CITY OF BELL GARDENS
WATER RESERVOIR PROJECT

Initial Study

Prepared by:

City of Bell Gardens
Public Works Department
8327 Garfield Avenue
Bell Gardens, CA 90201

Contact: Chau L. Vu, Director of Public Works

MARCH 2020

INITIAL STUDY CHECKLIST

Project Title: **Water Reservoir Construction**

Project Location:

The 1.82-acre Project area is located within the northeastern portion of the City of Bell Gardens. The City is bordered to the north by the City of Commerce, to the south by the City of South Gate, to the east by the City of Downey, and to the west by the City of Bell and the City of Cudahy. Regional access to the City of Bell Gardens is via the Long Beach Freeway (Interstate 710), which extends along the City's western boundary in a north-to-south direction (Reference Exhibits 1 and 2). Major roadways in the Project vicinity include the following: Gage Avenue (.47 mile north of the Project site); Florence Avenue (.3 mile south of the Project site); Paramount Boulevard (1.22 miles east of the Project site); and, Garfield Avenue (.19 mile west of the Project site).

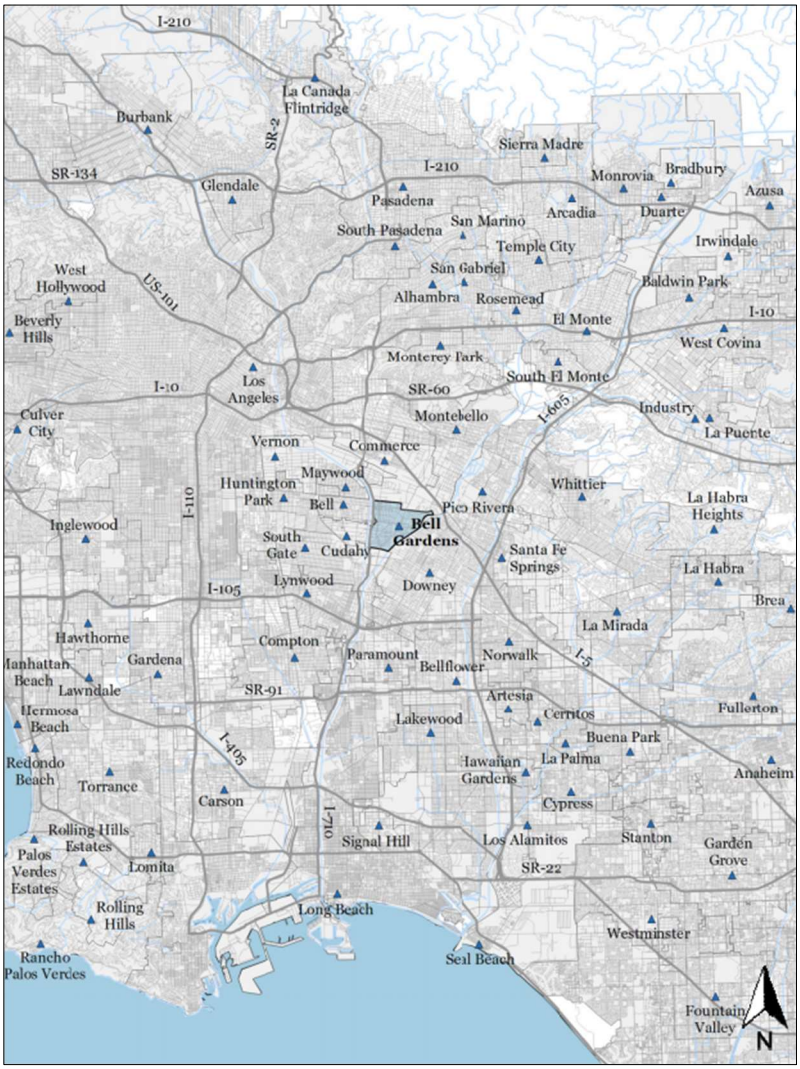

EXHIBIT 1
REGIONAL LOCATION MAP
Source: Quantum GIS

The three alternative Project sites within the Project area that are under consideration for the Project (as described below) are located within a rectangular area comprised of 11 parcels (Reference Exhibit 3) at 6607-6673 Florence Place and 6937-6951 Emil Avenue in the City of Bell Gardens. The City of Bell Gardens owns the parcels, which are covered with natural turf, mature trees, and shrubs. The alternate sites (Reference Exhibit 4 and 5) are bounded to the north by Bell Gardens Veterans Park and the Bell Gardens Boys and Girls Club, on the south by Florence Place and a mix of single-family and multiple-family residences south of Florence Place, on the east by Emil Avenue and duplex and triplex residences east of Emil Avenue, and on the west by Perry Road and BBB Market west of the Perry Road/Florence Place intersection. The three alternative Project sites are separated from Bell Gardens Veterans Park by an alley.

