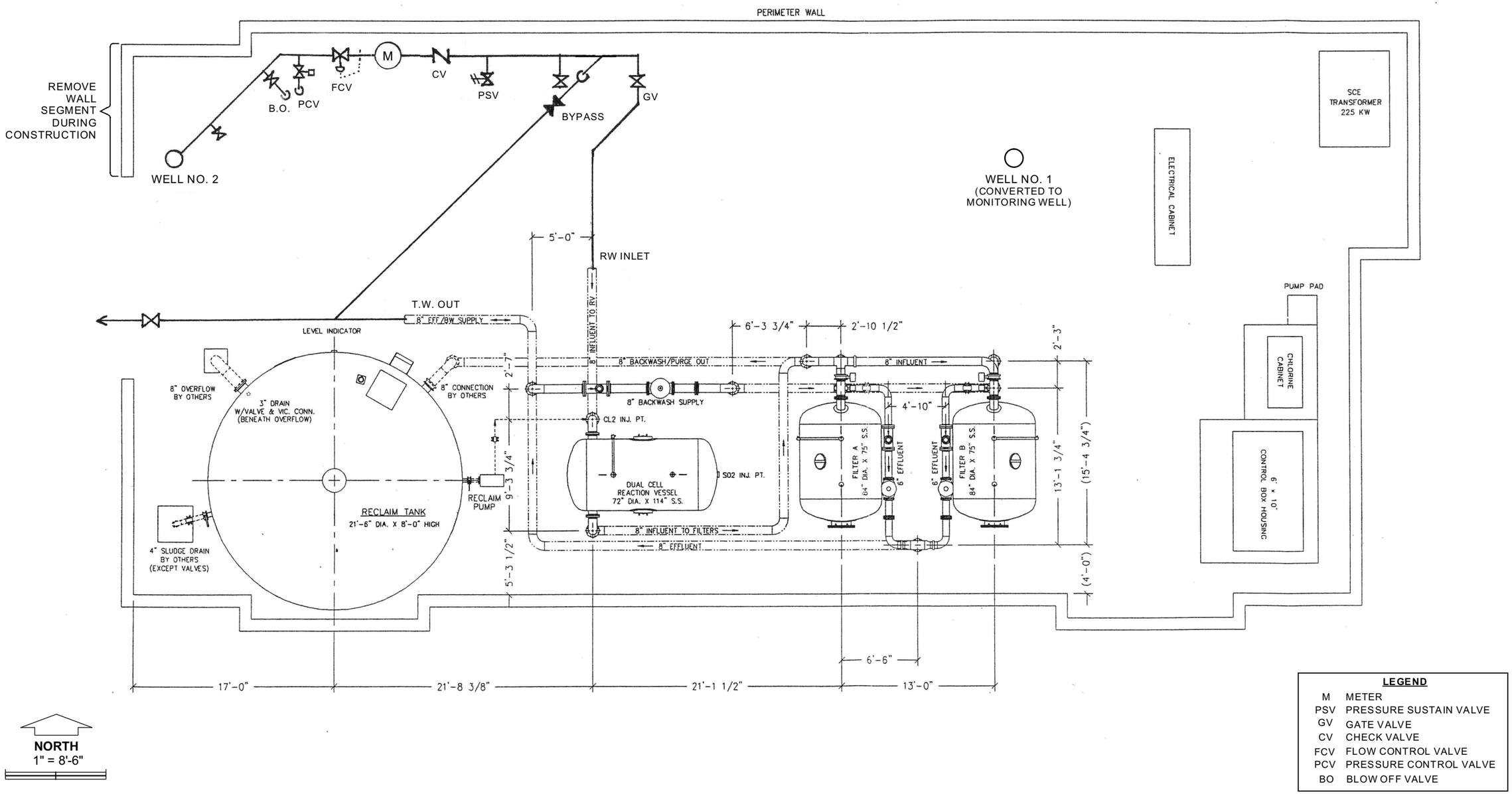

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CVWD - El Carro Well

PROPOSED EL CARRO WELL SITE PLAN
FIGURE 3

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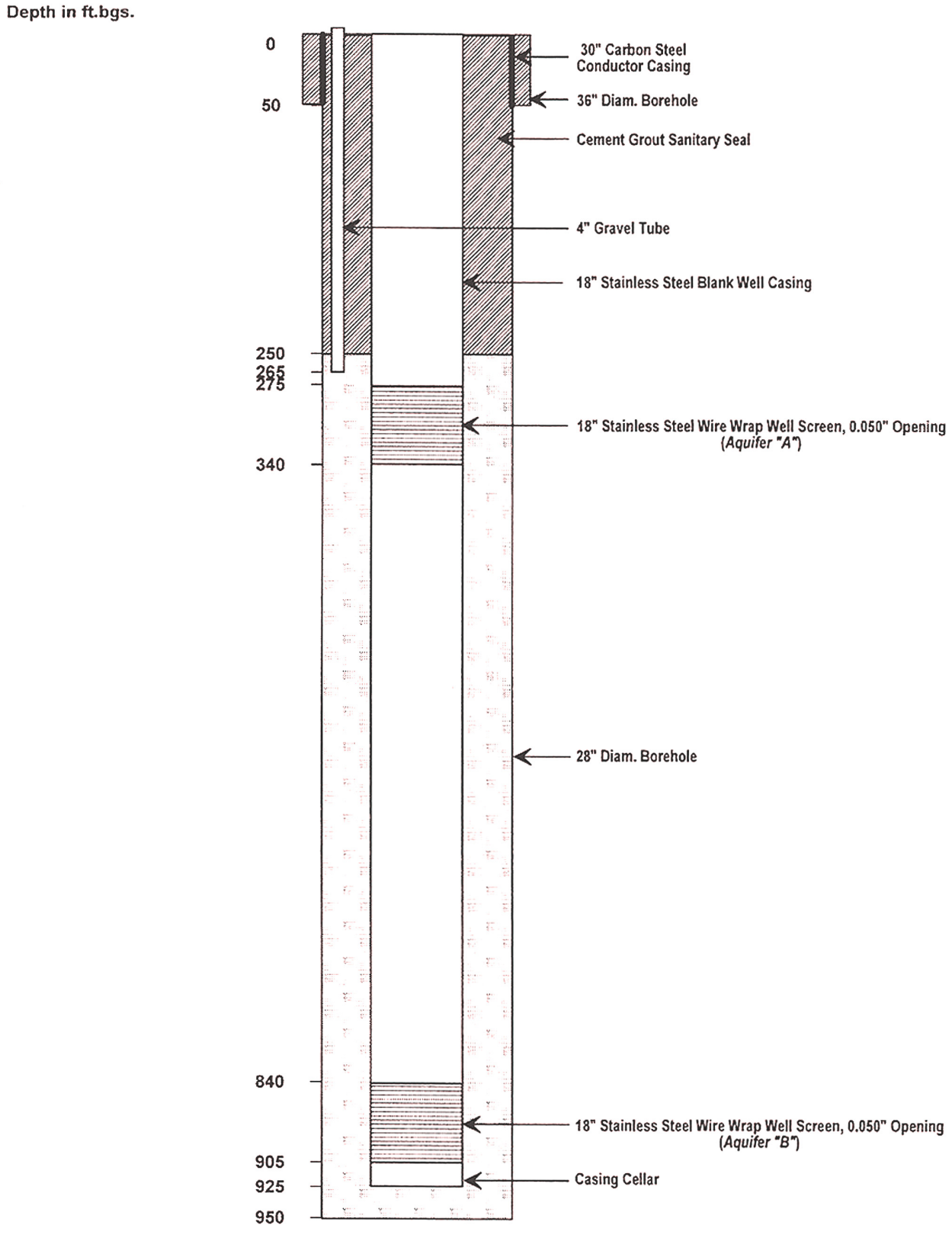

SOURCE: Pueblo Water Resources

PROPOSED WELL COMPLETION
EL CARRO WELL NO. 2
FIGURE 4

approximately 925 feet below ground surface and would be perforated to coincide with basin aquifers "A" (perforations at 275 to 340 feet) and "B" (perforations at 840 to 905 feet). (Figure 4 shows the Proposed Well Completion Diagram.) The well would be constructed in strict compliance with California Water Well Standards. The estimated life expectancy of the well would be 30 to 50 years.

The new design of the proposed well would be aquifer, storage and recovery (ASR) capable. In the event that in the future, based upon the well functioning and other factors to be evaluated, it is determined that the well is suitable to be used for ASR purposes, and the District decides to develop a project for such use, it will be subject to the California Environmental Quality Act (CEQA) at that time.

Prior to construction of the new well, the existing well will be converted into a monitoring well by installing a 4-inch diameter PVC casing and screen inside the existing well, and cementing the annulus to a depth of approximately 200 feet below ground surface. No pump is required for the monitoring well.

The replacement water well pump would be a vertical line shaft unit similar to the original well's pump. The pump motor would be 300 HP with a noise rating of 82 decibels (dB), A weighted, at a distance of three feet. The pump would be operating continuously for weeks or months at a time when water demand necessitates its use, followed by weeks or months of inactivity. Pump installation will be similar to the existing well (i.e., a vertical line-shaft turbine pump mounted above ground directly over the well casing). Although the pump will not be enclosed in a separate housing, it is situated within the existing 8-foot high block wall enclosure surrounding (with the exception of the gate on the western side of the site) the 0.8 acre site. This wall acts as a sound attenuation barrier as well as an aesthetic and security feature. The District has not received any noise complaints regarding the original well operations from 1990 through 2004.

The proposed project would also include implementing several repairs and upgrades to the existing Manganese (Mn) filtration system. With treatment, the well water would meet State drinking water standards pursuant to Title 22 California Code of Regulations (CCR). The existing filter system used sodium hypochlorite solution (12.5 percent bleach) to oxidize iron and manganese for subsequent adsorption and precipitation on a catalytic media filter bed. The system is similar to the existing treatment units at the High School and Headquarters wells. The existing system includes two filter vessels, a reaction vessel, a backwash system, piping and miscellaneous instrumentation. The proposed changes to the system include changing the existing pneumatically operated filter valves to electrically-actuated valves, upgrading system instrumentation and Supervisory Control and Data Acquisition (SCADA) communications, and possibly replacement of the granular filter media. The overall footprint of the system, throughput capacity, and chemical use will not change as a result of these modifications.

The existing facility already includes an 850-gallon sodium hypochlorite storage tank for a three week supply of chlorine for system operation, which is housed in a concrete double-containment basin with the capacity to contain the entire contents of the tank in the event of a

tank leak or failure per NFPA/UFC article 80. The hypochlorite is used for both oxidation/filtration and disinfection of the finished potable water.

Proposed Pipeline Improvements. The Central Zone pipeline improvements portion of the project is an upgrade and optimization of the District's main Central Pressure Zone (CPZ) by replacing undersized lines, completion of water main loops and intertie to the proposed El Carro Well directly into the CPZ. One new pipeline segment and four replacement segments of pipe are proposed. Pipes being replaced (four segments) range from 6-inch to 8-inch in diameter and are located in open space and along El Carro Lane, Via Real, across US 101, and along Plum Street. The oldest pipes (e.g. segment in Plum Street) were installed in the 1940s. New pipe (segment 1) would be installed from the replacement El Carro Well south along the east side of El Carro Park to El Carro Lane.

The existing pipe segments will be abandoned in place once the new segments are operational. The pipes will be cut on ends and filled with concrete.

Project Construction Details

Well Site Construction. Well construction activities would include: setting the well conductor, drilling a pilot hole, reaming the pilot hole, setting the well casing, filling of the well annulus with specialized graded silica gravel, developing the well, testing the well via pumping and finally cleanup and demobilization of equipment.

Well drilling is expected to require the following construction equipment:

- 1 - drill rig
- 1 - back hoe
- 1 - cement truck

Three to five employees will be required for the drilling operations. In addition, well construction may involve the removal and subsequent replacement of a 22 foot section of the existing 8-foot block wall enclosure to allow sufficient drill rig access.

Repairs and upgrades to the filtration system would include: installation of piping, electrical wiring instrumentation, and relocation of the existing catch basin within the existing site.

Filtration system construction and assembly is expected to require the following construction equipment:

- 1 – backhoe
- 1- crew truck
- 1- forklift

Three to six construction employees will be required for the filtration system repair and upgrade work.

No cut or fill operations would be required at the site. Staging of materials and equipment would be within the tank site and the adjacent paved area immediately west of the tank site.

Project construction is anticipated to begin in summer 2008, with development of the proposed well. This phase is anticipated to last about one month. Upgrades of the filtration system would follow in the fall of 2008 and would last about one month. Construction would occur between the hours of 7:00 a.m. until 4:00 p.m. with the exception of drilling which would be ongoing for 24 hours per day for an estimated seven days. To minimize noise impacts during well drilling operations, a 24-foot high sound dampening curtain (soundwall) will be erected around the site. The soundwall will be removed upon completion of well construction.

Pipeline Replacement / Installation. In general, the pipelines would be a potable water system of polyvinyl chloride (PVC) or cement-lined steel pipe and would be installed using conventional trenching methods.

The total length of pipe to be installed is approximately 4,000 linear feet (l.f.). New pipe will be from 12-inch to 16-inch depending on specific hydraulic needs. As stated above, five separate segments of pipe are proposed to be installed. The first segment is a new approximately 700 feet long main from the El Carro Well site to El Carro lane mainly located along the eastern boundary of El Carro Park. This pipe will not be a replacement line but a new line to connect the El Carro Well into the distribution system. The second segment is an upgrade of 680 feet of existing 8-inch pipe on El Carro Lane near Linden Avenue. The third segment is an upgrade of 570 feet of 6-inch pipe crossing under Franklin Creek, at Franklin Creek Park and Sterling Avenue. The fourth segment is an upgrade of 540 feet of 6-inch pipe at the west end of El Carro Lane. Finally, the fifth segment of pipe is an upgrade of 1,430 feet of 6-inch pipe along Santa Monica Creek (under a creekside trail), and Via Real (and over the creek at the Santa Monica Bridge), crossing U.S. 101 at Santa Monica Road on the north side of US 101 to Plum Street on the south side of U.S. 101, and then extending down Plum Street to Carpinteria Avenue. (See Figure 1 above and pipeline segment exhibits in Appendix A of this Initial Study).

Pipe construction methods will be conventional trenching for all segments of pipe excepting a 240 foot section under US 101 and segment 3 which will be completed using trenchless technology (e.g., horizontal directional drilling, jack and bore and microtunnelling). For conventional pipe installation, trenches will be approximately 4 feet deep and 3 feet wide. For trenchless pipeline installation, entry and exit pits for the equipment and pipe will be required and are estimated to be about 5 feet deep, 12 feet wide and 20 feet long.

Horizontal directional drilling can be used where open cut installations are not feasible such as road and river crossings. The process of installing a pipe using HDD is fairly straight forward. Using a HDD drill rig a hole is bored using a steel drill string with a steerable cutting head. Drilling mud is injected into the hole at the head to cool and lubricate the cutter, to push drill cuttings from the borehole, and stabilize the open hole. Once the drill head reaches its exit site, usually and exit pit, the cutting head is removed and a backreamer attached. A backbreaker is a head that is attached to the drill rod and is slightly larger than the pipe

diameter that will follow. The pipe string, usually fused HDPE, is attached to the backreamer through a weak-link device. As the drill string is pulled back through the hole, the backreamer enlarges the borehole and the pipe follows. The movement of the drill string and the pipe are monitored using handheld locators. The pulling load is also monitored so that the allowable tensile load on the pipe is not exceeded.