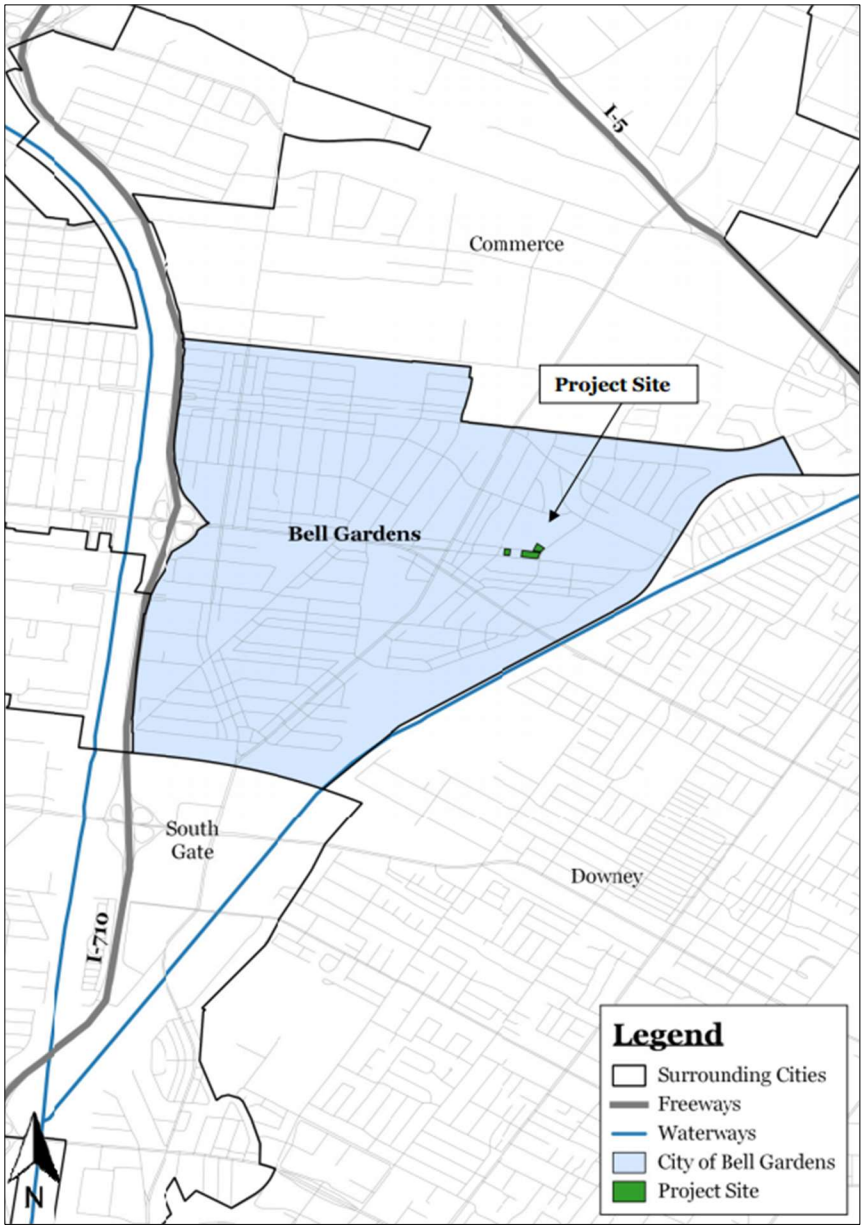

EXHIBIT 2
CITYWIDE MAP
Source: Quantum GIS

EXHIBIT 3
LOCAL MAP
Source: Quantum GIS

EXHIBIT 4
LOCAL MAP
Source: Quantum GIS

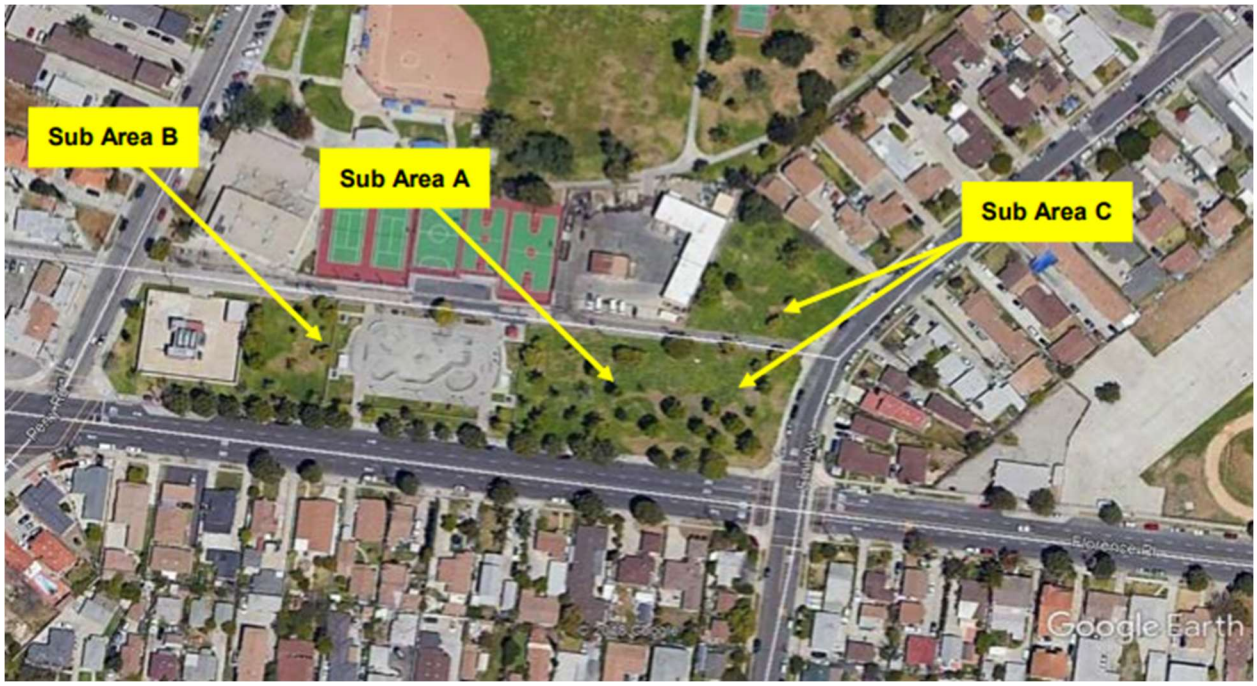

EXHIBIT 5
AERIAL PHOTOGRAPH ILLUSTRATING SUBAREAS
Source: Google Earth Street 2004

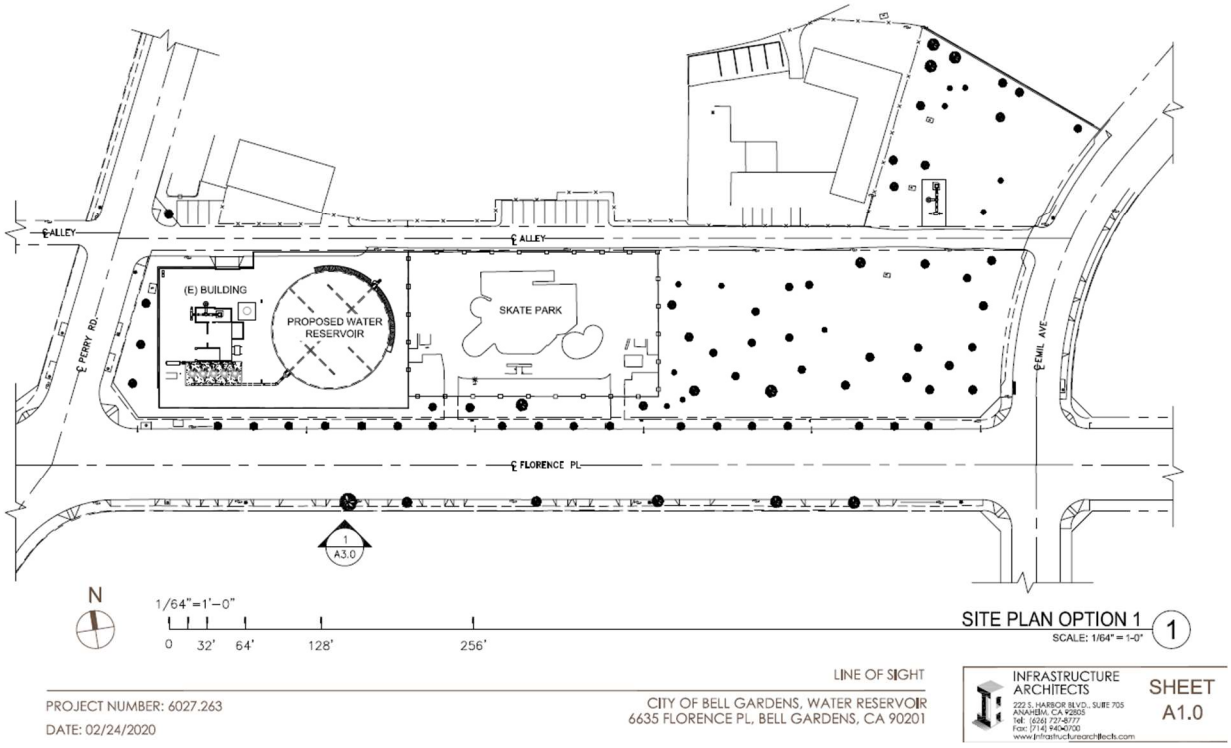

EXHIBIT 6
SITE PLAN OPTION 1

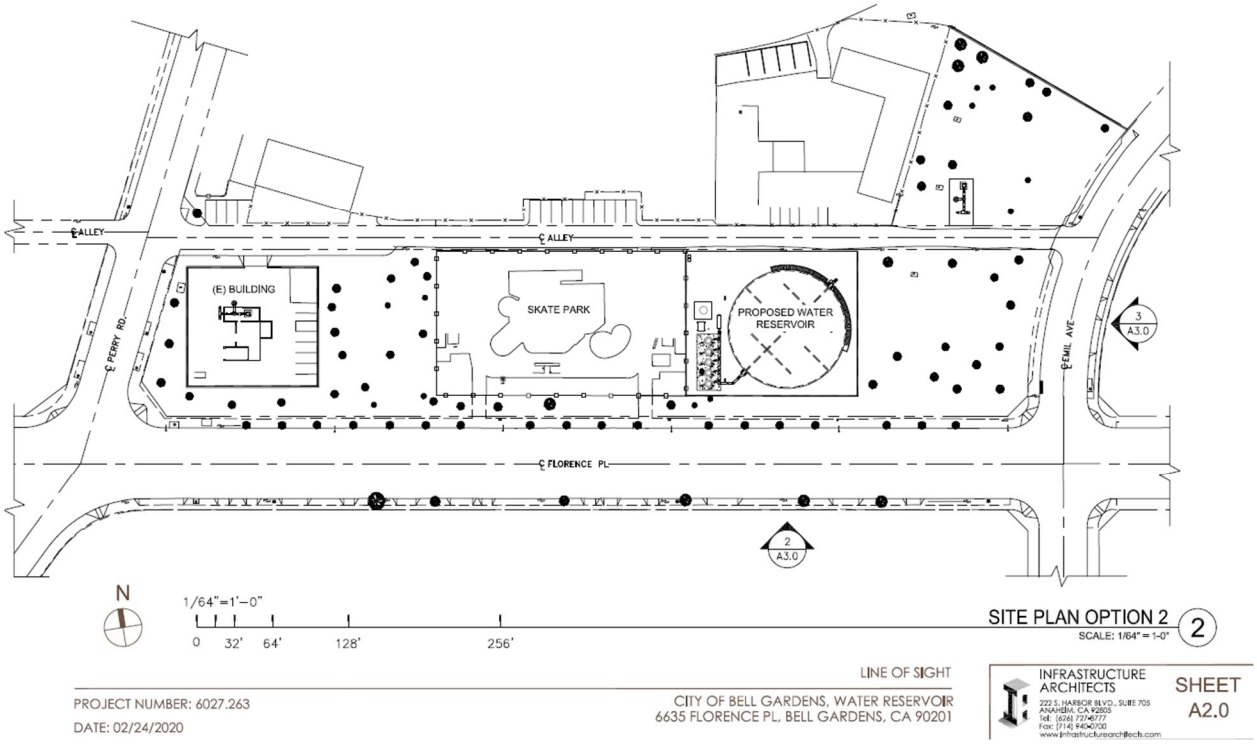

EXHIBIT 7
SITE PLAN OPTION 2

Project Description: The City of Bell Gardens is intending to construct above-ground site improvements to its Well No. 1 Facility. The improvements would supplement the existing Well No. 1 that is located at the northeast corner of Perry Road and Florence Place. In addition, the City intends to construct a new water well and install a new water reservoir tank (tower). The new water tower would be located within one of three potential locations (Project sites) within the 1.82-acre Project area, referred to in this document as Subarea A, Subarea B, and Subarea C (reference Exhibit 5 – Aerial Photograph) and as described below.

Subarea A – Alternative 1 (Parcels 6358-06-902; 6358-06-910; 6358-016-907; 6358-016-913; 6358-016-914; and, 6358-016-911)

Subarea A is a building pad 14,480 square feet in area on two parcels totaling 14,922 square feet in area that are approximately 125 feet west of the northwest corner of the Emil Avenue/Florence Place intersection and approximately 25 feet north of Florence Place. Subarea A would contain a 2-million-gallon steel circular tank that would have a diameter of 120 feet and extend to a height of 24 feet. This Subarea also would contain a 25-foot by 60-foot building pad for a pump station and surge tank (reference Exhibit 7 – Site Plan Option 2). This Subarea is immediately east of the existing Skate Park, between the Skate Park and Emil Avenue, and is separated from Subarea B.

Subarea B – Alternative 2 (Parcels 6358-016-909 and 6358-016-904)

Subarea B is a building pad immediately abutting Existing Well No. 1 to the east. This Subarea would contain a 1.41-million-gallon circular concrete tank that would be 100 feet in diameter and

extend to a height of 24 feet. Subarea B would encompass14,722 square feet in area within two parcels. A 25-foot by 60-foot building pad abutting the Existing Well No. 1 location would contain a pump station and a surge tank. This Subarea is between the Existing Well No. 1 site and the existing Skate Park to the east (reference Exhibit 6 – Site Plan Option 1). Subarea B is separated from Subarea A.

Subarea C – Alternative 3 (Parcels 6358-017-910; 6358-017-911; and, 6358-017-913)

Subarea C is located in the northeast portion of the Planning area and occupies frontage exclusively along the west side of Emil Avenue. The rectangular tank would accommodate 1.48 million gallons within 9,900 square feet of a 42,788 square foot area encompassing six parcels. The tank would extend to a height of 24 feet. A 25-foot by 60-foot building pad abutting the Existing Well No. 1 location would contain a pump station and a surge tank (reference Exhibit 5– Aerial Photograph).

Table 1 below provides a summary of the Project alternatives.

Table 1
Project Summary

PROJECT ELEMENT	DESCRIPTION
Site Area	1.82 acres (79,279 square feet)
Alternative 1 – Tank	1.48-million-gallon rectangular tank within Subarea B
Alternative 1 – Pump Station	1,500 square foot pad for a pump station and surge tank located south of the existing City-owned water well
Alternative 1 – Well Sites	3 alternative new well sites proposed with Subareas A, B and C
Alternative 2 – Tank	1.41-million-gallon circular concrete tank within Subarea B
Alternative 2 – Pump Station	1,500 square foot pad for a pump station and surge tank located south of the existing City-owned water well
Alternative 2 – Well Sites	3 alternative new well sites proposed within Subareas A, B and C
Alternative 3 – Tank	2-million-gallon circular steel tank within Subarea A
Alternative 3 – Pump Station	1,500 square foot pad for a pump station and surge tank located between the public skate park and steel tank
Alternative 3 – Well Sites	3 alternative new well sites proposed within Subareas A and C

Construction Phases

Project construction phases are assumed to occur over approximately 15 months. The following are key construction phases.

- **Phase 1 – Site Preparation.** Phase 1 will occur over an approximate one-month timeframe. The following equipment will be assumed to be operating on the Project site: one tractor; two loaders; two backhoes; and, three rubber tire dozers. Each piece of equipment will operate eight hours during a work day.
- **Phase 2 – Installation of Tank, Control Equipment, and Yard Piping to Tanks.** Phase 2 will include assembly and installation of the tank and tank piping. Phase 2 is expected to occur over an approximate eight-month timeframe. The following equipment will be

assumed to be operating on the Project site during this Phase: two excavators; one tractor; one loader; one backhoe; and, three forklifts. Each piece of equipment will operate during eight hours during a work day.

- **Phase 3 – Installation of Pump Station, Piping from Tanks to Pump Station and Discharge, Final Grading, and Drainage.** Phase 3 involves installation of the pump house and piping. Phase 3 will occur over an approximate five months. The following equipment will be assumed to be operating on the Project site during this Phase: one crane; one loader; three forklifts; and, one tractor. Each piece of equipment will operate during eight hours during a work day.

Project Applicant:	**City of Bell Gardens**
Property Owner:	**City of Bell Gardens**
Lead Agency Contact Person:	**Chau L. Vu** **Director of Public Works** **City of Bell Gardens** **8327 Garfield Avenue** **Bell Gardens, California 90201** **(562) 806-7770** **Email: CVu@bellgardens.org**

This Initial Study has been prepared to identify and assess anticipated environmental impacts of the Project described above. The document relies on the City of Bell Gardens General Plan, Bell Gardens General Plan Environmental Impact Report, and Project-related technical studies noted in the Bibliography to this document to address in detail the effects or impacts associated with Project construction and operation. The Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either individually or cumulatively, may have a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial, the lead agency is required to prepare an Environmental Impact Report. If the lead agency finds no substantial evidence the project or any of its aspects may cause a significant effect on the environment, a Negative Declaration shall be prepared. If the lead agency recognizes the Project may have a significant impact on the environment, but that by incorporating specific mitigation measures to which the Project proponent has agreed in advance the impact will be reduced to a less than significant effect, a Mitigated Negative Declaration shall be prepared. In reviewing site specific information provided for the Project, the City of Bell Gardens has analyzed potential environmental impacts created by this project and a **Mitigated Negative Declaration** has been prepared pursuant to the provisions of CEQA.

Existing Site Conditions

The Project site has a land use designation of "Open Space/Parks" in the City of Bell Gardens General Plan (reference General Plan Exhibit 1-6 – Land Use Map, which is not available on the City web page). The Zoning designation for the three Subareas is Medium Density Residential (R-3) in that single-family residences occupied the Project site until the mid-1980s. The total area of the Project site currently is a greenbelt adjacent to Bell Gardens Veterans Park. The Project site is bordered by open space/park (Bell Gardens Veterans Park) use to the north and by high

density residential uses to the east, west and south. Florence Place immediately borders the Project site to the south. The City of Bell Gardens General Plan identifies Florence Place adjacent to the Project site as a Major Element (to contain medians and street trees) in the City-wide "Beautification Plan" (General Plan Exhibit 1-4).

Project Objectives

The Project Objectives that would be applicable to each of the three alternative sites are as follows.

- Provision of a reliable secondary source of water
- Improvement of water delivery to City residents

Project Approvals

Project development would require a Grading Permit and a Building Permit, both of which would be granted by the City of Bell Gardens.

Regulatory Setting

State

The State of California has created a set of legislation, executive orders, policies and programs intended to reduce greenhouse gas emissions. California can draw on substantial scientific research conducted by experts at various state universities and research institutions. More than a decade of concerted research has demonstrated to scientists that early signs of climate change already are evident in California – demonstrated in increased average temperatures, changes in temperature extremes, reduced Sierra Nevada snowpack, sea level rise, and ecological shifts. Many of such changes are accelerating. Generally, research indicates California should expect overall hotter and drier conditions, increased average temperatures, rising sea levels, and increasing intensity of extreme weather events such as heat waves, wildfires, droughts and floods.

The California Climate Action Team and the Air Resources Board have developed several reports to achieve the Governor's greenhouse gas targets. Reliance on achieving the targets is based on voluntary actions of California businesses, local governments and community groups, and on State incentive and regulatory programs. These include the Climate Action Team's 2010 "Report to Governor Schwarzenegger and the Legislature," the Air Resource Board's 2007 "Expanded list of Early Action Measures to Reduce Greenhouse Gas Emissions in California," and the Air Resources Board's "First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006." The reports identify strategies to reduce California's emissions to levels proposed in Executive Order S-3-05 and Assembly Bill 32 that are applicable to the proposed project. The Scoping Plan adopted in 2008 and updated in 2014 is the most recent document.

Regional

Southern California Association of Governments (SCAG) Connect SoCal (Draft)

Connect SoCal will serve as SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Its core vision is to build upon and expand land use and transportation

strategies established over several previous planning cycles to increase mobility options and to achieve a more sustainable growth pattern in Southern California. Connect SoCal establishes a path toward a more mobile, sustainable and prosperous region by making key connections such as the following: between transportation networks; between planning strategies; and, between people whose collaboration can make plans a reality. Connect SoCal is developed with input from a wide range of stakeholders in Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial counties.

The key legislation and requirements that drive Connect SoCal are the following.