Jack and bore trenchless techniques can be used where relatively straight pipe runs are planned in which a conductor casing may be desirable. An example of this is major freeways where interrupting traffic is prohibitive. In these locations the Department of Transportation may not allow "uncontained" pipelines to exist in the right of way. Installing a conductor casing in this situation is ideal and jack and bore installation is an excellent technique. The process of installing a conductor pipe using this method is as follows. A pit is excavated approximately 30 ft. x 20 ft. X 8 ft. for staging pipe material and a drill rig. The drilling equipment is equipped with a guidance system that usually uses a laser to point the drill bit toward the target. Locating equipment is used to monitor the progress of the bore. Once the target direction is set, a conductor pipe is "jacked" into the side of the pit along the alignment several feet into the subsurface. Once the alignment is verified an auger is placed in the conductor to move material (soil) from the conductor to the pit. Once the conductor is cleared the pipe is then jacked several more feet and the process continues until the conductor has been advanced to the target. As the spoils accumulate in the pit equipment or labor can be used to keep the pit clear. If ground water is encountered, dewatering may be necessary.

Estimated total excavation quantities are as follows:

Cut	2,000 CY
Fill	1,350 CY
Export	650 CY

Traffic control measures will be used when work is within the lanes of traffic. Caltrans standard traffic control methods will be implemented for all project traffic control. Lane closures will be necessary where work needs to be conducted in the travel lanes of local roads.

The following construction equipment is anticipated to be required for installation of the proposed pipeline improvements.

(2) Rubber Tired Backhoes
(2) 4,000 Gallon Water Trucks
(3) Wheel Bucket Loader (rubber tired)
(2) End Dump Trucks
(2) Small Walk Behind Trench Soil Compactors
(3) 2-Ton Flatbed Work Trucks
(1) Air Compressor
(2) Generators
Concrete trucks

The lay down area will be at the District maintenance yard located at 1301 Santa Ynez Avenue, Carpinteria, California. The following materials/components will be utilized for project

construction: polyvinal chloride (PVC) pipe, bedding sand, ductile iron pipe (DIP) fittings, concrete, native backfill material, asphalt and valves.

Construction of each pipe segment can be done simultaneously but will likely be under one contract and done one segment at a time. The entire pipeline project will take approximately seven weeks to complete. Segment 5 will have the longest duration of four weeks in construction. Three to six construction employees will be required for the pipeline work.

Project Operations. Operation of the well and filtration system is fully automatic, and would be identical to previous operations at the site. Operators would visit the site every day for 10 to 15 minutes to record water quality and equipment status. Once per quarter the monitoring well would be checked. Once per year maintenance on the system would be conducted. No new employees would be needed at the District for operation of the proposed project.

Electrical, chemical and utility water use would be similar to previous levels when the original well and filtration plant was in operation. Filtration waste, consisting of about 1,200 gallons per day of water with manganese sulfate and manganese carbonate (approximate 100 ppm concentration) would be disposed of through the sewer system. This waste is non-hazardous and is fully compatible with the Carpinteria Sanitary District wastewater collection and treatment system, and identical to the waste stream originally permitted with CSD. Clean flush water from the well during start-up would be directed to the storm drain system.

Well production will likely be on a 24-hour per day basis, as necessitated by water demands in the community. During low demand periods or winter months the well may be idle for several weeks or months.

9.0 SURROUNDING LAND USES AND SETTING:

9.1 Surrounding Land Use

The El Carro Well site is located within the existing El Carro Park and directly behind the Girls. Inc. facilities. The El Carro Park includes ball playing fields, lawn area, play equipment, restrooms and a paved parking lot. Based upon limited observation (about 45 minutes) of park use during a winter weekday (11:30 A.M. until 12:15 p.m.), the park receives limited use during the week. However, it is assumed that the park receives significant use during weekends, holidays and during recreational ball games and practice. Girls Inc. is an organization that provides informal educational programs for girls. The Girls Inc. program operates from 1:00 p.m. until 6:00 p.m. and provides art, crafts and drama activities as well as time out of doors. From 4:30 p.m. until 6:00 p.m. the participants do homework inside. The Howard Carden School began operating from the Girls Inc. facility in 2000. Classes at the school are in session from 7:30 A.M. until 3:00 p.m..

Low density residential and agricultural uses are located adjacent to El Carro Park. Pipeline segment 1 extends through El Carro Park and next to residential uses along the eastern boundary of the Park.

Pipeline segment 2 is in a portion of El Carro Lane that is adjacent to public facility uses including Saint Joseph's church and facilities and an elementary school. A residential subdivision (Mission Terrace) is presently under construction on the western side of Linden Avenue at El Carro Lane.

Pipeline segment 3 is adjacent to residential, agricultural and open space uses (Franklin Creek Park), and a concrete-lined portion of Franklin Creek. The Mission Terrace residential development, presently under construction, is located east of the pipeline segment.

Pipeline segment 4 is in a portion of El Carro Lane that is adjacent to residential uses and ends at the Santa Monica Creek (which is in a concrete channel). A recreational trail extends along Santa Monica Creek in this area.

The fifth and final segment of the pipeline is in street rights-of way adjacent to general commercial uses (including such uses as gas stations, and food establishments) and residential uses. It also crosses over and is near a concrete-lined portion of Santa Monica Creek and within a portion of the adjacent paved trail. This pipeline segment would cross U.S. Highway 101 between the intersection of Via Real and Santa Monica Road on the north side of the highway and Plum Street on the south side of the highway.

9.2 Environmental Setting

As indicated above, the project is located within the City of Carpinteria and confined mainly to the El Carro Park and road rights-of way. The City of Carpinteria is self defined as a small, rural, southern California coastal community with family oriented residential neighborhoods and unique visual and natural resources (City of Carpinteria, April 2003). Additional setting information by issue area is provided under the evaluation of environmental impacts below.

9.3 Other Pending and Approved Development

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guidelines Section 15355). The individual effects may result from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related, past, present and reasonably foreseeable probable future projects. A project's cumulative impact is considered significant if the project's effect is considered to be cumulatively considerable as defined in Section 15065 (c) of the CEQA Guidelines.

Most of the impacts associated with the proposed project are short-term in nature. Therefore, for the purposes of evaluating cumulative impacts the City of Carpinteria was consulted with respect to public or private development projects that would potentially occur during the same time period as the proposed well project and in relative proximity to the project such that cumulative impacts may result. Based upon the City's Cumulative Project's list (dated January 2008) available on the City's web site the following projects (approved and proposed)

are located within about 2,000 feet of the El Carro Well and Central Zone Pipeline Improvement Project.

Approved:

- Mission Terrace, 27 single family residences, located at 1497 Linden Avenue. This project is presently under construction but is anticipated to be developed in phases over an extended period of time.

- Williamson, one new residential unit and second unit, located at 4980 Nipomo Drive.

- Lavender Court, 40 condominium units and 4,670 s.f. of commercial space, located at 4646 Carpinteria Avenue.

- Sparrow's Landing, demolition of one unit and construction of 8 new condominium units, located at 4367 Carpinteria Avenue.

- T-Mobile, Wireless Antenna, located at 420 Via Real.

- Carl's Jr. Restaurant, construct 514 s.f. addition, located at 4610 Carpinteria Avenue.

Proposed:

- Martinez, demolish one single family unit and construct 3 new units, located at 1055 Cramer Road.

- Vasquez, construct one new single family unit, located at 5160 El Carro Lane.

- McDonald, approved demolition of existing unit and construction of two condominium units, located at 4664 4th Street.

- Vasquez, proposed one new single family unit, located at 5160 El Carro Lane.

Additional projects are identified on the list provided as Appendix B to this Initial Study.

In addition, the CVWD has an ongoing tank and pipeline project at Rancho Monte Alegre (RMA) north of the intersection of Foothill and Santa Monica Roads. The RMA project was to include installation of a new 24-inch transmission pipeline in Foothill Road. However, this element of the RMA project is not anticipated to go forward and the presently proposed project will provide some of the benefits that would have been associated with the Central Zone Pipeline Improvements included in the CVWD 3 MG Tank and RMA Annexation Project evaluated in a Final Environmental Impact Report (FEIR) dated January 8, 2003. Elements of the RMA project presently under construction and proposed for construction in the foreseeable future (all located within RMA) including construction of access road improvements and

installation of pipe and associated infrastructure are not in close proximity to the proposed El Carro Well and Central Zone Pipeline segments.

The Carpinteria Sanitary District (CSD) General Manager was consulted with respect to planned projects in the vicinity of the proposed District project. CSD plans to replace/upsize a 10-inch diameter sewer that is in Plum Street from the Railroad tracks north under 101 to Santa Monica Road (Murray, personal communication, January 2007). This sewer project will extend east in Railroad right-of way to the pump station near Aliso School. The District may coordinate with CSD for utilization of the same construction site and equipment to install the segment of this sewer pipe under U.S. 101 and a portion of segment 5 (also under U.S. 101) of the proposed project.

A representative of Santa Barbara County Planning and Development Department was contacted to identify any pending or approved projects located within the unincorporated County area in proximity to the proposed project. The following projects were identified (Gibbs, personal communication, December 2007).

- Renovations to Cate School located at 1960 Cate Mesa Road are ongoing and anticipated to continue for the next two years.

- Three Carpinteria Creek restoration projects are planned for the upper reaches of Carpinteria Creek.

10.0 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (E.G., PERMITS, FINANCING APPROVAL, OR PARTICIPATION AGREEMENT.):

In addition to discretionary approval by the CVWD, a Coastal Development Permit from the City of Carpinteria and a ministerial California Well Driller's Permit from the County of Santa Barbara Department of Health Services are required for the project. CVWD is also applying for a Proposition 50 grant from the State Water Resources Control Board and Department of Water Resources to help fund the proposed project.

11.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

12.0 DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Charles J. Hamilton Date 4/2/08

Signature _____ Date _____

13.0 EVALUATION OF ENVIRONMENTAL IMPACTS:

13.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Setting:

The Santa Ynez Mountains rise steeply and provide a dramatic vertical backdrop for northerly views from the local area. Coastal foothills are viewed against the base of the mountains, and provide an open, rural feel to local views. The foothills have been largely developed with agriculture and scattered residences, intervened by local creeks and natural areas. Agricultural areas, stands of tall trees, coastal bluffs, beaches, and the ocean are important visual features to the south. Pleasing views of these important visual resources are available from many vantage points throughout the local area. Particularly important view points and corridors include public parks (e.g., El Carro Park, Tarpits Park, Carpinteria State Beach), roadways (e.g., U.S. 101, Carpinteria Avenue, State Route 150, etc.), the Union Pacific railroad line, and open space areas (e.g., the Carpinteria Bluffs) due to the number of potential viewers and/or the likely high value of aesthetics to viewers in these locations. U.S. 101 and State Route 150 are listed as eligible highways for scenic highway designation by the County of Santa Barbara.

As indicated above, the El Carro Well facility is located in El Carro Park. However, the facility is blocked from public view by an 8-foot block wall with vegetative plantings (trees and shrubs) on the south and east sides and buildings on the north. The interior of the facility can be seen through the gate on the western side. The character of the existing CVWD El Carro Well is typical of a public works facility and includes a reclaim water tank, reaction vessel, filters, control box, electrical cabinet well head, piping and miscellaneous related minor facilities all enclosed by the block wall and gate.

The areas proposed for pipeline replacement or new pipe installation are mainly within road rights-of-way or park land (El Carro Park and Franklin Park). In all cases the existing pipelines are subsurface (except at Santa Monica and Franklin Creeks where the existing pipes are presently located above the creeks).

Impact Discussion:

a) Construction of the well and pipeline replacement/installation would result in short-term exposure of viewers to construction equipment materials and in the case of the pipeline work exposed soils. In no case would the work completely block views of the foothills, ocean or creeks from any vista point. Because the project would have very limited effects on views of scenic vistas and due to the short duration (two months for well work and about seven weeks for all five pipeline segments), the short-term visual impact on scenic vistas is considered less than significant.

   The proposed well and filtration facility are existing facilities. The modifications proposed under this project would not alter the facility in a way that would impact views of scenic vistas such as the foothills to the north.

b) Construction activities for installation of pipeline segment 5 may be visible from U.S. 101 which is eligible for listing as a scenic highway; however, no scenic resources would be damaged. Upon construction, no element of the project will be seen from any officially designated or eligible state scenic highway.

c) Construction of the well and pipeline replacement/installation would result in short-term exposure of viewers to construction equipment materials and in the case of the pipeline work exposed soils. This is considered an adverse effect on the scenic quality of the construction sites and surroundings as in all cases they would be visible to the public. However, because of the short-term duration of the project construction this impact is considered less than significant.

   Well construction at El Carro Park will require the removal of a portion of the western portion of block wall around the well site to allow equipment access as shown on Figure 3. Entry of large equipment would like damage branches of a mature tree which overhangs the northern wall of the well site. Damage to tree limbs can result in adverse health effects on trees which impacts their overall visual appearance. Because of the visual sensitivity of public parks, this is considered a potentially significant adverse visual impact of the project.

The installation of pipeline segment 1 is proposed to be within the access road/trail on the western side of El Carro Park. There are several large (approximate 18-inch in diameter) sycamore trees and about 20 smaller (approximate 6-inch in diameter) sycamores along the access road. Additionally, two mature pines and three broadleaf ornamental trees are also located along the access road, and one large ornamental tree is located on private property west and adjacent to the park wall along the western park boundary. Approximately five living and one dead young (approximately 4-inch in diameter or less) sycamores are located along the path which is an extension of the access road. Based upon the current alignment pipeline installation would avoid trees and shrubs. However, trenching may be as close as 10 feet to the large sycamores and ornamental on the access road and as close as about 6 feet to the smaller sycamores along the path. Trenching causes the complete loss of the root system outside of the trench area away from the tree trunk. This may impact the health of the existing trees. Additionally, inadvertent damage to tree limbs or trunk can lead to a future decline in tree health. As trees and other vegetation are part of the aesthetic appeal of the park, impacts to vegetation are considered adverse and potentially significant aesthetic impact if the trees are damaged to the point where they would not survive or would experience a substantive decline in health.

Pipeline segment 3 installation is proposed to be conducted using trenchless methods under Franklin Creek and Franklin Creek Park. The pipe would be located between approximately 20 feet below surface near Franklin Creek to about 4 feet below surface near Sterling Avenue. Therefore, pipe installation at this location would result in limited impacts to vegetation in Franklin Creek Park including limited subsurface root damage to several ornamental shrubs along the southern park boundary and three large sycamores (18-inch, 34-inch and one two trunk specimen with 29-inch and 27-inch in diameter trunks) located about 15-feet from the proposed pipe. Additionally, one shrub would need to be removed at the location of the pit to be located at the southwestern corner of the park which is required for pipe installation through the trenchless method. It is anticipated that this pit would be 3 ft. by 3 ft. by 4 ft. deep. Vegetation including trees provide the aesthetic quality of Franklin Creek Park, as such this limited impact is considered an adverse and potentially significant aesthetic impact. However, it should be noted that the existing above-surface segment of pipe that extends over Franklin Creek would be removed. This is a beneficial aesthetic impact of the project.

The new and replacement pipelines would all be subsurface and therefore, not visible with the exception of the replacement portion over the Santa Monica Creek. The portion over Santa Monica Creek is obscured by the bridge and is not noticeable. Therefore, the pipes themselves would not create any long-term significant aesthetic impact, and as stated above, the removal of the above-ground segment at Franklin Creek would result in a beneficial impact.

d) New sources of nighttime lighting are not anticipated to be needed for the project. If any new light is installed it would be focused onsite. No construction that would create a source of glare is proposed.

Aesthetic impacts associated with the project are not considered to be cumulatively significant as there are no other known projects that would also adversely impact the aesthetics of either the El Carro or Franklin Creek Parks.

Mitigation and Residual Impacts:

a-b) No significant impacts would result; therefore, no mitigation is required.

c) The following mitigation shall be implemented to reduce impacts to a less than significant level, although a short-term residual aesthetic impact may result during the period that vegetation is being reestablished.