Regional Transportation Plan (RTP)

Federal law requires SCAG to prepare and update a long-range RTP that must include (among other things) the following.

- Identification of transportation facilities such as major roadways, transit, intermodal facilities and connectors that function as an integrated metropolitan system over at least a 20-year forecast period
- A financial plan that demonstrates how the RTP can be implemented with "reasonably available" resources and additional financial approaches
- Strategies to improve existing facilities and relieve vehicular congestion and maximize safety and mobility of people and goods
- Environmental mitigation activities

Keeping up with Clean Air Act Requirements

Most areas within the SCAG region have been designated as nonattainment or maintenance areas for one or more transportation-related criteria pollutants. Pursuant to the federal Clean Air Act, the SCAG RTP is required to meet all federal transportation conformity requirements, including regional emissions analysis, financial constraint, timely implementation of transportation control measures, and interagency consultation and public involvement.

Monitoring System Performance

After 2012, transportation system performance planning and monitoring became a federal mandate. The 2015 FST Act further solidified this commitment to a national performance management and reporting system. SCAG has been using quantitative performance in its evaluations.

Connect SoCal includes new initiatives to close the gap to reach the State's greenhouse gas emissions reduction goals at the intersection of land use, transportation and technology.

<u>City of Bell Gardens</u>

City of Bell Gardens General Plan – Policies Relevant to the Project

Open Space and Recreation Element

The Open Space and Recreation Element contains programs and measures designed to protect and enhance open space resources in Bell Gardens.

Policy 1 – The City of Bell Gardens shall continue to protect and maintain existing open space used for recreation and shall explore opportunities for providing additional park land.

Policy 3 – The City of Bell Gardens shall maximize the City's recreational resources through the adoption of a Quimby Act ordinance.

Conservation Element

The Conservation Element establishes policies related to conservation, development and use of natural resources in the City, including programs and strategies that are intended to be effective in improving local air quality.

Policy 2 – The City of Bell Gardens shall, to the extent possible, protect remaining ecological resources and enhance those resources through programs in the Open Space and Recreation Element and the Circulation and Transportation Element.

Policy 3 – The City of Bell Gardens shall protect the quality of water in the underground water basin by optimizing open space area with programs adopted as part of the Open Space and Recreation Element.

Noise Element

The Noise Element examines existing and future noise environments in the City and promotes policies that reduce noise in the community.

Policy 2 – The City of Bell Gardens shall ensure that the noise caused by sources other than traffic are at acceptable levels.

City of Bell Gardens Zoning Ordinance

The City Zoning Regulations are the primary implementation mechanism for the City General Plan Land Use Element and control development in the City by designating areas where specific land uses are allowed that are compatible with the Land Use Element. The City Zoning Regulations consist of two primary components - - the Zoning Ordinance and the Zoning Map. The Zoning Ordinance is comprised of detailed development standards, and includes lists of permitted and conditional uses and various development standards. The Zoning Map is a parcel specific map with each parcel of land that is assigned a zone designation. The City Zoning Map contains sixteen zones that combined apply to residential, agricultural, commercial and industrial developments. Public parks are permitted uses in the Medium Density Multiple Zone (R-3) and the General Commercial (C-2) zone districts.

City of Bell Gardens Beautification Plan

The City of Bell Gardens developed a Beautification Plan in 1989. This Plan provided a framework to extend urban design principles throughout the City through focusing on the following six basic components to be implemented as individual projects or in conjunction with other development:

- Entrances to the City
- Landscaped Median and Traffic Islands
- Central Business District Landscaping

- Southern California Edison Right-of-Way Screen Planting
- Street Tree Plan
- Public Information Signing

City of Bell Gardens Infrastructure

Water/Wells

Imported Water

The City of Bell Gardens, via the Liberty and Golden State Water Companies, provides water service to the City of Bell Gardens. The Project site is served by the City of Bell Gardens via the Liberty Water Company. As does the Golden State Water Company, the City obtains its water from two primary sources - - the Metropolitan Water District of Southern California system and local wells from underground aquifers. The underground aquifers provide 25 percent of the City water needs; the Metropolitan Water District provides 75 percent of the City water needs. The wells are located in the Central Basin Pressure Area (which provides water to the Project site). Imported water is delivered by the Metropolitan Water District through metered connections operated by the Central Basin Municipal Water District.

There are eight active wells within the Metropolitan Water System; one belongs to the City and seven belong to the Golden State Water Company. Extraction from the ground water basin is limited by terms of an agreement between water producers in the Central Basin to prevent overdraft of the underground water supply. In addition, water producers have organized the Central Basin Water Replenishment District that has undertaken a program of recharging the underground water basin using imported water from the Metropolitan Water District and reclaimed wastewater.

The one active well generally supplies less than one-half the total City water demand. No treatment other than addition of chlorine is given to the well water.

Needs Assessment

The City of Bell Gardens City Council in 2019 acted to balance the inequity of water rates within the City and to fund much needed improvements in the water delivery system by passing a resolution to conduct a cost survey and a public survey. Residents and businesses in Bell Gardens are served by two water systems - - the City-owned water system, which services in the northern portion of the City approximately 30 percent of the City's population; the Golden State Water Company, which provides water to the remaining approximate 70 percent of the City's population. The average City-owned water company bimonthly bill is $54.48; the average Golden State bimonthly bill is $138.58.

Water sales revenues should have increased starting in 2011 to keep pace with maintenance operations and to preserve a Citywide equitable water rate. Most of the existing Bell Gardens Water system is more than 60 years old. Fire flows in many areas of the City are below standard and thereby compromise public safety. Operation and maintenance costs will continue to increase at an estimated rate of $250,000 annually, together with costs such as electricity and pumping assessment. Additionally, the City of Bell Gardens is responsible for a significant annual bond debt payment of $600,000.

Since 2012, the City of Bell Gardens has subsidized cost averages of $2.3 million for customers of the City-owned water company. With the goal of a self-sustaining Water Enterprise Fund that has been running at a deficit for the past seven years, the City Council has directed City staff to conduct a water rate survey, publicize proposed rate increases, and hold a public hearing to solicit public input.

Graduated rate increases over the next five years would allow for equipment and operations to be brought up to current standards. Also, the City would take advantage of its current Disadvantaged Community status to apply for grant money to be used for improvements when available. Furthermore, City staff would be able to explore an additional connection to another water agency or add a second water well to improve reliability of water service.

Increasing water rates throughout to a level comparable with rates in surrounding jurisdictions would provide Citywide equity and halt the drain on the City's General Fund resources.

Public Scoping Meeting

The City of Bell Gardens conducted a public scoping meeting related to the Project environmental analysis on November 19, 2019. The public comments pertained to the nature and purpose of the Project rather than to the Project environmental analysis.

Initial Study Checklist

The proposed project (Project) requires a Grading Permit and Building Permit to proceed.

As part of the City of Bell Gardens' discretionary permitting process for the proposed project (Project), the City has determined an Initial Study shall be prepared to determine whether any impacts resulting from Project development and/or operation would be considered potentially significant. Where the Initial Study concludes there is no substantial evidence the project could have a significant effect on the environment, a Negative Declaration (or a Mitigated Negative Declaration) is required. If the Initial Study concludes there is substantial evidence the Project could have a significant effect on the environment, and Mitigation Measures either are unavailable or have not been agreed to by the Applicant, then an EIR is required.

The Initial Study Checklist recommended in the CEQA Guidelines is used to determine potential impacts of the Project on the physical environment. The Checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the Project. Explanations to answers are provided in a discussion for each section of questions, as follows:

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show the impact simply does not apply to projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).

- All answers must take into account the whole action involved, including off-site as well as on-site, cumulative as well as Project level, indirect as well as direct, and construction as well as operational impacts.

- "Potentially Significant Impact" is appropriate if there is substantial evidence an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

- "Less Than Significant Impact with Mitigation Incorporated" applies where incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the Mitigation Measures and briefly explain how they reduce the effect to a less than significant level

- "Less Than Significant Impact" applies where the impact does not require mitigation or result in a substantial or potentially substantial change of any physical conditions within the area affected by the Project.

- "No Impact" applies where Project development (demolition; grading; construction) and Project operation would not result in any impacts to the environment in the context of CEQA Thresholds of Analysis.

- Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D).

Environmental Factors Potentially Affected

This Project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☒ Aesthetics	☒ Hazards & Hazardous Materials	☒ Recreation
☐ Agriculture & Forest Resources	☒ Hydrology / Water Quality	☒ Transportation
☒ Air Quality	☒ Land Use / Planning	☒ Tribal Cultural Resources
☒ Biological Resources	☐ Mineral Resources	☒ Utilities / Service Systems
☒ Cultural Resources	☒ Noise	☐ Wildfire
☒ Energy	X Paleontological Resources	☐ Mandatory Findings of Significance
☒ Geology / Soils	☐ Population / Housing	
☒ Greenhouse Gas Emissions	☒ Public Services	

Determination

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 to the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

Signature _____ Date 4.22.2020

Printed Name Chaun L. Vu Title Director of Public Works

ENVIRONMENTAL DETERMINATION

I. AESTHETICS

The discussion and analysis in this section is derived from information contained in the City of Bell Gardens General Plan, City of Bell Gardens Municipal Code, the Line of Sight Study performed for the Project/Project sites, and the Project plans.