AES1 CVWD shall retain a certified arborist to advise the District and construction staff on methods to minimize damage to trees and shrubs at the El Carro and Franklin Creek Parks. The arborist shall visit the sites and consult with the District, prior to project implementation to provide recommendations to protect tree and shrub health. Avoidance shall be the preferred method of minimizing impact to trees and shrubs where feasible and not causing new or substantially more severe impacts in other environmental issue areas (e.g., traffic). Tree protection strategies may include: 1) installation of root protection zone barricades; 2) invigoration of trees prior to construction by use of a light fertilizer and water; and 3) pre-cut roots at limits of construction to prevent tearing by equipment; and 4) provide aeration of the root zone. The arborist shall also be onsite during any elements of the project that will result in impacts to trees and shrubs to ensure that construction techniques and tree protection measures implemented follow the arborist's recommendations and to provide onsite advice, if determined necessary by the consulting arborist. Pruning of any trees shall be in accordance with industry standards (International Society of Arboriculture or ANZI 133.1)

AES2 CVWD will coordinate with the City of Carpinteria Parks and Recreation Department to develop a revegetation plan to offset damage to and or removal of trees (not currently anticipated), shrubs and other plantings within the El Carro and Franklin Creek Parks. At a minimum, any vegetation that is permanently destroyed will be replaced on a 1:1 basis (based upon a cross sectional area for trees, meaning that the trunk cross-sectional area is estimated for trees to be removed and an equivalent number of trees must be planted to provide the same cross-sectional area).

d) No significant impacts would result; therefore, no mitigation is required.

13.2 Agricultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Setting:

Agriculture is an important land use and economic enterprise within the County of Santa Barbara and City of Carpinteria. As indicated above, the project impact area is limited to the existing El Carro Well site, existing pipeline alignments and a short new segment of pipeline corridor that would extend through El Carro Park. Based upon a review of the Soil Survey of Santa Barbara County, California, South Coastal Part, soils at the El Carro Park are Goleta loam 0-2 percent slope (GdA). These soils have a capability classification of I. Soils with a capability classification of I or II are generally considered to be prime agricultural soils. Soils at Frankin Creek Park are Camarillo Variant, fine sandy loam (Cb). The capability unit of this soil is IIIw-2. However, no portion of the project site is in agricultural production.

Impact Discussion:

a) The City of Carpinteria Environmental Review Guidelines (1994 as amended 1997) thresholds states the following which is used herein as guidance for the assessment of agricultural impacts. *In the absence of any specific General Plan policies which would restrict development in agricultural lands, the following general thresholds may apply to agricultural lands within City of Carpinteria boundaries:*

- *Development proposed on any property five acres or greater in size with a Prime Agricultural Soils designation may represent a significant environmental impact.*
- *Development proposed on any property in an Agricultural Preserve would represent a significant environmental impact.*
- *Development proposed on any property which in the past five years has been in agricultural production and which is agriculturally zoned may represent a significant environmental impact.*
- *Development of 10 more acre non-prime parcels may be significant due to historical use or surroundings (conversion may make adjacent agricultural land ripe for conversion).*

The proposed well project would not result in the conversion of agricultural soils of prime, unique or statewide importance because it would be sited within an existing developed facility. Most of the pipeline work will be upgrading of existing pipeline in road rights-of-way. However, a segment of new pipe would be installed within El Carro Park. Soils at the park site are considered prime; however, the site is an established park. It is possible that at some future date the City may select to allow community gardening at the site, in which case the pipeline may constitute a minor constraint. However, the pipeline segment (1) would impact less than a quarter acre of land; therefore, impacts to special agricultural land are considered less than significant.

b) The proposed project is not within an area zoned for agriculture, nor is it under an agricultural preserve contract.

c) The project would not result in a change of land use at the site or surroundings. CVWD already provides water service to agricultural areas adjacent to the proposed pipeline upgrade of segment 4, thus water availability is not a constraint to agricultural conversion in the area. Therefore, it would not directly or indirectly result in the conversion to farmland to non-agricultural use.

The project would not considerably contribute to cumulative impacts to agricultural resources.

Mitigation and Residual Impacts:

a-c) No significant impacts would result, therefore, no mitigation is required.

13.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

13.3.1 Setting

Regulatory Setting. The project site is located in the City of Carpinteria within the South Central Coast Air Basin (SCCAB) which encompasses three counties: San Luis Obispo, Santa Barbara and Ventura. The Santa Barbara County portion of the SCCAB periodically fails to meet air quality standards and is a designated "non-attainment" area for:

- State 8-hour ozone standard; and
- State particulate matter (PM10) standard;

Air pollution control is administered on three governmental levels. The US Environmental Protection Agency (USEPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and the Santa Barbara County Air Quality Pollution District (SBCAPCD) shares responsibility with the ARB for ensuring that all State and Federal ambient air quality standards are attained within the Santa Barbara County portion of the SCCAB.

The SBCAPCD adopted the 2007 Clean Air Plan in August 2007. This Plan addresses maintenance of the Federal 8-hour ozone standard and attainment of the State 1-hour ozone standard. Overall, air quality in Santa Barbara County is improving, with no exceedances of the

Federal 8-hour ozone standard or State 1-hour ozone standard recorded in 2005, and only 1 in 2006.

Local Air Quality. The ARB and SBCAPCD operate an ambient air quality monitoring station in Carpinteria, located approximately 1.6 miles east of the El Carro well site. Air quality data collected at this station from 2004 through 2006 indicate:

- The State 1-hour ozone standard was exceeded on only 1 day (9/18/06) during this period; and
- The Federal 8-hour ozone standard was exceeded on only 1 day (9/6/04) during this period.

Thresholds of Significance. The air quality impacts of the proposed project would be limited to construction. The SBCAPCD has developed thresholds to determine the significance of operational (long-term) air emissions under CEQA. No quantitative thresholds have been established for short-term, construction-related air quality impacts.

13.3.2 Impact Discussion

a. The proposed project would return the El Carro well to service, increasing the amount of potable water available. However, water availability does not presently impede growth in Carpinteria such that growth inducement is not anticipated as a result of the well replacement. Additionally, the upgrade of the pipeline segments would not make water available to areas not presently served. As such, no conversion of adjacent agricultural land (pipeline segment 5) is anticipated to result from the pipeline upgrade component of the project. The proposed project is consistent with the emissions inventory and assumptions used to prepare the 2007 Clean Air Plan, and would not obstruct implementation of the Plan.

b. The proposed project would generate emissions during construction. However, the magnitude of these emissions (see item c. below) would be small and limited to a two month construction period. Ozone is a regional pollutant as it is formed in the atmosphere, and the project's contribution to regional ozone precursor emissions would be negligible. Therefore, exceedances of air quality standards or substantial contributions to existing air quality standard exceedances are not expected.

   Greenhouse Gases. The American public and government have recently become concerned about greenhouse gas (GHG) emissions and their effects on global climate change. In 2006, the California State Legislature signed AB 32 which charged the CARB to develop regulations on how the state would address global climate change (also known as "global warming"). CARB, the State EPA, the U.S. EPA, or other appropriate governmental organizations have not yet developed guidelines on how to prepare an impact assessment for global climate change. Additionally, there are currently no published thresholds for measuring the significance of a project's cumulative contribution to global climate change. An individual project does not generate enough greenhouse gas emissions to

significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases. In view of the lack of appropriate thresholds of significance for a project's contribution to global warming, this analysis relies on an assumed correlation between the project's emissions for criteria pollutants as evaluated above, and GHG emissions. Because the project's criteria pollutant emissions (NOx and ROC), are less than significant, it is assumed the project's GHG emissions, while adverse, would likewise be less than significant.

c. Project-related peak day ozone precursor emissions during well drilling (24 hours per day) would be approximately 239.6 pounds NOx and 16.6 pounds ROC. Project-related peak day ozone precursor emissions during pipeline installation would be approximately 121.9 pounds NOx and 11.7 pounds ROC. These values are negligible and short-term, and are considered less than significant. However, construction activities (well drilling and pipeline installation) would generate particulate emissions, which may be considered significant due to existing non-attainment of the State PM10 standard. (See Appendix C to this Initial Study.)

d. Construction activities (pipeline installation and well drilling) would result in emissions of diesel particulate matter from construction equipment and heavy-duty trucks. Diesel particulate matter is considered a toxic air contaminant by ARB. However, exposure to diesel particulate matter would be limited due to the short duration of exposure (a few days at any one location) and low PM10 emission rate (6.9 pounds per day during pipeline installation). Impacts of air emissions on sensitive receptors are considered less than significant.

e. Diesel exhaust would be generated during project construction, and may be considered to have an objectionable odor by sensitive individuals. However, exposure to such odors would be limited due to short duration and magnitude of exhaust emissions. Odor impacts are considered less than significant.

13.3.3 Mitigation

a.-b. No significant impact would result therefore no mitigation is required.

c. The following measures are taken from Scope and Content of Air Quality Sections in Environmental Documents developed by the SBCAPCD (2007) and would be implemented by the District and it's construction contractor.

AQ1 During construction, water trucks will be used to keep all unpaved areas of vehicle movement damp enough to prevent dust from leaving the site.

AQ2 The amount of disturbed area will be minimized, and vehicle speeds on unpaved roads will be reduced to 15 mph or below.

AQ3 Gravel pads will be used as needed to prevent tracking of mud onto public roads.

AQ4 Stockpiled earth material will be watered as needed to minimize dust generation.

AQ5 Trucks transporting earth materials will be tarped or maintain a minimum 2 foot freeboard.

AQ6 The District will designate a person to monitor dust generation, with the power to increase watering or implement other measures to reduce off-site transport of construction-related dust. The dust monitor will be available during non-work hours to respond to dust-related complaints. The name and phone number will be provided to the SBCAPCD.

d.-e. No significant impact would result therefore no mitigation is required.

13.4 Biological Resources

Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Setting

The replacement well site is paved and protected by a masonry block wall. The pipeline segment 1 alignment is located within El Carro Park, and would traverse an existing access road and path on the western side of the park. The access road and path in El Carro Park is lined by numerous sycamores and ornamental trees. The pipeline segment 2 alignment is entirely located within the El Carro Lane right-of-way, and does not traverse any vegetation or wildlife habitat. The pipeline segment 3 alignment traverses the Mission Terrace residential development construction site, Franklin Creek Park and Sterling Avenue. Along the western boundary of the Mission Terrace development site is a row of Myoporum (20 ± feet in height). There are a variety of native and non-native ornamental trees located in Franklin Creek Park. Native trees in Franklin Creek Park that are in proximity to the existing and proposed pipeline segment 3 alignments include three mature western sycamore trees (*Platanus racemosa*) (18-inch, 34-inch and one two trunk specimen with 29-inch and 27-inch in diameter trunks) near the southern boundary of the park, and an immature 5-inch diameter western sycamore about 30 feet south of the proposed pipeline alignment. Franklin Creek consists of a rectangular concrete channel at the existing and proposed pipeline segment 3 alignment. The existing pipe would crosses Franklin Creek over the box channel. The pipeline segment 4 alignment is located within the El Carro Lane right-of-way, and terminates at the bike path along Santa Monica Creek which consists of a rectangular concrete channel at this location. The pipeline segment 5 alignment is located along a portion of the bike path adjacent to Santa Monica Creek, and along Via Real and Plum Street. Pipeline segment 5 would be located under U.S. 101, and installed using trench-less technology. Most of the segment 5 alignment consists of pavement.

Impact Discussion

a. Special-status species known from the City of Carpinteria and adjacent areas include:

Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*): Federal Endangered, State Endangered;

Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*): Federal Endangered, State Endangered;

Coulter's saltbush (*Atriplex coulteri*): California Native Plant Society (CNPS) List 1B (rare & endangered in California);

Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*): CNPS List 1B

Nuttall's scrub oak (*Quercus dumosa*): CNPS List 1B;

Monarch butterfly (*Danaus plexippus*): California Special Animal;

Globose dune beetle (*Coelus globosus*): California Special Animal;

Tidewater goby (*Eucyclogobius newberryi*): Federal Endangered, California Species of Special Concern;

Southern steelhead (*Oncorhynchus mykiss*): Federal Endangered, California Species of Special Concern;

Belding's savannah sparrow (*Passerculus sandwichensis beldingi*): State Endangered;

Western snowy plover (*Charadrius alexandrinus nivosus*): Federal Threatened, California Species of Special Concern;

Light-footed clapper rail (*Rallus longirostris levipes*): Federal Endangered, State Endangered;

White-tailed kite (*Elanus caerulus*): California Species of Special Concern;

Loggerhead shrike (*Lanius ludovicianus*): California Species of Special Concern; and

Cooper's hawk (*Accipiter cooperi*): California Species of Special Concern.

(See Appendix D to this Initial Study for a complete California Department of Fish and Game Natural Diversity Database Location Summary Report for the Carpinteria Quadrangle.)

Each of the project sites (well site and pipeline alignments) are located within suburban areas, mostly within roadways. Habitat within and adjacent to the project sites is limited to landscaping, mostly comprised of turf-grass and scattered landscaping trees. Suitable habitat for special-status species does not occur within the project sites; therefore, impacts to these species are not anticipated.

b. Pipeline segment 3 would cross under Franklin Creek, pipeline segment 4 would terminate near Santa Monica Creek, and pipeline segment 5 crosses over Santa

Monica Creek at the bridge on Via Real. However, both creeks consist of rectangular concrete-lined channels within the project area, and do not support riparian habitat. No other sensitive natural community occurs within or adjacent to the project sites. Impacts to sensitive natural communities are not anticipated.

c. As discussed under part b., both Santa Monica Creek and Franklin Creek are concrete-lined and do not support federally-protected wetlands. However, regionally important wetlands (Carpinteria Salt Marsh) occur downstream of the project sites. The project would not result in the direct filling or removal of these wetlands. Additionally, the project-related increase in groundwater extraction would not adversely affect these wetlands, as the hydrologic regime supporting these wetlands is dominated by tidal flows. The project would not have an adverse affect on the Carpinteria Salt Marsh or other federally protected wetlands.

d. As the local creeks have been converted to vertically-sided concrete channels, they do not function as wildlife movement corridors. There are no wildlife corridors within or adjacent to the project sites, and the project is not expected to have an impact on wildlife movement corridors or known nursery sites. The project would need to comply with the Migratory Bird Treaty Act which protects all migratory birds and their parts (including eggs, nests, and feathers).

e. The City of Carpinteria Environmental Thresholds considers native trees to be biologically valuable and non-native trees to be potentially valuable depending on habitat provided, size, quality and historic value. No trees are proposed for removal as part of the proposed project. Trenching for pipeline segment 1 would affect the root zone of several mature and immature sycamore trees and ornamentals. Trenchless pipeline installation which would be used for segment 3 is preferable to installation using trenching, but may encroach into the root zone of three large sycamores located about 15 feet north of the pipeline alignment. Installation of pipeline segment 4 would slightly encroach into the root zone of a very large western sycamore (approximately 70” in diameter); however, only a very small portion of the root system would be affected and no adverse effects to this native tree are expected. Installation of pipeline segment 5 may slightly encroach into the root zone of a western sycamore located at the corner of Plum Street and Carpinteria Avenue; however, only a very small portion of the root system would be affected. However, in no case is the root damage expected to be fatal to any biologically valuable trees. Therefore, these impacts are considered less than significant.

f. The project would not result in any impacts to special-status species or sensitive natural community, and would therefore not conflict with the provisions of any Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). In addition, no HCP or NCCP has been adopted in the immediate area.

The proposed project may contribute to cumulative impacts associated with loss of native trees.

Mitigation

a.-f. No significant impact would result therefore no mitigation is required. Mitigation measures AES1 and AES2 provided in Section 13.1 would further reduce impacts to biologically valuable trees.

13.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 5064.5 of the CEQA Guidelines?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Setting:

Archaeological and Historical Resources. The project area lies within the historic territory of the Native American group known as the Chumash. The Chumash occupied the region from San Luis Obispo to Malibu Canyon on the coast, inland as far as the western edge of the San Joaquin Valley, and the four northern Channel Islands. The Chumash are subdivided into factions based on six distinct dialects: Barbareño, Ventureño, Purisimeño, Ynezeño, Obispeño, and Island. Carpinteria is located within historic Barbareño territory.

Archaeological resources are the material remains (artifacts, structures, refuse, etc.) produced purposely or accidentally by members of prehistoric cultures. A unique archaeological resource is an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is demonstrable public interest in that information.
2. Has a special and particular quality such as oldest of its type or best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A Phase I Cultural Resources Investigation was conducted for the proposed project by Conejo Archaeological Consultants and is summarized below. The study findings are documented in Phase I Cultural Resources Investigation of Approximately 4,000 Linear Feet (2.5-acres) for the El Carro Well Replacement and Central Zone Pipeline Improvement Project Carpinteria, Santa Barbara County, California (Conejo Archaeological Consultants, December 16, 2007) and Addendum 1 to that report (Conejo Archaeological Consultants, March 20, 2008. These reports are available for review in their entirety at the District office located at 1301 Santa Ynez Avenue, Carpinteria, California and are herein incorporated by reference. The Phase I Cultural Resources Investigation consisted of a record search, Native American Heritage Commission (NAHC) and Native American consultation, and pedestrian survey conducted by Mary Maki, principal of Conejo Archaeological Consultants. The Addendum addresses a realignment of pipeline segment 1 after preparation of the December 2007 cultural report, but before the preparation of this Initial Study.

Ms. Maki conducted the project record search at the Central Coast Information Center (CCIC) the of the California Historical Resources Information System on Dec 4, 2007 and found that four prehistoric sites and one historic archaeological site are located within a 0.5-mile radius of the project site as described below.

CA-SBa-8 was recorded as the historic Chumash village of Teneknes by David Banks Rogers in 1929. Rogers plotted the village on the west side of the Carpinteria Salt Marsh's ocean outlet and writes:

"Near the extreme outer angle of the low point of land upon which are located the beach cottages of Sandyland, two miles west of Carpinteria, one may see, at a few spots, evidences of the former existence of an extensive Canalino village. This is now almost obliterated by encroaching sand dunes. This is probably the site of old "Teneknes," tentatively located near here on Kroeber's map."

CA-SBA-8 was later recorded at Sand Point along the eastern bank of the Carpinteria Salt Marsh's ocean outlet by Larry Wilcoxon in 1974.

Site CA-SBa-8 is located at the outer edge of the 0.5-mile radius and not within the project impact area.

CA-SBa-129 was recorded as a sparse midden within a lemon orchard by Ruby in 1960. Ruby noted that projectile points were found along the edge of Santa Monica Creek while the sparse midden was located approximately 100 yards *east* of Santa Monica Creek.

No site location map was on file with the CA-SBa-129 site record, but the CCIC has the prehistoric site plotted on the *west* side of Santa Monica Creek. Both the west and east side of Santa Monica Creek in the general CA-SBa-129 area have been subject to commercial and residential development.

CA-SBa-129's exact location is unknown. The prehistoric site has undoubtedly been impacted by the large scale commercial and residential development in the general area. However, it is unknown if buried cultural deposits were associated with this site and, if so, if such buried deposits remain intact under the existing development. The CCIC site record map indicates that CA-SBa-129 is within the immediate vicinity of the Segment 5 pipeline.

CA-SBa-130 was recorded by Long in 1960 as a "habitation midden, possibly not aboriginal. Surface find includes: 1 pc. of hand-blown blue glass, burnt bone, shell frags (few)."

CA-SBa-130 is located at the northwest intersection of Foothill Road and Santa Monica Road and is not within the project impact area.

CA-SBa-2177H is a household refuse cluster recorded by Haley and York in 1988. An updated site record by Victorino in 2002 indicates that CA-SBa-2177H has been extensively disturbed and does not represent an intact deposit.

CA-SBa-2177H is located south of Carpinteria Avenue and not within the project impact area.

Site CA-SBa-3816 was discovered during construction monitoring along the west terrace of Santa Monica Creek by archaeologist Larry Carbone in 2005. Carbone describes the site as a truncated deposit of midden soils covered by fill materials as overburden. Two groundstone manos were identified within an associated lens of marine shell.

Site CA-SBa-3816 is located north of Foothill Drive and is not within the project impact area.

In addition, the CCIC files include a site record (P42-040714) for the former Donald Bailard Residence located at 1212 Casitas Pass Road within a 0.5-mile radius. Pavlik (1999) determined that the residence was ineligible for listing on the National Register of Historic Places or the California Register.

Twenty archaeological investigations are recorded within a 0.5-mile radius of the project site. Three of these surveys overlap small portions of Segment 5; none of which identified any cultural resources within Segment 5.

The National Register of Historic Places (NRHP) listings include no properties within or adjacent to the project site. No California Historical Landmarks or California Points of Historical Interest are located within or adjacent to the project site. The California State Historic

Resources Inventory lists no properties within or adjacent to the project site. No Santa Barbara County Landmarks are located within or adjacent to the project site.

On December 12, 2007, Ms. Maki conducted an archaeological survey of the proposed well site and the five locations where pipeline would be constructed. The survey area, with the exception of the small well site, was linear in nature covering approximately 4,000 feet of proposed pipeline route. The total area covered consisted of approximately 2.5 acres, much of which was paved, landscaped or built over. The objective of the survey was the visual detection of historical resources, including lithic debris and aboriginal artifacts, midden deposits, archaeological features, historical-era foundations or refuse, and other evidence of past land use. On March 20, 2008 Ms. Maki conducted an archaeological survey of the proposed alignment for pipeline segment 1. Findings of the surveys are described below.

El Carro Well Site. The proposed El Carro Well site is located within an existing fenced off District facility within El Carro Park directly behind the Girls. Inc. facilities. Low density residential and agricultural uses are located adjacent to the park. The proposed well site lies within a flat graded area covered by dirt and aggregate. No evidence of historical resources was observed.

Segment 1 Pipeline. The Segment 1 pipeline is located within El Carro Park. Two potential pipeline routes from the new well site to El Carro Lane were surveyed during December 2007. The first route extended east from the well site along the park's northern border and then south along the park's eastern border to El Carro Lane (this alternative has been dropped from consideration). The second route surveyed extended almost due south from the new well site to El Carro Lane (this alternative alignment has been dropped from consideration due to recreational impact considerations). In March of 2008 a third alignment along the western park boundary (currently proposed) was surveyed. A 30-foot wide corridor was surveyed for the three potential pipeline routes and within each corridor a tight zigzag pattern was walked that focused on close examination of any visible ground surface. The majority of El Carro Park is landscaped with grass, and ornamental trees and shrubs. Much of the park's eastern boundary is landscaped with iceplant. Occasional bare spots in the grass and iceplant, and rodent mounds provided the best opportunities to examine the ground surface. On the western boundary much of the area is vegetated with grass and shrubs but good visibility was afforded near paved areas, near the softball field and at the base of trees. No evidence of historical resources was observed within the Segment 1 pipeline route.

Segment 2 Pipeline. The Segment 2 pipeline is in a portion of El Carro Lane that is adjacent to public facility uses including Saint Joseph's church and facilities, and an elementary school. Inspection of ground surface visibility was limited to a bare/lightly landscaped strip of soil adjacent to the sidewalk on the north side of the road. On the south side of El Carro Lane ground surface visibility was limited to dirt areas around landscape trees and unpaved areas in the neighboring school yard. No evidence of historical resources was observed within the Segment 2 pipeline route.

Segment 3 Pipeline. The Segment 3 pipeline is adjacent to residential and open space uses (Franklin Creek Park). East of Franklin Creek the pipeline route is located in a former

agricultural area that is in the process of being developed and ground surface visibility was good. At this location Franklin Creek consists of a concrete lined channel. Within Franklin Creek Park ground surface visibility was poor to fair dependent upon vegetation density. Survey for the westernmost portion of this segment consisted of examining residential yards for evidence of prehistoric or historic resources. No evidence of historical resources was observed within the Segment 3 pipeline route.

Segment 4 Pipeline. The Segment 4 pipeline is in a portion of El Carro Lane that is adjacent to residential uses and ends at the Santa Monica Creek (a concrete channel). A recreational trail extends along Santa Monica Creek in this area. Survey coverage was limited primarily to inspecting residential yards along both sides of El Carro Lane and ground surface visibility ranged from poor to fair. At the western terminus of this segment ground surface visibility improved once the recreational trail was reached. No evidence of historical resources was observed within the Segment 4 pipeline route.

Segment 5 Pipeline. The fifth and final segment of the pipeline is in street rights-of-way adjacent to general commercial and residential uses and would also cross under U.S. Highway 101. North of the highway this segment lies within the general area of CA-SBa-129. Ground surface visibility was limited due to development and survey was limited to close inspection of any landscaped areas, with the exception of a large bare area along the west side of Santa Monica Creek (a cement lined channel). A few small fragments of marine shell were observed in front of the 7-11 Store and by a commercial office building. The amount of shell observed was sparse and in a highly disturbed context with no indications that the shell was cultural in deposition. Additional shell was found in some sand located on the south side of the freeway at the intersection of Carpinteria Avenue and Plum Street. Again there was nothing to indicate that the shell was cultural in origin as the fragments could be associated with El Estero located just south of Segment 5 or brought in with fill. No definitive evidence of historical resources was observed within the Segment 5 pipeline route, but it is possible that the sparse shell observed on the north side of Via Real may represent remnants of CA-SBa-129.

A Native American Heritage Commission (NAHC) sacred lands file search was conducted for the project and failed to identify any cultural resources within the immediate project area.

The following Chumash contacts were mailed a project description letter dated December 11, 2007 and asked to respond with any comments or concerns regarding the project:

- Angula, Richard
- Coastal Band of the Chumash Nation
- DeSoto, Ernestine
- Guzman-Folkes, Randy
- Khus, Puilulaw
- Miller, Stephen
- Napoleone, Diane
- Owl Clan
- Parra, Charles S.
- Para-Hernandez, Melissa M.
- Pulido, Carol

- Ruiz, John
- Salazar Folks, Beverly, Chumash
- San Luis Obispo County Chumash Council,
- Santa Ynez Band of Chumash Indians
- Santa Ynez Tribal Elders Council
- Sespe, John
- Tumamait, Julie
- Tumamait, Patrick
- Unzueta, Gilbert

To date one letter has been received from Owl Can Consultants expressing a general concern for Chumash cultural sites within the project area and five mile radius around the proposed site. The letter also requests that Owl Clan Consultants be informed of meetings to discuss their concerns. Freddie Romero of the Chumash Band of Indians also communicated by telephone a general concern for the cultural sensitivity of the project area and about potential construction impacts to previously undisturbed soil, particularly during installation of pipeline segment 5.

Paleontological Resources. Paleontological resources refer to the fossilized remains of plant and animal life. Certain geologic formations are of known paleontological importance, others are of low importance, while the importance of other deposits is unknown. Fossil remains are considered important if they are: 1) well preserved, 2) identifiable, 3) type/topotypic specimens, 4) age diagnostic, 5) useful in environmental reconstruction, 6) represent rare and/or endemic taxa, 7) represent a diverse assemblage, 8) represent associated marine and nonmarine taxa.

The project site is comprised of recent alluvial deposits. These deposits are not expected to contain important paleontological resources.

Impact Discussion:

a) There are no historical resources on the site. Additionally, the former Donald Bailard Residence will not be directly or indirectly impacted by project implementation. Therefore, no impact to historical resources would occur as a result of the project.

b) The CCIC record search identified one archaeological site within close proximity to the proposed Segment 5 pipeline. CA-SBa-129 was recorded as a sparse midden with projectile points in 1960. No updates for this site record are on record at the CCIC and there is conflicting information as to where this site is located. Since CA-SBa-129 was recorded, the general area has been subject to commercial and residential development. The NAHC failed to identify any sacred lands in the general project area. As of January 2008, two Chumash representatives (Owl Clan Consultants and the Santa Ynez Band of Chumash Indians) have expressed a general concern regarding this project and specifically about the archaeological sensitivity of the area and potential for disturbance of previously undisturbed soils. Conejo's field survey noted a few marine shell fragments within a disturbed context within Segment 5; it is possible although not certain, that the shell may be associated with CA-SBa-129. In the event that undisturbed native materials are disturbed during the construction of pipeline segment 5 on the north side of Highway 101, and

CA-SBa-129 exists in this area, the project would have the potential to result in a significant cultural resource impact if the site is determined to be a unique archaeological or historic resource.

As stated in the Phase I Cultural Resources Survey report, an archaeological survey can only confidently assess the potential for encountering surface cultural resource remains. Considering this fact and due to the general archaeological sensitivity of the Carpinteria area, any ground disturbance into previously undisturbed soils has the potential to impact presently undocumented cultural resources. This is considered a potentially significant impact of the project.

c) There are no known unique geologic features or paleontological resources at the site. Therefore, no impacts to such features or resources would result from the project.

d) Based upon the findings of the Phase I Cultural Resources Investigation, no intact burial sites are expected to exist at the site. However, in the event that site preparation activities disturbed previously unidentified, burial remains at the site, project activities would have the potential to result in a significant cultural resource impact.

Mitigation and Residual Impacts:

a) No significant impact would result therefore, no mitigation is required.

b) The following measure shall be implemented to reduce any impacts to cultural resources to a less than significant level.

CUL1 A professional archaeologist and Chumash representative shall be retained to monitor all project related earth disturbances within pipeline Segment 5 north of Highway 101. The following elements are also a part of this measure.

a. At the commencement of project construction, the archaeological monitor shall give all workers associated with earth-disturbing procedures an orientation regarding the probability of exposing cultural resources and directions as to what steps are to be taken if a find is encountered.

b. The archaeologist shall have the authority to temporarily halt or redirect project construction in the event that potentially significant cultural resources are exposed. Based on monitoring observations and the actual extent of project disturbance, the lead archaeologist shall have the authority to refine the monitoring requirements as appropriate (i.e., change to spot checks, reduce or increase the area to be monitored) in consultation with the District.

c. A monitoring report shall be prepared upon completion of construction and provided to the District and the CCIC.

The following measure applies to all portions of the project to mitigate the impact associated with the possible encounter of previously undocumented cultural resources within the proposed ground disturbance area.

CUL2 In the event that archaeological resources are exposed during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until a professional archaeologist has been retained to evaluate the nature and significance of the find. The District shall be notified immediately of any such find. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative should monitor any mitigation work associated with Native American cultural material.

c) No paleontological impacts are expected. Therefore, no mitigation is required.

d) The following measure shall be implemented to reduce potential impacts to human remains to a less than significant level.

CUL3 If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The District shall be notified immediately of the find.

13.6 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Setting:

Santa Barbara County inclusive of the project site is underlain mainly by marine sedimentary rocks of the late Mesozic[1] and Cenozoic[2] ages (Santa Barbara County, 1979). The surficial materials at the site (well and pipelines) are mapped as alluvium (Qal). These materials are comprised of unconsolidated flood plain deposits of sand, silt, and gravel.

The entire southern California region is seismically active, given the numerous faults throughout the region. The closest active[3] fault (identified as active by the County of Santa

1 Late Mesozoic - 140 to 70 million years before present.

2 Cenozoic - 70 million years to the present.

3 Active - refers to faults that have experienced movement in the last 11,000 years.

Barbara but not zoned as active by the State) to the site is the Santa Ynez fault (about 5 miles away to the north). This fault has an estimated maximum credible earthquake magnitude of 7.2 (major). The closest faults to the south of the site are the Rincon Creek and Carpinteria faults located about 4,000 feet or more south of the site. Both of these faults are considered potentially active[4]. To the north of the site, the closest fault is the Arroyo Parida which is also considered to be potentially active in the project region, but is zoned as active along the segment located east of the project area. This fault is located approximately 3,800 feet from the project site. No faults are known to occur beneath the project site (well or pipeline segments). The available data indicate little probability of surface rupture due to faulting beneath the site.

Carpinteria is not located in an Alquist-Priolo Earthquake Zone, which is a zone that delineates areas of known active faulting that may be subject to surface displacement based on future faulting.