Setting

The three parcels of the Project site occupy approximately 1.82 acres bordered by Perry Avenue to the north, Emil Avenue to the south, Bell Gardens Park to the east, and Florence Place to the south. The entire Project vicinity is urbanized and includes single family residences and one commercial business.

Garfield Avenue is the primary roadway in the Project vicinity and thus functions as an automobile-dominated corridor that connects Bell Gardens to cities to the north and south. Garfield Avenue is not designated a Scenic Highway or Scenic Corridor in the City of Bell Gardens General Plan. In addition, the segments of Interstate-710 near the Project site have not been identified by the State as scenic highways or landscaped freeways. Interstate-710 contains overhead lighting fixtures as well as alternately heavy nighttime vehicular traffic.

Photo 1: View from adjacent property into Subarea A facing North.

Photo 2: View from adjacent property into Subarea C facing West.

Photo 3: View from adjacent property into Subarea B facing North

Thresholds of Significance

Would the project --

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

Discussion of CEQA Checklist Answers

a) Would the project have a substantial adverse effect on a scenic vista?

NO IMPACT.

Bell Gardens is relatively flat and is built out with a mix of residential, medical, commercial and industrial uses. The urban character of Bell Gardens is further reinforced by the major roadway corridors that include Interstate-710, Garfield Avenue and Florence Avenue. All these auto-oriented roadways are lined with commercial, industrial, residential or medical development.

The City of Bell Gardens has no significant scenic vistas in the Project area and no designated or proposed scenic routes. The 1.82-acre Project area comprises three potential alternative locations for Project development; that is, three separate potential Project sites (Subareas).

Subarea A is comprised of two parcels occupying a total area of 14,922 square feet approximately 125 feet west of the northwest corner of the Florence Place/Emil Avenue intersection. A potential water tower on Subarea A would have a 120-foot diameter and would extend to a height of 24 feet. Subarea A also would include a pump station and surge tank.

Subarea B occupies a total area of 14,722 square feet at the northeast corner of the Florence Place/Perry Road, immediately west of the existing Skate Park. A potential water tower on Subarea B would have a 100-foot diameter and would extend to a height of 24 feet. Subarea B also would contain a pump station and a surge tank.

Subarea C occupies a total area of 42,788 square feet along the westerly side of Emil Avenue. A potential rectangular water tank on Subarea C would extend to a height of 24 feet. Subarea C also would contain a pump station and a surge tank.

Although the tallest structures on each of the three potential Project sites would extend to 24-feet in height, no scenic vista from adjacent residential, commercial or recreational uses would be affected in that distances from the closest residential properties to the potential water reservoirs vary from 65 feet to approximately 135 feet. Existing and replanted trees would further impede public views of each of the potential water towers. No substantial adverse impact on a scenic vista would result from Project development.

Photo 4: View from Subarea C, facing East

Photo 5: View from Subarea A, facing South

Photo 6: View from Subarea B, facing South

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

NO IMPACT.

The Project would provide for construction of a 24-foot tall water tower on one of three noted sites adjacent to the Bell Gardens Park and surrounded by residential uses and a commercial use. The Project site is not within the vicinity of a State-designated (in the Caltrans State Scenic Highway Mapping System) or City-designated scenic highway. Neither Florence Avenue nor Garfield Avenue are designated State scenic highways by the Caltrans State Scenic Highway Mapping System. The entire potential Project site does not contain any heritage trees, historic buildings or rock outcroppings that would be considered scenic resources. There are no scenic vistas or scenic resources on or near the Project site that Project development could adversely affect. Therefore, Project development and operation would not result in a substantial adverse effect on a scenic vista and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. No impact would result from Project development or operation.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

LESS THAN SIGNIFICANT IMPACT.

The Project site consists of a portion of a greenbelt/open space area west of/adjacent to Bell Gardens Park. The greenbelt contains grass, more than 20 mature trees, and shrubbery. The greenbelt is in view of adjacent residences to the west across Florence Place. Subareas A, B, and C are in view of residences south of Florence Place. Subareas A and C are in view of residences to the east, across Emil Avenue. Project development

would entail construction of a water reservoir 24 feet in height on one of three alternative sites, as indicated in the Project Description section of this Initial Study.

The visual character of the greenbelt would be changed as a result of construction of a water tower on any one of the three subareas chosen for Project development. An undetermined number of trees would be eliminated; portions of the greenbelt would be paved over. Development (construction activity) of any of the three potential Project sites would be visible from surrounding land uses. Therefore, a temporary change in visual character would result from the presence of construction equipment and material, some soil stockpiles, and construction vehicles. The visual character of the selected Project site would be temporary, short-term, and insubstantial.

Infrastructure Architects prepared a Line of Sight Study that depicts the view from adjacent residences to each of the three alternative locations for the proposed water reservoir. The Line of Sight Study (reference Exhibit 8) indicates that views from each of three selected points toward the 24-foot tall water reservoirs would be largely impeded by existing trees within the greenbelt both along Florence Place and along Emil Avenue. Views of the proposed reservoirs at locations A and B from residential properties indicate those properties are approximately 65 feet from the water reservoirs. The view from residential properties adjacent to Emil Avenue toward the location B water reservoir are approximately 200 feet from the potential water tower location B and approximately 65 feet from a potential water tower on location C.

The Line of Sight Study demonstrates that the visual impacts of each of the potential three water tower locations from adjacent residences across Florence Place and across Emil Avenue are less than significant.

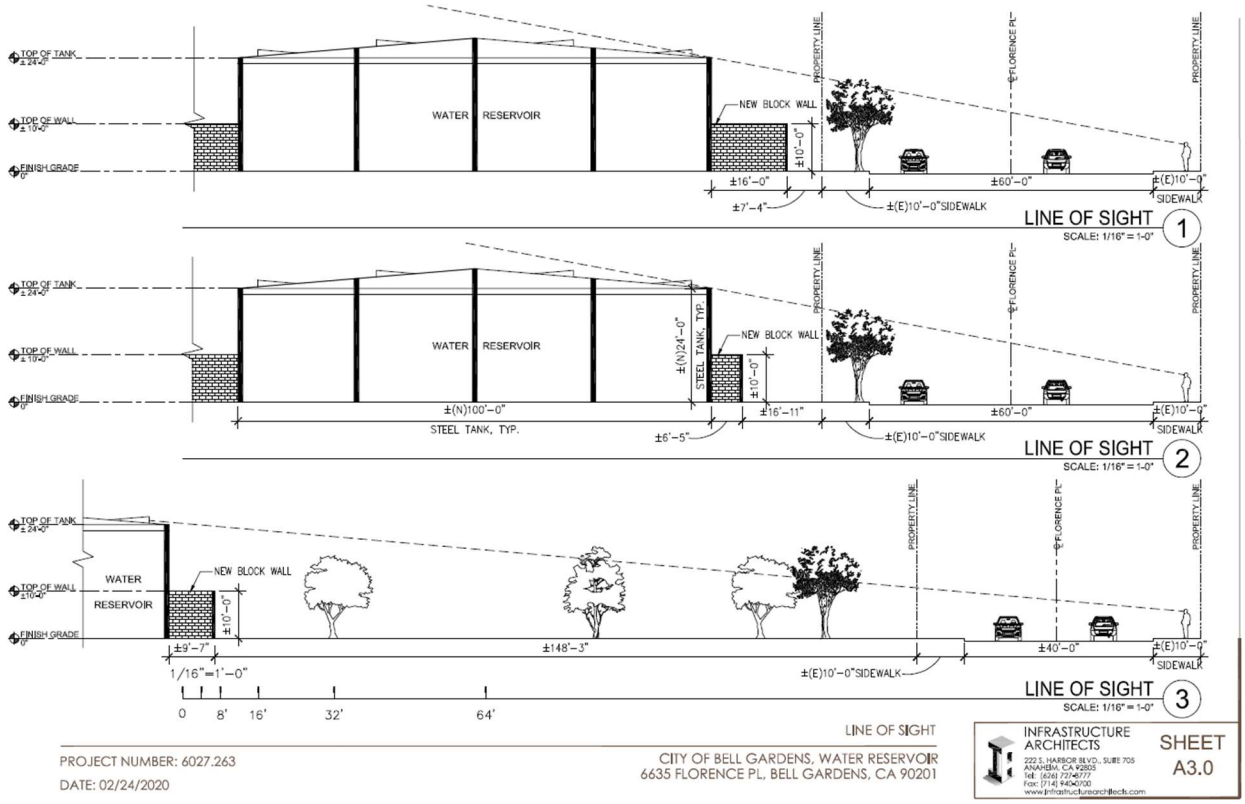

EXHIBIT 8
LINE OF SIGHT

d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

NO IMPACT.