Based upon a review of the City of Carpinteria General Plan Figure S-2, Seismic and Slope Stability Hazards the project site (well and pipeline segments) has a high potential for liquefaction. Based upon the same map, the project site, except pipeline Segment 5, is outside the potential limits for tsunami inundation. The site is not within a high rockfall or landslide hazard area. The area has a low problem rating for tsunami and seiches, low problem rating for expansive soils, and low problem rating for compressible-collapsible soils. There is no risk of landslides, slope failure or soil creep at the site due to the flat topography of the site and surroundings. Furthermore, the City of Carpinteria is considered to have a low potential for subsidence- and hydrocompation-related hazards (City of Carpinteria, 2003).

Impact Discussion:

a)

i No faults are located under the project site, and the site is not within an Alquist-Priolo Earthquake Zone. Therefore, no impacts resulting from fault rupture are anticipated.

ii Because the site is located in a seismically active region, there is the potential for ground shaking. However, given that: the project site is not in an Alquist-Priolo Earthquake Zone; and all structures will be designed to comply with the requirements of the appropriate Uniform Building Code (UBC) seismic zone criteria or International Building Code as appropriate, the American Waterworks Association standards and local earthquake design standards; and because no habitable structures are proposed, impacts are expected to be less than significant.

iii The project site is located in an area identified as having a high potential for liquefaction. Given the existence of alluvial materials underlying the site and potential for high groundwater, during a large earthquake event, soil liquefaction

4 Potentially active - refers to faults which displace deposits of late Pleistocene age and show no evidence of recent (0 to 11,000 years old) movement. The late Pleistocene is estimated to span 11,000 to 5000,000 years before the present.

could possibly develop in the sandy layers below groundwater level, depending on the density and composition of the soils. Impacts from potential liquefaction to the proposed project are probably no greater than those already present for the existing facilities (well site and pipelines). Because the project would be constructed in compliance with appropriate construction requirements as identified in item ii above, the potential for substantial adverse affects due liquefaction are not anticipated to be significant.

iv The project site topography is level and the site is not located in a designated landslide hazard zone pursuant to the City of Carpinteria General Plan Figure S-2 Seismic and Slope Stability Hazards map. Landslides would not impact the project nor would the project result in the creation of a landslide.

b) The project site is flat. Only a small area would be disturbed and significant erosion is not anticipated.

c) As described in the setting above, the project site soils have a low potential for geologic hazards with the exception of liquefaction.

d) The project site is not located within an area with a high potential for expansive soils with the exception of pipeline Segments 3 and 5. These are areas where existing pipeline would be replaced. With implementation of standard building practices in conformance with all applicable codes, impacts associated with expansive soils are expected to be less than significant.

e) The project would not require a wastewater disposal system.

Because geological impacts are considered site specific, a discussion of cumulative impacts in not applicable.

Mitigation and Residual Impacts:

a-d) No significant impacts are anticipated, therefore no mitigation is required. However, the following measure is recommended in order to assist the District in complying with building code requirements that address geotechnical/soils-related hazards including liquefaction and expansive soils.

GEO1 The District shall retain a registered engineering geologist to prepare a geotechnical study of the project area. Seismic and geologic hazards (including but not limited to liquefaction and expansive soils along pipe Segments 3 and 5) shall be assessed and construction recommendations provided as necessary. The recommendations (e.g., design and ground preparation methods) shall be implemented by the District. Examples of measures that may be recommended include: overexcavation and recompaction of soils; use of flexible couplings on pipe joints, removal of expansive soil and replacement with non-expansive material).

13.7 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Setting:

The CVWD had a Hazardous Materials Business Plan for the El Carro Well facility on file with the Carpinteria-Summerland Fire Protection District (a copy is also kept at the District office). The Hazardous Materials Business Plan consists of four parts: 1) an inventory of hazardous materials at the site, which also describes their behavior, characteristics, and health risk; 2) a site map and facilities floor plan indicating the location of the hazardous materials; 3) a hazardous materials emergency response plan; and 4) a training program for all employees. Materials that were used and or stored at the El Carro Well site include an 850-gallon storage tank of sodium hypochlorite which is housed in a concrete double containment basin with the capacity to contain the entire contents of the tank in the event of a tank leak or failure per NFPA/UFC article 80.

The project site is located over 15 miles from the closest public use airport, Santa Barbara Airport, and is not near any private airstrip.

The well site and pipeline alignments are located within the urban area of the City of Carpinteria within an area identified by the City as a low wildlands fire hazard area (City of Carpinteria, 2003).

Impact Discussion:

a) As indicated above, the El Carro Well during its previous years of operation used sodium hypochlorite solution (12.5 percent bleach) to oxidize iron and manganese for subsequent adsorption and precipitation on a catalytic media filter bed. The proposed upgraded system will continue to use sodium hypochlorite solution and it would be stored as it was previously in the 850-gallon capacity tank at the site. The Hazardous Materials Business Plan for the facility will need to be updated and

reactivated with the Carpinteria-Summerland Fire Protection District. With compliance to this standard procedure, as well as all transportation regulations pertaining to the transport of hazardous materials, no significant hazards are anticipated in association with this element of the proposed project.

b) Please see response a.

c) Canalino Elementary School is located about one-quarter mile southwest of the well site. However, no hazardous emissions would result from the project. Hazardous materials handled at the site would include sodium hypochlorite. Due to the secondary containerization for this material at the site, and the distance between the well site and the school, no impacts to the school site or persons at the school site would be expected from the routine use of sodium hypochlorite at the site or release under upset conditions. Trucks transporting sodium hypochlorite to the site are expected to use Foothill Road rather than El Carro Lane. Additionally, it is assumed that standard safety regulations for the transport of such material would be followed. No significant impact to schools resulting from the transportation of this material to the project site is anticipated.

d) Padre conducted a review of two separate hazardous materials database review reports prepared by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut which are dated December 4, 2007. (This database report review is summarized and a statement of conclusions provided in "Summary of Review of Environmental Database Information Regarding Hazardous Materials – Carpinteria Valley Water District El Carro Well Replacement and Central Zone Improvement Project, Carpinteria, Santa Barbara County, California" prepared by Padre Associates, Inc. and dated December 5, 2007. This document is available for review in its entirety at the Carpinteria Valley Water District office located at 1301 Santa Ynez Avenue, Carpinteria, California 93013 and is herein incorporated by reference.) The reviewed lists include: the National Priorities List (Superfund); Resource Conservation and Recovery Act (RCRA) TSD database; RCRA corrective action sites listing; Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database; CERCLIS "No Further Remedial Action Planned" database; Cal-Sites; California Regional Water Quality Control Board's Waste Management Unit Database (WMUDS/SWAT); Cortese Hazardous Waste and Substance database; Underground Storage Tank databases; Spills, Leaks, Investigations and Cleanups (SLIC) database; Resource Conservation and Recovery Information System (RCRIS) Generator Listing; Facility and Manifest Data [HAZNET]; Emergency Response Notification System (ERNS); California Hazardous Materials Incident Report System (CHMIRS); Notify 65; and the orphan sites list. Based upon the database search results, it was determined that two CORTESE listed sites are located within 0.5 miles of the proposed pipeline Segment No. 5. Of these sites, one is of potential concern to the project and is described as follows. Unocal Service Station No. 5113 is located at 4401 Via Real adjacent to the proposed pipeline Segment 5. This site has had gasoline and oil soil contamination, some of which has been removed, and is currently undergoing groundwater remediation. The UST database identified four sites within 0.5 mile of proposed

pipeline Segment 5. Of these, two are of potential concern to the project and are described as follows. Unocal Service Station No. 5113 which was described above under the CORTESE listings and Chevron Service Station No. 9-3005 located at 4290 Via Real adjacent to pipeline Segment 5. This site has been under regulatory investigation since March 1998 when hydrocarbon-containing soil was encountered during the replacement of gasoline-containing underground storage tanks at the site. Both soil and groundwater have been impacted, and soil and groundwater remediation activities have been initiated at the site and are ongoing. No other hazardous sites that are a potential concern to the project were identified on any of the lists.

In the event that during the construction of pipeline segment 5 groundwater is encountered, this water may be contaminated from either of the two sources identified above. In this case, dewatering discharge waters, if discharged to storm drains, would result in a violation of discharge requirements and could present a public health hazard. Additionally, workers and the public could be exposed to contamination in the event that contaminated soils and or water are encountered during the installation of pipeline Segment 5. These are potentially significant hazardous materials-related impacts of the project.

e) The project area is not identified in an Airport Land Use Plan, nor is it located within 2 miles of a public or public use airport. Therefore, no safety hazards resulting from airport proximity are expected.

f) The project site is not located near a private airstrip, and so would not result in a safety hazard.

g) Over the long-term, there would be no impact, as the proposed project would be confined to the existing CVWD site and would not impair implementation or interfere with any emergency response plan or emergency evacuation plan. However, during implementation of pipeline installation normal utilization of the affected road corridors would be impacted. However, the District will be required to obtain encroachment permits from the City (see Appendix F). It is anticipated that with the implementation of the standard transportation safety measures associated with the encroachment permit, emergency response will not be significantly impacted.

h) The project site is within an existing developed area identified as having a low fire hazard risk and would not include uses that would create a fire risk. Therefore, no wildland fire impact is associated with the project.

No other projects are in close proximity to the proposed project that would use, store, or transport hazardous materials that together with the project would result in significant cumulative impacts associated with such materials. There would be no other hazard-related impacts associated with the project. Therefore, the project would not contribute to any cumulative impacts for these issues.

Mitigation and Residual Impacts:

a) No significant impact is anticipated. However, the following standard procedure is listed here so that it may be tracked on the project mitigation monitoring program.

HAZ1 The CVWD shall update its Hazardous Materials Business Plan for the El Carro Well and submit it to the Carpinteria Summerland Fire Protection District prior to reestablishment of operations at the El Carro Well site.

b) No significant impacts are anticipated, therefore no mitigation is required.

c) No significant impacts are anticipated, therefore no mitigation is required.

d) The following mitigation measures are required to reduce potentially significant health impacts associated with the potential for contaminated soil and/or water to be encountered during construction work at the proposed pipeline Segment 5 to a less than significant level.

HAZ2 CVWD shall develop a Contaminated Materials Management Plan (CMMP) for the El Carro Well and Central Zone Pipeline Improvement Project prior to the implementation of the project. The CMMP shall address proper handling, temporary storage, treatment and/or disposal of petroleum hydrocarbon contaminated soil and/or groundwater encountered during the course of planned construction of the project in compliance with applicable local, state and federal regulations.

The following additional measure shall be implemented.

HAZ3 CVWD shall ensure that only Hazardous Work Operations and Emergency Response (OSHA 29 CFR, 1910.120) (HAZWOPPER) trained personnel shall work on pipeline Segment 5 at and north of U.S. Highway 101.

e) No impacts are anticipated, therefore no mitigation is required.

f) No impacts are anticipated, therefore no mitigation is required.

g) No significant impacts are anticipated, therefore no mitigation is required. However the following standard measure is identified below for tracking the in mitigation monitoring program for the project.

HAZ4 The CVWD shall obtain encroachment permit(s) from the City of Carpinteria for work in City rights-of-way.

h) No impacts are anticipated, therefore no mitigation is required.

13.8 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
water quality?				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Setting:

The Carpinteria Groundwater Basin (Basin) is one of several south coast basins situated along a narrow alluvial plain between the Santa Ynez Mountains and the Pacific Ocean (County of Santa Barbara, 1994). The basin underlies approximately 7,600 acres. The watershed is about 37 square miles and includes five major streams. The Rincon Fault is the main structural feature of the Carpinteria Basin. Most of the basin lies in the structural low north of the fault. A sequence of marine and non-marine sediments up to 4,000 feet thick filled this structural low as a movement occurred on the fault. This sequence is designated Storage Unit No. 1. As the project site is north of the Rincon Fault, it is within the area of Storage Unit No. 1. South of the Rincon fault is a thin section of sedimentary rocks (up to 500 feet thick) designated Storage Unit 2. The fault forms a hydrologic barrier between the two units. The water bearing deposits are included in the following five geologic formations, listed from youngest to oldest: Older and Younger Alluvium, Terrace Deposits, Carpinteria Formation, Casitas Formation, and Santa Barbara Formation.

According to the California Department of Water Resources (2004), groundwater in the Carpinteria Basin is predominantly calcium bicarbonate in character, with varying amounts of sodium. The total dissolved solids (TDS) content ranges from 600 to 900 mg/L for most wells

as reported by Fugro West in 2000 through 2005. Santa Barbara County Water Agency (SBCWA) reported in 2001 TDS content levels ranging from 436 to 980 mg/L.

Water quality data from four public supply wells as reported in the California's Groundwater Bulletin 118 indicate that none of the sampled well had concentrations of inorganics, radiation, nitrates, pesticides volatile organic compounds, or synthetic organic chemicals above primary Maximum Contaminant Levels (MCLs). However, three of the four wells sampled had concentrations of inorganics above the secondary MCL[5].

As of 2005, general water quality in the Basin is reported as stable, with no trends toward impairment; however, in the western portion of the basin, historical data show elevated nitrate concentrations. The Basin continues to provide a generally high quality of groundwater for the prevailing uses (Fugro 2006).

According to the Carpinteria Groundwater Basin, Annual Report for 2005 (most current available report) prepared by Fugro West, Inc. (September 2006), water levels in the Carpinteria Groundwater Basin were generally above sea level with a shallow pumping depression in the central portion of the District around the Headquarters and El Carro Wells due to the fact that the wells were actively being pumped during the time of the groundwater level measurements. Recharge in the Basin occurs by direct infiltration of precipitation, infiltration of water in the streambeds draining the mountains, by irrigation return flow, and, to a limited extent, by underflow from the hill and mountain area. The perennial yield[6] of the Basin is 4,500 to 5,500 acre-feet per year (afy) (Integrated Water Resources, Inc., 2003). In the last 20 years groundwater pumped has exceeded 5,000 afy twice. In the remaining years, total groundwater pumped has been less than 5,000 afy and, on average, has been about 3,760 afy. In general over the five-year period 2000-2005 water levels in the basin are falling slightly. However, based on the data reviewed by Fugro for the Annual Report for 2005, it was determined that the aquifers in the Carpinteria Basin continue to be adequately recharged in average to above average precipitation years.

Water purveyors within the basin include the CVWD and the Montecito Water District. Both districts extract some groundwater. However, only CVWD extracts water from the Carpinteria Basin (approximately 45 percent of its total supply). The primary single constituent of the potable water supply for both districts is Cachuma Water Project water.

In response to Assembly Bill 3030, passed in the California Legislature in 1992 which provides for the management of groundwater basins and encourages local agencies to adopt groundwater management plans for their groundwater basins in order to protect water quality, maximize water supply, and eliminate protracted legal battles over groundwater, the District adopted a Groundwater Management Plan (Plan) in 1996. The action elements of the Plan include systematic monitoring and analysis of groundwater levels and well water quality in the Carpinteria Valley. This system is designed to provide an early warning/detection should the

5 Secondary MCLs are non-mandatory water quality levels set by the EPA as guidelines to assist public water agencies in managing their drinking water for aesthetic considerations such as taste, color and odor and are not related to risk to human health.

6 Perennial yield id the amount of water that can be extracted on an annual basis without damage to the basin.

growing use of the basin begin to result in adverse effects. The Carpinteria Groundwater Basin Annual Report, as referenced above, is the main reporting tool of the District's groundwater monitoring effort.

The project site is located within the watershed of the Carpinteria Marsh. The watershed area is 6,600 acres (California Resources Agency, 1997). The tributaries to the marsh include Santa Monica Creek and Franklin Creek. The marsh is typically tidally influenced, but a barrier bar forms some years at the ocean inlet. The bar is then mechanically breached to maintain year round tidal flushing. Both Santa Monica and Franklin Creeks are tidally influenced through the marsh to the Pacific Coast Highway. Water quality in the marsh is impaired from pesticides, siltation, nutrients, and urban run-off.

Based upon the Carpinteria General Plan graphic S-4, Flood Areas, the project site is generally not in a flood zone. However, pipeline segment 3 extends under Franklin Creek and Franklin Creek Park which is identified as being within the 100-year flood plain.

Impact Discussion:

a) Construction activities would be limited to a small, level area at the well and linear trenches and pits for pipeline installation. Generally, construction operations are not expected to result in substantial discharge to surface water due to their limited nature with two exceptions described as follows. Drilling of the well would generate discharge comprised of drilling muds and flushing water. The District would collect drilling fluids for settlement of solids prior to discharge to the storm drain pursuant to a specific "Low Threat Discharge Permit" that it would obtain from the Central Coast Regional Water Quality Control Board. Also, as indicated above, Padre conducted a review of two separate hazardous materials database review reports prepared by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut which are dated December 4, 2007. It was determined that two listed sites, located within 0.5 miles of the proposed pipeline Segment No. 5, are of potential concern to the project due to soil and/or groundwater contamination. In the event that during the construction of pipeline Segment 5 groundwater is encountered, this water may be contaminated from either of the two sources identified above. In this case dewatering discharge waters if discharged to storm drains would result in a violation of discharge requirements. This is a potentially significant impact.

   Over the long-term operational life of the project, well discharges would include discharge of manganese filtration flush water to the local sewer and discharge of the initial flush of well water to the storm drain as was the case when the well was previously in operation. The discharge is regulated under the District's existing "Low Threat Discharge Permit" that allows operational well flush water to be discharge to the local storm drain system. Carpinteria Sanitary District is regulated under its own National Pollution Discharge Elimination Permit from the Regional Water Quality Control Board.

   Based on the hazardous materials database review reports prepared by (EDR), neither the proposed well site nor properties within 0.5 mile of the well site were are

listed as hazardous material sites. Additionally, CVWD is regularly required to analyze water produced by the subject water supply well for the presence of regulated constituents and proposes to maintain the existing El Carro Well (Well No. 1) as a water monitoring well. Therefore, no impacts to the public water supply that are in violation of water quality standards are anticipated from development of the proposed project.

b) The project is proposed by the CVWD, the local purveyor of domestic water for the City of Carpinteria and adjacent portions of unincorporated Santa Barbara County. It is the responsibility of CVWD to appropriately manage water resources including groundwater. The well would replace a previously existing well that was abandoned due to sanding-in of the well. The CVWD proposed to re-establish the well in order to increase reliability of its groundwater supplies. As described in the setting above, groundwater extractions in the basin have for the most part historically been below the perennial safe yield and at present the Basin continues to be adequately recharged. Impacts to groundwater levels would be less than significant.

c) The project site is flat and construction would be confined to a small area at the well site and along the pipeline segments, substantial erosion would not result from project implementation. No alterations of streamflow are proposed.

d) Construction of the proposed facilities will not substantially alter the existing drainage pattern of the site or area, nor alter the course of stream or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site.

e) The drainage pattern on-site will continue to flow in the existing pattern, and discharge from the site is not expected to change from that associated with the well site when it was previously in operation. Project runoff will be accommodated by the existing drainage system.

g) Since no housing is proposed, the project would not place housing in a 100-year flood hazard area.

h) Replacement pipeline would be installed under Franklin Creek, a concrete-lined channel. As such, no significant impacts are expected in association with the new pipe.

i) The project is redevelopment of a water well that was previously in operation within an existing developed CVWD site, and pipeline installation. No substantive flooding hazard would be created by the proposed project. A break in a water line could cause localized erosion or flooding. However, due to the unlikely nature of such an event and the limited nature of impact should it occur, this potential impact is considered less than significant.

j) Only pipeline Segment 5 is in a tsunami hazard area. Because the pipeline is a subsurface replacement water line, the potential impacts associated with the project are no greater than existing and are less that significant.

k) The project site is relatively flat and there are no slopes in the project vicinity that would be subject to landsliding. Because the site is located at sufficient distance from source areas of potential debris flows from the north, it is unlikely that inundation by mudflows would occur.

The projects potential contribution of contaminated discharge during construction has the potential to be cumulatively significant.

Mitigation and Residual Impacts:

a) The District's procurement of the appropriate discharge permit from the RWQCB for well construction discharge and implementation of mitigation measure HAZ2 would reduce the potentially significant impacts related to well construction discharge and encountering possible contaminated water necessitating dewatering during construction of pipeline Segment 5 to a less than significant level on a project-specific and cumulative level.

b-j) No significant impact would result. Therefore, no mitigation is required.

13.9 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Setting:

General Plan land use designations and zoning for the project site and surroundings are identified above in Sections 6.0 and 7.0 of this Initial Study respectively. Surrounding land uses are described in Section 9.1 of this Initial Study.

The primary land use planning and regulatory documents for the City of Carpinteria are the City of Carpinteria General Plan/Local Coastal Land Use Plan and Environmental Impact Report (General Plan) (April 2003) and the City's Municipal Code (which includes the Zoning Ordinance). The City's General Plan contains eight elements and is designed to be consistent with the California Coastal Act. The General Plan reflects the shared vision of the community's future and includes land use objectives and policies that in some cases apply to development projects within the City. Objectives and polices that apply to the proposed project are described in the Impact Section below.

The City's Zoning Ordinance classifies and regulates the uses of land, buildings, and structures in the City and thus implements the Coastal Land Use Plan and the General Plan of the City in accordance with the requirements of the applicable provisions of the Government Code and the Public Resources Code of the state. Water wells, filtration plants and water pipelines are not identified in the Zoning Ordinance as intended uses for most of the zoning designations that apply to the properties that the proposed project infrastructure is located on with the exception of the portion of pipeline Segment 5 which extends near the District's main facility at 1302 Santa Ynez Avenue which is on land zoned Public Utilities District (UT). However, Section 14.62.030 of the City of Carpinteria Municipal Code identifies a list of land uses, which in addition to the conditionally permitted uses listed in specific zoning districts, are allowed subject to granting of a Conditional Use Permit. Included in the list are pipelines pursuant to the provisions of Section 14.50.010(11), (12), and (13); and buildings, structures, and uses of a public works, public service or public utility nature, excluding the permitted uses of the public utility zoning district.

Impact Discussion:

a) As the well site is located within the existing CVWD facility and pipes would be mainly underground, the project would not physically divide an established community.

b) As described above the proposed project includes uses that are considered conditional uses within the majority of zoning districts within which it is located. However,". . . Zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, or transmission of water." Government Code Section 53091, in part). None-the-less, the project must be consistent with the provisions of the California Coastal Act which is implemented at the local level through the City's development review process.

   As described above, the City's General Plan identifies a series of objectives and policies relating to land use and a variety of environmental and public service issues including water supply. Most of the policies presented in the General Plan/Local

Coastal Land Us Plan are not relevant to the proposed project. However, numerous policies can be considered relevant to the project such as, but not necessarily limited to, the following as summarized below:

- Objective OSC-6: Preserve the natural environmental qualities of creekways and protect riparian habitat and OSC Implementation Policy 28 pertaining to the prohibition of development in stream corridors;
- Objective OSC-10 and Policy OSC10c pertaining to the conservation of water resources and protection of water quality;
- Objective OSC-13 pertaining to the preservation of Carpinteria's visual resources;
- Policy OSC-14f which states that "no unrelated development shall be permitted in publicly owned recreational areas except pipelines to serve coastal dependent industrial uses when no alternative route is feasible";
- Objective OSC-16 and Policy OSC-16a and implementation policies regarding the preservation of cultural resources;
- Objective S-1 and related policies pertaining to minimization of risks due to seismic activity;
- Objective S-2 and related policies pertaining to minimization of risks due to slope stability;
- Objective S-3 and related policies pertaining to minimization of risks due to soils hazards;
- Objective S-4 and related policies pertaining to minimization of risks due to flooding;
- Objective S-5 and related policies pertaining to minimization of risks due to fire;
- Objective S-6 and related policies pertaining to minimization of risks due to hazardous materials (of particular interest is Implementation Policy 19 which states that "hazardous materials or waste stored in closed containers at a facility shall not be within 50 feet of an adjacent property"; and
- Objective N-5 and related policies pertaining to minimizing the effects of nuisance noise (e.g., construction noise) on sensitive receptors.

The project would be consistent with most of the identified policies that pertain development such as that proposed by CVWD with the incorporation of mitigation measures described within this Initial Study (e.g., water quality would be protected, visual and cultural resources would be protected, structures would be built to the Uniform Building Code standards and not subject to significant hazards, minimization of construction noise impacts, etc.). The project would be consistent with the intent of other policies. For example, two replacement pipeline segments need to cross creeks to convey water throughout the City but would be above and below the Santa Monica and Franklin Creeks respectively (which are concrete channels in the project

area with little if any habitat value), not in the stream corridors. Existing exposed pipeline segments would be removed and the new segments would be colored to blend with the existing surroundings. Additionally, it may not be feasible to place the pipelines beneath the creeks as the concrete channels are quite deep which presents a technical challenge to placing these pipe segments subsurface. Therefore, the project would be consistent with the intent of Policy 28 pertaining to the prohibition of development in stream corridors and objective OSC-6. With regard to Policy OSC-14f "no unrelated development shall be permitted in publicly owned recreational areas except pipelines to serve coastal dependent industrial uses when no alternative route is feasible", it is assumed that since the well site and pipeline in Franklin Creek Park are existing facilities, water service is essential to all city land uses, and that such water infrastructure is conditionally acceptable as provided in the Zoning Ordinance, the proposed project could be considered consistent with the intent of the policy. Further, City staff indicates that the intent of this policy is directed more toward coastal recreation areas rather neighborhood parks located away from the shoreline (Campbell, personal communication, January 2008). Regarding Objective S-6, Policy 19 which states that "hazardous materials or waste stored in closed containers at a facility shall not be within 50 feet of an adjacent property, the existing and proposed facility plans for the El Carro Well site locate the chlorine cabinet about 25 feet south of the property line with Girls Inc. However, this is an existing facility that has double containment. Furthermore sodium hypochlorite is not identified as an acutely hazardous substance under the California Code of Regulations (Title 8, Section 5189) and has the following National Fire Protections Association (NFPA) ratings: Health: 2, Flammability: 0, and Reactivity: 1. Therefore, it is assumed that it may be considered consistent with the intent of the referenced policy.

Based upon the assessment provided above, the fact that the project elements are replacement of existing uses within the City (except pipeline Segment 1), and the District's intended compliance with the City's coastal development review process, it is anticipated that the project will be consistent with relevant plans and policies.

c) There are no identified habitat conservation plans or natural community conservation plans that are relevant to the project site, therefore, no impacts are anticipated.

Since no significant impacts are anticipated for items a) and c), no cumulative impacts would result. The assessment of item b accounts for the possible cumulative impacts of the project for environmental issue areas for which policies are relevant to the proposed project.

Mitigation and Residual Impacts:

a and c) There are no significant impacts. Therefore, no mitigation is required.

b) Mitigation measures provided in other sections of this Initial Study serve to mitigate impacts associated with project consistency with relevant plans and policies.

13.10 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Setting:

According to the City of Carpinteria General Plan/Local Coastal Plan (2003), the only mineral source present within the City in any significant quantity is oil. No such resources have been developed at the project site.

Impact Discussion:

a) As the project site is not located in a mineral resource area, does not contain past or existing oil wells, and does not have the potential to be a source of minerals or aggregate materials, there is not expected to be a loss of mineral resources as a result of project implementation.

b) See response for item a) above. The site is not located in a mineral resources area or oil production area.

The project would not result in any impacts to mineral resources. Therefore, there it would not contribute to cumulative impacts.

Mitigation and Residual Impacts:

a-b) Impacts are less than significant, therefore no mitigation is necessary.

13.11 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting:

Characteristics of Noise. The duration of noise and the time period at which it occurs are important factors in determining the impact of noise on sensitive land uses. Noise is more

disturbing at night than during the day and noise indices have been developed to account for the varying duration of noise events over time as well as community response to them. The Community Noise Level Equivalent (CNEL) and the Day-Night Average Level (DNL or Ldn) are such indices. They are time-weighted average values based on the equivalent sound level (Leq), which is a constant sound level that equals the same amount of acoustic energy as actual time-varying sound over a particular period. The CNEL penalizes noise levels during the night (10 p.m. to 7 a.m.) by 10 dB to account for the increased sensitivity of people to noise after dark. Evening noise levels (7 p.m. to 10 p.m.) are penalized 5 dB by the CNEL. Appropriately weighted hourly Leqs are then combined over a 24-hour period to result in a CNEL. The Ldn also penalizes nighttime noise levels, but does not penalize evening levels. These two indices are generally equivalent.

In general, the CNEL may be thought qualitatively as an accumulation of the noise associated with individual events occurring throughout a 24-hour period. The noise of each individual event is accounted for in a separate, discrete measurement that integrates the changing sound level over time as, for example, when an aircraft approaches, flies overhead, then continues off into the distance. These integrated sound levels for individual operations are referred to as Sound Exposure Levels or SELs. The accumulation of the SELs from each individual operation during a 24-hour period determines the CNEL for the day.

Noise Regulation. To limit population exposure to physically and/or psychologically significant noise levels, the State of California, various county governments, and most cites in the state have established guidelines and ordinances to control noise. The City of Carpinteria's Noise Element references the former California Department of Health, Office of Noise Control's land use compatibility guidelines for community noise environments. Those guidelines are presented here as Table 2 and are used by the City of Carpinteria in its Noise Element.

The City's Environmental Thresholds Manual (part of the City of Carpinteria Guidelines for the Implementation of the California Environmental Quality Act, provides noise thresholds. Relevant thresholds are as follows.

Temporary construction noise which exceeds 75 dB(A) CNEL for 12 hours within a 24-hour period at residences would be considered significant. Additionally, where temporary construction noise would substantially interfere with normal business communication, or affect sensitive receptors, such as day care facilities, hospitals or schools, temporary impacts would be considered significant.

For the noise level analysis, an increase in noise would be considered significant if any of the following conditions occurred for an extended period of time:

- An increase in noise levels of 10 dB(A) if the existing noise levels are below 55 dB(A) (creates a potential significant nuisance effect);

- An increase in noise levels that exceeds noise level standards if the existing noise levels are between 55 and 60 dB(A) (violates existing regulatory requirement); or

- An increase in noise levels of 5 dB(A) if the existing noise levels are above 60 dB(A) (violates or worsens a violation of an existing regulatory requirement).

Long-term noise thresholds are as follows.

a. A proposed development that would generate noise levels in excess of 65 dB CNEL and could affect sensitive receptors would be considered to have a significant impact.

b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dB CNEL would be considered to be significantly impacted by ambient noise. A significant impact would also occur where interior noise levels cannot be reduced to 45 dB CNEL or less.

c. A project will have a significant effect on the environment if it will increase substantially the ambient noise levels for adjoining areas.

Noise sensitive land uses are considered to include:

- Residential, including single and multi-family dwellings, mobile home parks, dormitories, and similar uses.

- Transient lodging, including hotels, motels, and similar uses.

- Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.

- Public or private educational facilities, libraries, churches, and places of public assembly.

1) A project which would generate noise levels at the property line which exceed the City's Noise Ordinance Standards is considered potentially significant (such as a car wash).

2) If a non-residential use, such as a commercial, industrial or school use, is proposed to abut an existing residential use, the noise level of the non-residential use should not exceed the residential standards of 64 dB(A) CNEL at the adjoining property line. Although the noise level could be consistent with the City's Noise Ordinance Standards, a noise level above 65 dB(A) CNEL at the residential property line could be considered a significant environmental impact.

Additionally, the City of Carpinteria's General Plan Health and Safety Hazards Element, Noise Hazards subsection contains several policies relating to noise, none of which are directly relevant to the proposed project. However, the City's Noise Element contains several policies that are relevant to the proposed project. They are as follows:

N5b. The City will require that construction activities adjacent to sensitive noise receptors be limited as necessary to prevent adverse noise impacts.

N5c. The City will require that construction activities employ techniques that minimize the noise impacts on adjacent uses.