Project development would entail construction of a water reservoir 24 feet in height on one of three alternative sites, as indicated in the Project Description section of this Initial Study. Construction of a water tower and pump station on any of the three potential Project sites typically would occur between 7:00 a.m. and 5:00 p.m. Later afternoon construction activities during the winter could require that some lighting be used, which may be visible from surrounding residential properties. No lighting that spills onto adjacent properties will accompany the new water tower; that is, all Project-related operational and safety lighting will illuminate only the Project site. Therefore, Project development and operation will not include creation of a new source of substantial light that would adversely affect day or nighttime views in the Project vicinity. In addition, the new water tower will have a non-glare surface to reduce any impact of glare from the Project. No impact will result from Project development and operation.

II. AGRICULTURE, AND FORESTRY RESOURCES

The discussion in this section is derived from information contained in the City of Bell Gardens General Plan, City of Bell Gardens Municipal Code, California Department of Conservation Farmland Mapping Program, and Project plans.

Setting

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

The Project site is located within an urban area. No agricultural uses or forestry uses are located on the Project site or in the Project vicinity. The Project site is not zoned for agricultural uses.

Thresholds for Analysis

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects. Lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources				**X**

	Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

Discussion of CEQA Checklist Answers

a-e) Would the project 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?

Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

NO IMPACT.

No portions of the Project area or the Project vicinity contain agricultural resources or prime farmland, or are State-designated Farmland, subject to Williamson Act contractual provisions, or support forest land or forest resources. The Bell Gardens General Plan Land Use Element does not designate any land within the City as Agricultural; the Project area is not zoned for Agricultural purposes. Construction and operation of the proposed water tower and pump station thereby would not result in the loss of forest land or result in the conversion of farmland or conflict with any land zoned for forest land. No impact would occur from Project development and operation.

III. AIR QUALITY

The discussion in this section is derived from information contained in the City of Bell Gardens General Plan, Blodgett Baylosis Environmental Planning, "Air Quality, Energy, Greenhouse Gas, and Noise Study" (February 6, 2020) prepared for the Project, the South Coast Air Quality Management District Air Quality Management Plan (March 2017), and Project plans.

Setting

South Coast Air Basin (SCAB)

The Project site is located within the South Coast Air Basin (SCAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is a 6,745 square mile sub-region of the SCAQMD and includes portions of Los Angeles, Riverside and San Bernardino Counties, and all of Orange County. The larger SCAQMD district boundary includes 10,743 square miles. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east.

The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with Federal and State air quality standards.

The Project site is located within the South Coast Air Basin (SCAB) - - an area that includes 6,600 square miles within Los Angeles, non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. SCAB is under the regulatory jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required to monitor air pollutant levels for compliance with National Ambient Air Quality Standards and California Ambient Air Quality Standards. If air pollutant levels are determined to be out of compliance, the SCAQMD is required to develop strategies to meet the Ambient Air Quality Standards.

California State law requires SCAQMD to prepare a plan for air quality improvement for pollutants for which SCAB is in "nonattainment." SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides for attainment of State and federal air quality standards and updates the AQMP every three years. Each iteration of the AQMP has a 20-year horizon.

Regional Climate

Regional climate has a substantial influence on air quality in the SCAB. The temperature, wind, humidity, precipitation and amount of sunshine influence air quality. Average annual temperatures throughout the SCAB vary from the low-to-middle 60s (degrees Fahrenheit). Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days due to the presence of a marine layer. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. Annual average relative humidity within the

SCAB is 71 percent along the coast and 59 percent inland. More than 90 percent of the SCAB's rainfall occurs from November through April. Annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles.

The importance of wind to air pollution is considerable. Direction and speed of wind determines the horizontal dispersion and transport of air pollutants. During late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing that effectively acts as an impervious lid to pollutants over the entire SCAB.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in winter and typically are only a few hundred feet above mean sea level. These inversions effectively trap pollutants such as NO_x and CO from vehicles, as the pool of cool air drafts seaward. Winter therefore is a period of high levels of primary pollutants along the coastline.

Criteria Pollutants/Health Effects of Air Pollutants

Criteria pollutants are pollutants regulated through development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified as follows.

Carbon Monoxide (CO)

Carbon Monoxide is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO concentrations tend to be highest during winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Motor vehicles operating at slow speeds are the primary source of CO in the SCAB. Thereby, the highest ambient CO concentrations generally are found near congested transportation corridors and intersections.

Individuals with a deficient blood supply to the heart are the most susceptible to adverse effects of CO exposure. Observed effects include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin. Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes. Recent studies have found increased risks for

adverse birth outcomes with exposure to elevated CO levels, including pre-term births and heart abnormalities.

Sulfur Dioxide (SO_2)

Sulfur Dioxide is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant primarily as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_x).

A few minutes of exposure to low levels of Sulfur Dioxide can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to Sulfur Dioxide. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of Sulfur Dioxide. Some population-based studies indicate mortality and morbidity effects associated with fine particles show a similar association with ambient Sulfur Dioxide levels. In these studies, efforts to separate effects of Sulfur Dioxide from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Nitrogen Oxides (Oxides of Nitrogen, or NO_x)

Nitrogen oxides consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides typically are created during combustion processes and are major contributors to smog formation and acid deposition. Nitrogen Dioxide is a criteria air pollutant and may result in numerous adverse health effects. Of the seven types of nitrogen oxide compounds, Nitrogen Dioxide is the most abundant in the atmosphere. As ambient concentrations of Nitrogen Dioxide are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of Nitrogen Dioxide than those indicated by regional monitoring stations.

Population-based studies suggest an increase in acute respiratory illness including infections and respiratory symptoms in children (not infants) is associated with long-term exposure to Nitrogen Dioxide at levels found in homes with gas stoves (which are higher than ambient levels found in Southern California). Increase in resistance to air flow and airway contraction is observed after short-term exposure to Nitrogen Dioxide in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

Ozone (O_3)

Ozone is a highly reactive and unstable gas formed when volatile organic compounds (VOC) and Nitrogen Oxides (which both are byproducts of internal combustion engine exhaust) undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations generally are highest during summer months when direct sunlight, light wind and warm temperature conditions are favorable to formation of this pollutant.

Individuals exercising outdoors, children, and people with preexisting lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences, with increases in daily hospital admission rates, and mortality. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high ozone levels. Animal studies suggest exposure to a combination of pollutants that includes ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Particulate Matter less than 10 microns (PM_{10})

This pollutant is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes and aerosols. Particulate matter pollution is a major cause of reduced visibility caused by the scattering of light and consequently a significant reduction in air clarity. The size of the particles of this criteria pollutant allows the particles to easily enter the lungs where they may be deposited, resulting in adverse health effects.

Particulate Matter less than 2.5 microns ($PM_{2.5}$)

These particles comprising this criteria pollutant are formed in the atmosphere from primary gaseous emissions that include sulfates formed from Sulfur Dioxide release from power plants and industrial facilities and nitrates that are formed from Nitrogen Oxides release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions.

A consistent correlation between elevated ambient fine Particulate Matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels also have been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to Particulate Matter. The elderly with pre-existing respiratory or cardiovascular disease and children appear to be more susceptible to effects of high levels of PM_{10} and $PM_{2.5}$.

Volatile Organic Compounds (VOC)

Volatile organic compounds are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. Volatile organic compounds contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. These Compounds often

have an odor. Some examples include gasoline, alcohol, and solvents used in paints. Exceptions to the Volatile Organic Compounds designation include the following: carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; and, ammonium carbonate. Volatile Organic Compounds are a criteria pollutant because they are a precursor to Ozone. The SCAQMD uses the terms VOC and ROG interchangeably.

Reactive Organic Gases (ROG)

Reactive Organic Gases are precursors in forming Ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons that typically are the result of some type of combustion or decomposition process. Smog is formed when Reactive Organic Gases and Nitrogen Oxides react in the presence of sunlight. Reactive Organic Gases are a precursor to Ozone.

Lead (Pb)

Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of removal of lead from gasoline, there have been no violations at any of the SCAQMD regular air monitoring stations since q1982. Major sources of lead emissions are ore and metals processing, particularly lead smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers.

Fetuses, infants and children are more sensitive than others to adverse effects of Lead exposure. Exposure to low levels of Lead can adversely affect development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death although it appears there are no direct effects of Lead on the respiratory system. Lead can be stored in the bone from early age environmental exposure and elevated blood Lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Lead because of previous environmental Lead exposure of their mothers.