Site-Specific Setting. The primary existing source of noise in the project area is vehicle traffic on U.S. 101, and the various road segments which the project is located on or close to (e.g., El Carro Lane, Foothill Road, Linden Avenue and Sterling Avenue). Other sources of noise include, railway traffic, aircraft fly-overs, and the general activities at area land uses. Ambient noise levels in the project area range from 60 dBA at the El Carro Park and over 65 dBA CNEL near U.S. Highway 101 based on the existing noise contour map presented in the City of Carpinteria General Plan/Local Coastal Plan.

Table 2. City of Carpinteria Land Use/Noise Compatibility Matrix

Land Use Category	Community Noise Exposure, Ldn or CNEL, dBA 55 60 65 70 75 80
Residential: single family, duplex, mobile homes	
Residential: multiple family	
Transient lodging: motels, hotels	
Schools, libraries, churches, hospitals, nursing homes.	
Auditoriums, concert halls, amphitheaters	
Sports arena, outdoor spectator sports	
Playgrounds, neighborhood parks	
Golf courses, riding stables, water recreation, cemeteries	
Office buildings, business commercial and professional	
Industrial, manufacturing, utilities, agriculture	

Interpretation	
Normally Acceptable	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable	New construction or development should generally not be undertaken.

Source: City of Carpinteria, *General Plan/Local Coastal Plan*, April 2003.

Additional specific criteria pertaining to noise from adjacent uses (noise generators) also applies to the project and is presented below.

Ambient noise level measurements were taken on Thursday, November 29, 2007 by a Padre Associates, Inc. staff member at the proposed well site and pipeline segment locations site using a Larson Davis DSP80 Sound Level Meter. These ambient noise measurements represent short-term (15 minute) Leqs measured during a specific time period. The measured noise levels are provided in the table below and indicate noise levels ranging from a low of 42.7 dBA Leq at El Carro Park to 66.4 dBA Leq at residential uses immediately south of U.S. 101. Noise sensitive uses in proximity to the proposed project site include residential and educational uses as described in the table below.

Table 3 - Ambient Noise Level Measurements

Project Element	Location of Noise Level Measurement	Time	15-minute Representative Ambient Leq Measurement (dBA)	Influencing Noise Sources	Nearby Sensitive Receptors
Well Site	El Carro Park on pavement adjacent to and west of well site About 0.45 mile from center of U.S. 101 and about 350 feet to centerline of Foothill Road	11:50 a.m. – 12:05 p.m.	42.7	U.S. 101 traffic in distance, traffic on Foothill Road and slight rustle of leaves	Homes along nearby residential streets such as Jay Lane and classrooms and other learning facilities at Girls Inc. north and adjacent to the well site. Howard School operates out of Girls Inc. Portable classrooms are located immediately across the property line from the El Carro Well Site.
Pipeline Segment 1	El Carro Park south of ball field No. 1 About 0.39 mile from center of U.S. 101 and about 855 feet from center of Foothill Road	11:15 a.m. – 11:45 a.m.	43.6	U.S. 101 traffic in distance, traffic on Foothill Road and slight rustle of leaves, intermittent construction sounds from a residential back yard adjacent and east of the park	Homes along nearby residential streets such as Jay Lane and classrooms or learning facilities at Girls Inc. north and adjacent to the well site.
Pipeline Segment 2	275 feet east of Linden Avenue on El Carro (about 35 feet from the centerline) 0.26 mile to center of U.S. 101	12:33 p.m. – 12:48 p.m.	56.5	U.S. 101 traffic in the distance, traffic on Linden Avenue and El Carro Lane, school children outside	School on El Carro Lane and possible residential uses at St. Joseph facility, future residences west of the intersection of Linden Avenue and El Carro Lane (site

Project Element	Location of Noise Level Measurement	Time	15-minute Representative Ambient Leq Measurement (dBA)	Influencing Noise Sources	Nearby Sensitive Receptors
					under construction)
Pipeline Segment 3	Franklin Creek Park on Sterling Avenue About 45 feet east of the centerline of Sterling Avenue and 105 feet north of the centerline of Malibu Drive About 0.23 miles north of U.S. 101	1:00 p.m. – 1:15 p.m.	55.0	Traffic on U.S. 101, Sterling Avenue and Malibu Drive	Residences on all area streets. New residential construction going in east of Franklin Creek Park and west of Linden Avenue
Pipeline Segment 4	Western end of El Carro Lane, about 150 feet east of the centerline of the recreational path along Santa Monica Creek and about 55 feet from the center of the intersection of El Carro Lane and La Jolla Place About 0.26 mile north of the centerline of U.S. 101	1:25 p.m.- 1:40 p.m.	45.1	Traffic on El Carro Lane and La Jolla Place as well as distant traffic on U.S. 101	Residents on El Carro Land and La Jolla Place
Pipeline Segment 5 n/o U.S. 101	7-11 on Via Real near Santa Monica Road highway onramp About 430 feet north of the center of U.S. Highway 101	3:15 p.m. – 3:30 p.m.	65.5	Traffic on U.S. 101 Via Real and Santa Monica Road	Residences northwest of and southeast of Santa Monica Creek
Pipeline Segment 5 s/o U.S. 101	Plum Street, one house back from U.S. 101 on the eastern limit of the pavement About 200 feet south of the center of U.S. 101	3:35 p.m. – 3:50 p.m.	66.4	Traffic on U.S. 101	Residential uses on Plum Street and Carpinteria Avenue

Impact Discussion:

a) The project is construction and operation of a well that would replace an existing well that was abandoned and installation of pipeline segments. Construction at the well site would include the use of heavy equipment including a back-hoe, cement truck and drill rig. Construction activities would occur from 7:00 a.m. until 4:00 p.m. with the exception of during well drilling operations when operations would be 24-hours per day for about seven days. The use of construction equipment would raise the existing ambient noise levels noticeably at the site and nearby areas in the short-term.

Noise produced by construction equipment varies substantially depending on the type of equipment, and its operation and maintenance. Noise levels typically range from 73 to 96 dBA at 50 feet from individual pieces of construction equipment.

The closest residence is about 200 feet east of the well site, and Girls Inc. facilities (Howard School) are adjacent to the site. The closest classrooms are about 20 feet from the project site.

Based upon modeling of equipment use anticipated during construction, exterior noise at the closest residence would be about 70 dBA. However the existing 8 feet tall block wall has the potential to reduce this noise level by about 8 dBA to 62 dBA (the residences also have back yard fences separating the lots from the park which would add some additional attenuation). Based upon modeling of the equipment anticipated to be used during general construction activities and a distance of 20 feet between source and receptor, exterior noise at the Girls Inc. property is expected to be as high as 93 dBA Leq. Typical construction offers a 20 dBA reduction in noise and the wall would reduce noise by about 8 dBA. Therefore, interior noise in the classroom during construction is anticipated to be as high as 65 dBA. However, the project is scheduled for the summer when the Howard School is not in session. However, Girls Inc. conducts summer enrichment programs. (See Appendix E to this Initial Study for noise data.)

Noise impacts resulting from drilling, however, have the potential to be more severe due to the fact that drilling will be conducted on a 24-hour per day schedule. (According to the project engineer, the 24-hour schedule is required to prevent the borehole from caving in on itself.) Because of the sensitivity of receptors during the evening and nighttime hours, the CNEL system penalizes noise occurring during these times. It is estimated that at a distance of 200 feet, drilling operations would result in a noise level of 73 dBA Leq and 73 dBA CNEL. Use of a 24-foot high acoustical blanket, as proposed, would reduce the noise associated with the drilling operations 12 to 43 dBA depending on the frequency of the noise with lower noise reduction associated with the lower frequency noise. The sound associated with an idling diesel engine has a low frequency of 20 to 150 Hertz (Hz) while a warning siren typically has a medium to high frequency of about 2,000 Hz. Construction noise is comprised of sounds with varying frequencies. However, noise from drilling operations is expected to be concentrated in the lower frequency range. Thus, the

noise reduction associated with the use of the proposed acoustical blanket is expected to be at the lower end of the range. With the use of the acoustical blanket exterior noise levels at the nearest receptor during drilling are likely to be reduced to 61 dBA CNEL. Typical residential construction with windows closed provides about 20 dBA of noise reduction. Therefore, interior noise levels at the closest residential receptor would be below the 45 dBA noise level which is considered an acceptable interior residential noise level. At the Girls Inc. (Howard School) noise during drilling would be 93 dBA Leq, essentially the same as during general construction. As indicated above, use of the sound blanket is anticipated to provide about 12 dBA of noise reduction. Therefore, exterior noise at the site would be an estimated maximum of 81 dBA. Interior noise levels would be about 61 dBA. As previously stated, the project is scheduled for the summer when the Howard School is not in session. However, Girls Inc. conducts summer enrichment programs. Based upon the assessment above, construction at the well site would create a potentially significant nuisance effect.

Pipeline construction would generate an estimated noise level of 85 dBA Leq during normal operation adjacent to construction (50 feet from the centerline). This noise level would be more than a 10 dBA increase over the ambient noise levels along pipeline segments 1 and 4 where ambient noise is less than 55 dBA, creating a potentially significant nuisance effect for residents. Ambient noise along pipeline segments 2 and 3 are at or above 55 dBA but less than 60 dBA, therefore pipeline construction is considered significant if it occurs for an extended period of time. Similarly, construction of pipeline segment 5 where ambient noise levels in some areas are above 60 dBA would have the potential to violate of worsen a violation of an existing regulatory requirement and is considered significant if it occurs for an extended period of time. However, pipeline installation is linear in nature and it is expected that about 50 linear feet of pipeline per day would be installed. Therefore, noise impacts to any given land use along the route would be limited to a few days in duration. Additionally, interior noise levels would substantively less than indicated above as even the closest residential structures are set back from the street and the structures reduce noise levels by about 20 dBA. Due to the limited duration of pipeline construction in any given area and the restriction of construction to daytime hours, this impact is considered an adverse nuisance impact, but less than significant.

Over the operational life of the project, the primary noise generator would be the well site pump. The pumping motor unit that would be required for well operation would be 300 horsepower with a noise rating of 82 dBA at a distance of three feet. This is the same size of pumping motor unit utilized for the existing, failed well. The pump would be operating continuously for weeks or months at a time when water demand necessitates its use. As indicated above, the closest home to the well is approximately 200 feet away. Accounting for noise attenuation over distance the noise levels created by operation of the proposed pump are expected to be 45.5 dBA at the closest residence. However, the block wall would reduce this noise level by an estimated 8 dBA. Therefore, the overall noise level would not noticeable change

at the closest residence with the operation of the well. At a distance of 10 feet from the well, pump noise would be an estimated 71.5 dBA which would be reduced by about 8 dBA by the block wall to about 63.5 dBA. This is considered conditionally acceptable for a school. Interior noise levels at the closest structure would be below 45 DBA which is considered acceptable.

b) Construction would require the use of heavy equipment which would result in some ground-borne vibration, but the level of vibration would not be substantively different than that associated with the operation of typical garbage trucks and is not expected to result in significant impacts to nearby land uses. The proposed project operation does not involve uses that would generate excessive ground-borne vibration or ground-borne noise levels. Therefore, no short-term or long-term vibration impacts are anticipated.

c) Please refer to the discussion under item a) above.

d) Please see response a) above.

e) The project is not located in an area addressed in an Airport Land Use Plan, and the closest airport is in Goleta, about 18 miles away. Therefore, no airport-related impacts are expected.

f) The project is not within the vicinity of a private airstrip. Therefore, no private airport-related impacts would result.

A residential project (Mission Terrace) is in the construction phase at the intersection of Linden Avenue and El Carro Lane. This project may still be in construction by the time the proposed project is implemented. Pipeline segment 2 and 3 are located in proximity to this development. Noise from these projects may be additive. However, due to the nature of noise sounds are not directly additive and combining construction activities can actually be beneficial over extending the duration of such activities. In either case, due to the short-term nature of the pipeline installation, it is not anticipated to result in a cumulatively significant noise impact.

Mitigation and Residual Impacts:

a) The following mitigation measures are required to reduce construction noise levels to the extent feasible. The District considers implementation of all reasonable mitigation as adequate to reduce construction noise impacts to a less significant level due to its short-term nature. This has also historically been the approach taken by the City of Carpinteria.

NOI1 As proposed by the District, construction of the well will be conducted during the summer months when school is not in session (based upon Carpinteria Unified School District schedule which is also followed by the Howard School).

NOI2 Nearby residents/occupants of adjacent land uses to the construction sites will be given advanced written notification of construction activity scheduling and hours of construction.

NOI3 As proposed by the District, temporary, portable noise barriers shall be used to shield noise-producing activities during drilling operations. The barriers will be 24 feet in height and meet Sound Transmission Class 25 criteria or above. The barriers will be used during drilling when construction activities are proposed for 24-hours per day.

NOI4 If residents complain of inability to sleep or other loss of normal life functions during the period of nighttime construction, the District shall retain a noise monitor to measure interior noise at the residence(s) in question. Should interior noise levels be above the 45 dBA (Ldn) interior residential standard within the home, with doors and windows closed, the District shall offer to provide temporary relocation of residents during the period of night time construction activities.

NOI5 Any stationary construction equipment will be placed within a noise reduction enclosure.

NOI6 All construction equipment shall be in proper operating condition and fitted with standard noise reduction features (e.g., mufflers).

b) No impact is expected, therefore no mitigation is required.

c) No impact is expected, therefore no mitigation is required.

d) Mitigation provided in section a) applies.

e) No impact is expected, therefore no mitigation is required.

f) No impact is expected, therefore no mitigation is required.

13.12 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
people, necessitating the construction of replacement housing elsewhere?				

Setting:

The project site is located in the City of Carpinteria and land uses at and adjacent to the site are described in Section 9.0 above.

Impact Discussion:

a) Project construction is expected to require about six temporary workers. These workers are expected to come from the regional population. No additional permanent employees would be needed for operation of the proposed facilities.

   Furthermore, the project includes construction of a replacement well and is proposed for the purposes of supply reliability, but would not constitute a new source of water supply for the District. Proposed replacement pipelines would not provide water service to areas not presently served by District facilities. Therefore, the project would not result in any growth inducing impacts as a result of construction or operation.

b) There are no residential uses at the project site. Therefore, no residences would be displaced.

c) As people would not be displaced as a result of project implementation, it would not be necessary to provide replacement housing.

Since the project is not growth inducing, it would not contribute to any cumulative growth impacts.

Mitigation and Residual Impacts:

a - b) Impacts would be less than significant, no mitigation is required.

13.13 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Setting:

Public Service providers are identified below.

Public Facilities/Services	Service Provider
Parks	City of Carpinteria
Police Protection	Santa Barbara County Sheriff Department - Carpinteria substation
Fire Protection	Carpinteria-Summerland Fire Protection District
Public Schools	Aliso Elementary School (grades 3-5) Canalino Elementary School (grades K-2) Main Elementary School (grades 3-5) Carpinteria Middle School (grades 6-8) Carpinteria High School (grades 9-12)

Impact Discussion:

a) The proposed project involves development of a replacement water well and installation of water pipeline segments. No new uses that would create a fire or crime hazard are proposed. Therefore, no impacts to police of fire protection services are expected.

The proposed project is not expected to cause an increase in demand for schools and parks, as no development that would induce population growth would be constructed. Therefore, no demand related impacts to schools and parks are expected.

Due to the nature of the project it would result in no impact to public services, therefore, the project would not contribute to any cumulative impacts.

Mitigation and Residual Impacts:

a) No significant impact would result; therefore, no mitigation is necessary.

13.14 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting:

Parks and open space in the City of Carpinteria encompass about 98 acres (City of Carpinteria, 2003). City-owned recreational areas include Carpinteria City Beach, El Carro Park, Memorial Park, Heath Ranch Park, Franklin Creek Park, Monte Vista Park, Historic Marker Park, Salt Marsh Park, Linden Field, Thunder Bowl Roller Hockey Rink, Tar Pits Park

and Bluffs Nature Park. Additionally, there are several recreational resources in the local area that are not owned by the City (e.g., state beach).