Odors

The science of odor as a health concern is still new. Offensive odors can potentially affect human health in several ways. Odorant compounds can irritate the eye, nose and throat, which can reduce respiratory volume. Also, studies have shown the Volatile Organic Compounds that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health by compromising the immune system. Furthermore, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

Existing Air Quality

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards, which are the levels of air quality considered safe, with an adequate margin of safety, to protect the

public health and welfare. Determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to State and Federal standards.

Air quality in a region is considered to be in attainment by the State if the measured ambient air pollutant levels for Ozone, Carbon Monoxide (except 8-hour Lake Tahoe), Sulfur Dioxide (1 and 24 hour), Nitrogen Dioxide, PM_{10} and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded.

Regional Air Quality

The United States Environmental Protection Agency has established national ambient air quality standards for six of the most common air pollutants: Carbon Monoxide; Lead; Ozone; Particulate Matter – 10 Microns or less; Particulate Matter – 2.5 Microns or less; Nitrogen Dioxide; and, Sulfur Dioxide, all of which are criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Lead air monitoring sites throughout the air district. In 2017, Federal and State ambient air quality standards were exceeded on one or more days for Ozone, PM_{10} and $PM_{2.5}$ at most monitoring locations. No areas of the SCAB exceeded Federal or State standards for Nitrogen Dioxide, Sulfur Dioxide, Carbon Monoxide, Sulfates or Lead.

According to the "Ambient and Emission Trends of Toxic Air Contaminants in California" journal article prepared for the California Air Resources Board, between 1990 and 2012 ambient concentration and emission trends for the seven toxic air contaminants responsible for most of known cancer risk associated with airborne exposure in California have declined significantly. The toxic air contaminants include those derived from mobile sources (diesel particulate matter, benzene and 1,3-butadiene), from stationary sources (perchloroethylene and hexavalent chromium), and from photochemical reactions of emitted volatile organic compounds (formaldehyde and acetaldehyde). Several of the sites in the SCAB include Reseda, Compton, Rubidoux, Burbank and Fontana. Decline in ambient concentration and emission trends of these toxic air contaminants are a result of various regulations the California Air Resources Board has implemented to address cancer risk.

Thresholds for Analysis

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				**X**
b) 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?		**X**		
c) Expose sensitive receptors to substantial pollutant concentrations?		**X**		

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

The South Coast Air Quality Management District (SCAQMD) has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants.

- Ozone (O_3) – Ozone is a nearly colorless gas that irritates the lungs, damages materials, and damages vegetation. Ozone is formed by photochemical reaction (when Nitrogen Dioxide is broken down by sunlight).
- Carbon Monoxide (CO) – Carbon Monoxide is a colorless, odorless toxic gas that interferes with transfer of oxygen to the brain and is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.
- Nitrogen Dioxide (NO_2) – Nitrogen Dioxide is a yellowish-brown gas that at high levels can cause breathing difficulties. Nitrogen Dioxide is formed when Nitric Oxide (a pollutant from internal combustion) combines with Oxygen.
- Sulfur Dioxide (SO_2) – Sulfur Dioxide is a colorless, pungent gas formed primarily by combustion of Sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- PM_{10} and $PM_{2,.5}$ – These refer to Particulate Matter less than 10 microns and 21/2 microns in diameter, respectfully. Particulates of these sizes cause a greater health risk than larger particles since fine particles can more easily cause irritation.

Projects in the South Coast Air Basin (SCAB) that generate construction-related (Project development) emissions that exceed any of the following emissions thresholds are considered to be significant under CEQA.

- 75 pounds per day of Reactive Organic Compounds
- 100 pounds per day of Nitrogen Dioxide
- 550 pounds per day of Carbon Monoxide
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$
- 150 pounds per day of Sulfur Oxides

A project would have a significant effect on Air Quality if ay of the following operational emissions thresholds for criteria pollutants are exceeded.

- 55 pounds per day of Reactive Organic Compounds
- 55 pounds per day of Nitrogen Dioxide
- 550 pounds per day of Carbon Monoxide
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$
- 150 pounds per day of Sulfur Oxides

Discussion of CEQA Checklist Answers

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

NO IMPACT.

The Project site is located within the South Coast Air Basin (SCAB) - - an area that includes 6,600 square miles within Los Angeles, non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. SCAQMD's Air Quality Management Plan (AQMP) contains measures to improve regional air quality. The most recent AQMP was adopted in 2017 and was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). The AQMP will assist SCAG to maintain focus on air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key components of growth. Key elements of the 2016 QMP include enhancements to existing programs to meet the 24-hour $PM_{2.5}$ Federal health standard and a proposed plan to reduce ground-level ozone. The primary criteria pollutants that remain non-attainment in the local area include $PM_{2.5}$ and Ozone.

Specific criteria for determining project conformity with the AQMP is defined in Section 12.3 of the SCAQMD CEQA Air Quality Handbook. The Air Quality Handbook refers to the following criteria as a means to determine Project conformity with the AQMP. Consistency Criterion 1 refers to a proposed project's potential for resulting in an increase in frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation. Consistency Criterion 2 refers to a proposed project's potential for exceeding assumptions included in the AQMP or other regional growth projections relevant to AQMP implementation.

Pertaining to Criteria 1, Project operation airborne emissions will be below levels that the SCAQMD considers to be a significant impact. In addition, the Air Quality Analysis prepared for the Project concludes that "the Project operational emissions will be well within the emissions projections for the City of Bell Gardens identified in the most recent AQMP."

Projects consistent with projections of employment and population forecasts identified in the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) are considered consistent with AQMP growth projections because the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP. The Project is designed to replace an existing obsolete reservoir with new well and water reservoir storage facilities that meet current requirements. Thereby, the Project will not result in any growth inducing impacts because it is a replacement facility.

Projects consistent with the SCAG Regional Comprehensive Plan (RCP) employment projections and population forecasts are considered consistent with AQMP growth projections because the RCP forms the basis of the land use and transportation control portions of the AQMP. Project development will not violate any regional growth projections identified in the Growth Forecast Appendix prepared by SCAG because Project development will involve an upgrade to an existing utility. Project development will not result in an increase in housing units, population, or employment in Bell Gardens. As a result, the Project will not be in conflict with Consistency Criteria 2 since it will not affect any regional population, housing, and employment projections prepared for Bell Gardens.

Thereby, Project development potential impacts do not conflict with or obstruct applicable air quality plans and no impact will result.

b) Would the project 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?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

Daily construction emissions have been analyzed using the California Emissions Estimator Model (Cal EEMod V. 2016.3.2) developed for the South Coast Air Quality Management District (SCAQMD). Project development includes site preparation, construction, and finishing (paving and painting). The following **Table III-1** demonstrates maximum daily construction emissions are not anticipated to exceed SCAQMD significance thresholds. Therefore, mass daily construction-related impacts associated with the Project would be less than significant.

Table III-1
Estimated Daily Construction Emissions

Construction Phase	ROG	NO_2	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation (on-site)	1.74	19.32	9.82	0.02	6.24	3.71
Site Preparation (off-site)	0.04	0.03	0.38	--	0.11	0.03
Total Site Preparation	**1.78**	**19.35**	**10.20**	**0.02**	**6.35**	**3.74**
Grading (on-site)	2.40	25.88	13.32	0.03	10.43	6.12
Grading (off-site)	0.06	0.04	0/57	--	0.17	0.05
Total Grading	**2.46**	**25.92**	**13.89**	**0.03**	**10.60**	**6.17**
Building Construction (on-site)	2.75	22.58	24.62	0.04	1.19	1.12
Building Construction (off-site)	0.03	0.21	0.27	--	0.08	0.02
Total Building Construction	**2.78**	**22.79**	**24.89**	**0.04**	**1.27**	**1.14**
Paving (on-site)	0.69	6.77	8.81	0.01	0.35	0.32
Paving (off-site)	0.05	0.03	0.45k	--	0.15	0.04
Total Paving	**0.74**	**6.80**	**9.26**	**0.01**	**0.50**	**0.36**
Architectural Coatings (on-site)	1.15	1.41	1.81	--	0.08	0.08
Architectural Coatings (off-site)	--	--	0.03	--	0.01	--
Total Architectural Coatings	**.15**	**1/41**	**1.84**	**--**	**0.09**	**0.08**
Maximum Daily Emissions	**2.78**	**25.92**	**24.89**	**0.04**	**10.59**	**6.16**
Daily Thresholds	**75**	**100**	**550**	**150**	**150**	**55**

The following Mitigation Measures have been provided to further reduce potential Project development emissions because the Project area is located in a non-attainment area for Ozone and Particulates and because of the proximity to sensitive receptors.