The proposed well site and pipeline Segment 1 are within El Carro Park. Pipeline Segment 3 is partly in Franklin Creek Park. Pipeline Segment 5 is partly located along the Santa Monica Creek Trail.

Impact Discussion:

a) The project does propose construction within El Carro Park including the drilling of the replacement well and installation of pipeline segment 1. Additionally, pipeline segment 3 extends along the southern edge of Franklin Creek Park and pipeline segment 5 goes along Santa Monica Creek where a paved recreational trail exists.

   The well construction would be confined to the well site itself with the exception of an adjacent area of pavement which is proposed to be used for staging of the construction activity. This has the potential to significantly affect park operations since this paved area accesses park storage and public rest rooms. Additionally, potential damage to a tree located along the northern well site wall in association with construction activities is considered a potentially significant aesthetic impact affecting the park.

   The construction of pipeline segment 1 has been aligned along the western boundary of El Carro Park in response to the Park Department's desire to minimize impacts to the active portions of the park and significant vegetation. None-the-less, impacts to nearby trees (roots and possibly limbs and trunks) may occur in association with pipeline construction. Such impacts have the potential to adversely impact the health of the affected trees which in turn could adversely impact the aesthetics of the park which is discussed in the aesthetics section of this Initial Study, Section 13.1.

   Installation of pipeline segment 3 would also impact vegetation at Franklin Creek (the complete removal of one shrub and limited root zone impacts to three mature sycamores and the row of shrubs along the southern park boundary). Removal of vegetation at the park site is considered an adverse and significant aesthetic impact which would adversely impact the quality of the recreational experience at this park. Additionally, construction would result in a short-term adverse impact to recreation due to the direct effect of construction operations at the site.

   Installation of pipeline segment 5 would result in the temporary disruption of the use of the Santa Monica Creek Trail near Via Real for a few days which is an adverse recreational impact. However, this portion of the trail would be restored to its pre-project condition or better after pipe installation. However, during construction, adverse impacts to recreational trail users could result if appropriate safety measures are not implemented at the construction site.

b) There are no plans to provide recreational services as part of the project other than restoration of park facilities that would be affected by project construction as addressed in item a) above.

As there would be no other projects directly impacting the El Carro Park, Franklin Park and Santa Monica Creek Trail facilities, there would be no cumulative impacts.

Mitigation and Residual Impacts:

a) To avoid and or reduce the potentially significant and adverse impacts on park operations at El Carro Park, Franklin Creek Park and Santa Monica Creek Trail to less than significant the following measure in addition to the measures identified in Section 13.1 is required.

REC1 The District shall coordinate with the City of Carpinteria Parks and Recreation Department to determine the acceptable limits of temporary construction easements within City recreational facilities prior to project construction. Temporary fencing or other measures determined necessary to delineate the construction and staging areas and to protect the public shall be identified and implemented prior to construction.

b) As there would be no impacts, no mitigation is necessary.

13.15 Transportation/Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☒	☐	☐

Setting:

The primary method of transportation within the project area is the automobile and surface streets are widely distributed throughout the Carpinteria Valley. The primary north-south transportation corridor is U.S. 101.

The project will directly affect the following roads through installation of pipeline: El Carro Lane, Linden Avenue, Sterling Avenue, Via Real and Plum Street. Via Real is a two-lane arterial street paralleling the freeway as a frontage road. Linden Avenue is a two-lane arterial running from the beach through the center of Carpinteria, across U.S. 101 to State Route 192. El Carro Lane is a major east-west collector street serving residential areas north of the freeway, running between Santa Monica Creek and Casitas Pass Road. It is presently discontinuous with a missing segment between Linden Avenue and Sterling Avenue. Via Real is a two-lane arterial street paralleling the freeway as a frontage road. Sterling Avenue and Plum Street are two lane residential streets with Plum being a short Cul-de-Sac. Other streets that are may receive construction-related traffic include U.S. 101, Casitas Pass Road, Foothill Road (Route 192), Santa Monica Road, Linden Avenue and Carpinteria Avenue.

The City of Carpinteria conducted a traffic count program in 2007. The traffic count program identified generally good to excellent levels of service on the project area street

network intersection operations as shown in the table below, with operational levels of service (LOS) in the LOS A and LOS B range (LOS A through LOS C are generally considered acceptable and LOS D through LOS F indicate poor conditions) with a couple of exceptions. These exceptions are Santa Monica Road/Via Real/U.S. 101 northbound interchange which is reported to operate at LOS E during the a.m. peak hours and LOS C in the p.m. peak hours and Carpinteria Avenue at Palm Avenue which reportedly operated at LOS D in the p.m. peak hours (reflecting the delay at the worst minor approach) and LOS C in the a.m. peak hours (reflecting the delay at the worst minor approach). Under future conditions with the completion of interchange improvements the Santa Monica Road/Via Real/U.S. 101 northbound interchange LOS is projected to be C for both the a.m. and p.m. peak.

Rail transportation is also available in Carpinteria via the Union Pacific railroad and Amtrak passenger service that extends through the City parallel to U.S. 101.

Impact Discussion:

a) Construction workers would generate trips going to and from the site. Only six workers are anticipated to be required for project construction at any given time. Therefore, 12 or fewer daily employee trips and several equipment and material trips per day will be required during the peak of the project construction activities. City of Carpinteria significance thresholds for traffic state that for intersections with LOS D the addition of 15 trips is considered significant and for intersections operating at LOS E, the addition of 10 trips is considered significant. Because of the poor levels of service at the Santa Monica/Via Real/U.S. 101 NB (a.m.) project added traffic to this intersection would be considered a potentially significant impact.

   Based upon communication with a representative of the California Department of Transportation District 5, due to the small number of trips generated by the project and temporary nature of the impact, project-related impacts on the operation of U.S. Highway 101 are considered less than significant (Senate, personal communication, January 2008).

   It is possible that other construction projects such as the Mission Terrace Project will be ongoing at the same time as the proposed project. Because any project within the City has the potential to add trips to poorly operating intersections, the project has the potential to contribute to a cumulatively significant short-term impact to the operation of the Santa Monica/U.S. 101 NB intersection.

   Project implementation would not require additional permanent staff. Therefore no increase in long-term trips would be generated by the project.

Intersection	Control	Delay / LOS[a]	
		A.M. Peak	P.M. Peak
U.S. 101 NB On/Off ramps/Santa Monica/Via Real	Four-Way Stop	**40.7 Sec/LOS E**	16.5 Sec/LOS C
U.S. 101 SB Off ramp/Linden Avenue	One-way Stop	13.9/LOSB	20.3/LOS C*
U.S. 101 SB Ramps/Casitas Pass Road	Four-way Stop	16.8/LOS C*	13.6/LOS B*
U.S. 101 NB Off-ramps/Via Real/Casitas Pass Road	Four-way Stop	19.8Sec/LOS C*	15.8 Sec/LOS C*
U.S. 101 Northbound Ramps/Bailard Avenue	One-way Stop	12.7/LOS B (13.5/LOS/LOS B)	11.5/LOS B (18.2/LOS C)
U.S. 101 SB Ramps/SR 150	One-way Stop	7.5/LOS A*	11.2/LOS B*
U.S. 101 NB Ramps/SR 150	One-way Stop	15.8/LOS C*	14.3/LOS B*
Carpinteria Avenue/7th Street	Signal	0.44/LOS A	0.60/LOSA
Carpinteria Avenue/Linden Avenue	Signal	0.52/LOS A	0.57/LOS A
Carpinteria Avenue/Palm Avenue	One-way-Stop	13.1/LOS B (16.2/LOS C)	22.4/LOS C **(30.6/LOS D)**
Carpinteria Ave./Casitas Pass Rd.	Signal	0.45/LOS A	0.67/LOS B
Carpinteria Ave./Bailard Ave.	Four-way Stop	9.8/LOS A	12.6/LOS B
Cravens Lane/Via Real	Three-way Stop	11.4/LOS B	9.6/LOS A
Linden Ave./Foothill Rd. (SR 192)	Three-way Stop	11.1/LOS B	10.3/LOS B
Linden Avenue/El Carro Lane	One-way Stop	12.5/LOS B (13.7/LOS B)	12.2/LOS B (13.4/LOS B)
Casitas Pass Road/El Carro Lane	One-way Stop	8.9/LOS A (10.1/LOS B)	8.8/LOS A (9.7 LOS A)
Casitas Pass Road/Ogan Road	One-way Stop	9.1/LOS A (10.0/LOS A)	8.7/LOS A (9.7/LOS A)
SR 150/Casitas Pass Road (SR 192)	One-way Stop	9.4/LOS A	9.1/LOSA
SR 150/Via Real		(9.9/LOS A)	(9.9/LOS A)
	Two-way Stop	8.7/LOS A	10.1/LOS B
Carpinteria Ave/SR 150		(15.5/LOS C)	(12.6/LOS B)
	One-way Stop	8.7/LOS A (15.5/LOS C)	10.1/LOS B
Santa Monica/Route 192**			(12.6/LOS B)
	2-Way Stop	9.1 Sec/LOS A	8.8 Sec/LOS A

* Total average delay calculated based on observed field delay.

** Data from Carpinteria Valley Water District (2003)

b) Please see response a) above.

c) Since no public airports or private airstrips are near the project site, no impacts to such facilities would result.

d) The project does not include any new roadways or changes to roadways, so no hazards due to design features would result. The proposed project would be compatible with surrounding uses from a traffic perspective. Therefore, there would be no impacts.

e) During construction of the pipeline segments, roadway encroachment would occur. However, the District must obtain an encroachment permit(s) from the City. As part of this process appropriate traffic control that would ensure adequate and safe access would be implemented as part of the construction project. (See encroachment permit requirements provided as Appendix F to this Initial Study.)

   Installation of pipeline beneath U.S. Highway 101 is proposed. This element of the project would not directly impact traffic flow on U.S. Highway 101 and would, therefore, not affect emergency access on this interstate highway. The District will obtain an encroachment permit from the California Department of Transportation for installation of pipeline Segment 5 under Highway 101.

   The project does not propose any changes to roadways (public or private). Since no changes to roadways or access areas are proposed, no impacts would result.

   It is possible that other construction projects such as the Mission Terrace Project will be ongoing at the same time as the proposed project. However, because the project is required to obtain encroachment permit(s) from the City it is anticipated that coordination of construction activities within the City with respect to avoidance of significant impacts to public access would be accomplished through this process.

f) Over the long-term adequate parking is provided at the well site for the District staff that would make routine maintenance visits. During construction, temporary construction employees (maximum six) would park at or near the construction site in available public parking. If this becomes problematic (e.g., interferes with adequate supply of parking for public access to the El Carro Park), construction employees would park at the District office and carpool to the construction site.

g) El Carro Lane and Sterling Avenue are on the Santa Barbara County Metropolitan Transit District (MTD) Seaside Shuttle Route. Transit stops are located in front of El Carro Park on El Carro Lane and at Franklin Creek Park on Sterling Avenue. No pipeline installation is proposed for El Carro Lane in front of the park, however, pipeline installation is proposed for the portion of Sterling Avenue that includes a transit stop. Therefore, the project has the potential to result in a short-term significant impact on operations of the Seaside Shuttle at this location. Over the long-term the project would not include any elements that would interfere with alternative transportation operations.

Mitigation and Residual Impacts:

a-b) The following mitigation is required to reduce the project-specific and cumulative short-term impact on LOS at the Santa Monica/U.S. 101 NB and Casitas Pass/U.S. 101 intersections.

T1 As a condition of awarding of a contract(s) for project construction, the contractor must agree to ensure that all project construction traffic (including construction worker trips, construction truck trips, etc.) avoid the U.S. 101 Northbound On/Off-ramps at Via Real/Santa Monica Roads during the a.m. peak period (7:00 a.m. - 9: a.m.).

c-d) No impact would result, therefore no mitigation is required.

e) To ensure that the projects impact to emergency access and public safety is less than significant the District shall implement the following standard requirement.

T2 The District shall obtain appropriate encroachment permits from the City of Carpinteria and California Department of Transportation as necessary.

f) No impact would result, therefore no mitigation is required.

g) To ensure that the projects impact to alternative transportation is reduced to less than significant the following measure will be implemented.

T3 The District shall coordinate with the County of Santa Barbara Metropolitan Transportation District prior to project construction with regard to the timing of the installation of pipeline Segment 3 so that alternative arrangements for the Seaside Shuttle stop at Franklin Creek Park can be implemented as necessary.

13.16 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
environmental effects?				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Setting:

Public utility and service providers are identified below.

Public Utilities/Services	Service Provider
Water Service	Carpinteria Valley Water District
Wastewater Collection and Treatment	Carpinteria Sanitation District
Solid Waste Collection and	E.J. Harrison and Sons, Inc. (non-hazardous)

Public Utilities/Services	Service Provider
Disposal	
Flood Control	City of Carpinteria and Santa Barbara County

Impact Discussion:

a) The project will dispose 1,200 gpd of water with manganese sulphate and manganese carbonate (approximately 100 ppm) through the sewer system. The Carpinteria Sanitary District (CSD) General Manager was consulted with respect to the proposed discharge. According to the CSD General Manager disposal of this filtration waste would be adequately accommodated by the existing sewer infrastructure and would not affect the CSDs compliance with the discharge requirements of the Regional Water Quality Control Board (RWQCB). Presently, the CVWD has permitted discharge of similar waste from its other wells to the sewer system. Therefore, no significant impact is anticipated. However, the CSD General Manager proposes that the two districts communicate on development of a possible metering system for the purposes of determining sewer fees for the project.

b) Please see response a). CSD has a proposed sewer line replacement project proposed for the same U.S. Highway 101 crossing area as proposed for pipeline Segment 5. The two Districts will need to coordinate on these projects to ensure that the adequate distance between lines is maintained in accordance with the California Waterworks Standards.

c) No new drainage facilities or expansion of facilities would be necessary to accommodate the proposed project. However, flush water from well start-up would be directed to the stormwater system as it was historically when the El Carro Well site was originally in operation. The District will obtain its own discharge permit for this purpose.

d) The project is a replacement water well and pipeline improvements proposed to improve water supply reliability within the District. The District is a special service agency with entitlement to pump groundwater at the site.

e) Please see response a.

f) The project would generate very little solid waste. Some product containers for parts, lubricants, etc., may need to be disposed of during maintenance activities at the site. This amount of solid waste would be negligible. Impacts would be less than significant.

g) The proposed project would comply with all federal, state, and local statutes relating to solid waste. No impacts are expected.

Because the project would create a very minor demand for utilities, it contribution to any cumulative impacts to such utilities is considered "de minimus" and therefore, less than significant.

Mitigation and Residual Impacts:

a-g) No significant impacts are expected, therefore no mitigation is required.

14.0 MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

15.0 INFORMATION SOURCES

15.1 Agencies and Individuals Consulted

Campbell, Jackie, Community Development Director, City of Carpinteria, (805) 684-5304 x451

Gibbs, Michelle, Planner, Santa Barbara County Planning and Development Department, (805) 568-3508

Lipp, Dale, Public Works Director, City of Carpinteria (805) 684-5405 x402

Lotah, A-lul'Koy Owl Clan Consultants, submitted letter dated December 27, 2007, (805) 472-9536

Morse, Dave, Manager of Operations, Santa Barbara County Metropolitan Transit District, (805) 963-3364

Murray, Craig General Manager, Carpinteria Sanitary District, (805) 684-7214

Robert, Matt, Director City of Carpinteria Parks and Recreation Department, (805) 684-5405

Romero, Freddie, Santa Ynez Band of Chumash Indians, telephone communication January 29, 2008, (805) 688-7997

Senate, Steve, Permitting, California Department of Transportation, District 5 (805) 549-3206

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Padre Associates, Inc (December 5, 2007). Summary Review of Environmental Database Information Regarding Hazardous Materials Carpinteria Water District El Carro Well Replacement and Central Zone Pipeline Improvement Project Carpinteria, Santa Barbara County, California.

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