Mitigation Measure AQ-1 – All unpaved demolitions and construction areas shall be watered three times a day during excavation, grading, and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403. Soil stabilizers shall also be used to control on-site fugitive dust. Watering could reduce fugitive dust by as much as 60 percent.

Mitigation Measure AQ -2 – All materials off-site shall either be sufficiently watered or securely covered to prevent excessive amounts of dust and spillage on adjacent streets during transport.

Mitigation Measure AQ-3 – All clearing, earthmoving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 miles per hour), so as to prevent excessive amounts of fugitive dust.

Mitigation Measure AQ-4 – The contractors shall adhere to all pertinent SCAQMD protocols regarding grading, site preparation, and construction activities.

Long-term emissions refer to air quality impacts that will occur once the Project has been constructed and is operational and will continue over the operational life of the Project. Project operational air quality impacts associated with the Project will include mobile emissions associated with vehicular traffic that will be minimal and will be limited to occasional site visits associated with routine maintenance. The Project also will result in indirect operational emissions derived from off-site production and on-site consumption of energy needed to power the pumps, security lighting, and other equipment. One operational, pumps and other machinery are estimated to consume limited amount of electricity. The Air Quality analysis conducted for the Project used the CalEEMod computer model. **Table III-2** below indicates projected Project operational emissions also will be below thresholds considered to be significant impact levels.

Table III-2
Estimated Operational Emissions (pounds/day)

Emission Source	ROG	NO_2	CO	SO_2	PM_{10}	$PM_{2.5}$
Area-wide	0.05	1.00e-5	1.34e-3	0.00	0.00	0.00
Energy	9.60e-4	8.75e-3	7.35e-3	5.00e-3	6.70e-4	6.70e-4
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.05**	**8.76e-3**	**8.69e-3**	**5.00e-5**	**6.70e-4**	**6.70e-4**
Daily Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

In that Project operational emissions will be at levels below thresholds of significance used by SCAQMD, potential Project operational emissions impacts are considered to be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

According to the SCAQMD CEQA Air Quality Handbook (Appendix 9, as amended 2017), sensitive receptors are land uses and/or activities that are especially sensitive to poor air quality and typically include homes, schools, playgrounds, hospitals, convalescent homes, and other facilities where children or the elderly may congregate. These population groups generally are more sensitive to poor air quality. The nearest sensitive receptors to the Project sites include the residential units located adjacent to Subarea C to the north, residential units located along the east side of Emil Avenue, and residential units located along the south side of Florence Place.

The SCAQMD requires that CEQA air quality analyses indicate whether a project will result in an exceedance of localized emissions thresholds (LST). LST apply to short-term (development) emissions at a fixed location and do not include off-site or regional emissions. The Air Quality Analysis prepared for the Project (Reference Attachment) utilized a number of screening tables that identified maximum allowable emissions (expressed in pounds per day) at a specified distance to a receptor. Pollutants that are the focus of the LST analysis include

the following: conversion of NOx to NO_2; Carbon Monoxide (CO) emissions from construction; PM_{10} emissions from construction; and, $PM_{2.5}$ emissions from construction. For purposes of the LST analysis, the Air Quality Analysis used the thresholds of significance for two-acre sites. **Table III-3** below shows Project LST emissions.

Table III-3
Local Significance Thresholds Exceedance SRA 12 For Two Acres of Disturbance

Emissions	Project	Type	Allowable Emissions Threshold (pounds per day) and a Specified Distance from Receptor (in meters)				
			25	50	100	200	500
NO_x	25.92	Construction	65	64	69	82	117
CO	24.89	Construction	346	515	841	1,817	5,962
PM_{10}	4.99*	Construction	7	20	34	62	146
$PM_{2.5}$	3.12*	Construction	4	6	9	19	74

*****These figures take into account watering of the Project site up to three times daily, which is a standard requirement of SCAQMD

The above Table indicates emissions generated by Project development will not exceed LST identified above.

Table III-4below depicts Project mobile source Diesel Particulate Emissions during Project development. The number and types of equipment that will be used during site preparation was taken from the Cal EEMod worksheets prepared for the Project. The Table demonstrates that the Project site preparation phase will result in negligible emissions.

Table III-4
Diesel Particulate Emissions During Site Preparation

Equipment	# Vehicles	Pollutants (pounds per hour)	Emissions Factors (grams/hour)	# Hours	Emissions (pounds per day)
Tractors	1	PM Exhaust during Operations	0.016	8	0.128
Loaders	2	PM Exhaust during Operations	0.016	8	0.256
Backhoes	2	PM Exhaust during Operations	0.016	8	0.256
Rubber Tired Dozers	3	PM Exhaust during Operations	0.0559	8	1.39

Table III-5 below depicts Project mobile source Diesel Particulate Emissions during the grading phase. The number and types of equipment that will be used during site preparation was taken from the Cal EEMod worksheets prepared for the Project. The Table demonstrates that the Project grading phase will result in negligible emissions.

Table III-5
Diesel Particulate Emissions During Installation of Tank, Control Equipment, and Installation of Yard Piping to Tanks

Equipment	# Vehicles	Pollutants (pounds per hour)	Emissions Factors (grams/hour)	# Hours	Emissions (pounds per day)
Excavators	2	PM Exhaust during Operations	0.027	8	0.181
Tractors	1	PM Exhaust during Operations	0.016	8	0.128
Loaders	1	PM Exhaust during Operations	0.016	8	0.256
Backhoes	1	PM Exhaust during Operations	0.016	8	0.128
Forklift	3	PM Exhaust during Operations	0.008	8	0.064

Table III-6 below depicts Project mobile source Diesel Particulate Emissions during the construction phase. The number and types of equipment that will be used during site preparation was taken from the Cal EEMod worksheets prepared for the Project. The Table demonstrates that the Project construction phase will result in negligible emissions.

Table III-6
Diesel Particulate Emissions During Installation of Pump Station, Piping from Tanks to Pump Station and Discharge, Final Grading, and Drainage

Equipment	# Vehicles	Pollutants (pounds per hour)	Emissions Factors (grams/hour)	# Hours	Emissions (pounds per day)
Crane	1	PM Exhaust during Operations	0.0190	8	0.152
Loaders	1	PM Exhaust during Operations	0.016	8	0.128
Forklift	3	PM Exhaust during Operations	0.008	8	0.064
Tractors	1	PM Exhaust during Operations	0.016	8	0.128

$PM_{2.5}$ and PM_{10} emissions will below the LST thresholds of significance. The Air Quality Analysis conducted for the Project indicates that to further reduce particulate emissions from Diesel use, the following Mitigation Measure is recommended.

Mitigation Measure AQ-5 – To ensure that diesel particulates from equipment and vehicles are kept to a minimum, the Project contractors shall ensure that all diesel trucks and equipment are not left to idle for longer than five minutes.

This Mitigation Measure, together with Mitigation Measures AQ-1 through AQ-4, will ensure potential impacts to Air Quality will be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

LESS THAN SIGNIFICANT IMPACT.

Emissions from equipment used during Project development will be minor. Idling from construction vehicles and equipment will be restricted to five or fewer minutes based on standard SCAQMD protocols. Therefore, odors generated by diesel powered equipment will be less than significant and therefore potential impacts are anticipated to be less than significant.

IV. BIOLOGICAL RESOURCES

The discussion and analysis in this section is derived from information contained in the Chambers Group – Biological Reconnaissance Survey prepared for the Project sites, the City of Bell Gardens General Plan, Project permitting history, and the Project plans.

Setting

The Project site consists of a portion of a greenbelt/open space area west of/adjacent to Bell Gardens Park. The greenbelt contains grass, more than 20 mature trees, and shrubbery.

Chambers Group conducted database searches, using the most recent records of the California Natural Diversity Database (CNDDB 2020) and the California Native Plant Society Electronic Inventory of Rare and Endangered Vascular Plants of California 9CNPSEI 2020) to determine which species are known to occur within the Project vicinity. These databases contain records of reported occurrences of federal- and State-listed endangered or threatened or proposed endangered or threatened species, California Species of Special Concern (SSC), and otherwise sensitive species or habitats that may occur within or in the immediate vicinity of the Project area/sites. Chambers Group then developed a list of sensitive plant and wildlife species potentially occurring within the Project area/sites. In addition, Chambers Group biologists conducted an inventory of biological resources on the property and assessed the potential for the presence of sensitive plant and wildlife species and sensitive habitats.

Chambers Group referenced soil maps for southeastern Los Angeles County to determine soil types found on the Project sites. Also, Chambers Group determined vegetation communities and performed a reconnaissance-level field survey of the Project sites to characterize distribution and relative abundance of wildlife, wildlife resources, and wildlife habitats. Wildlife and wildlife signs, including tracks, scat, carcasses, burrows, nests, excavations and vocalizations were noted and recorded. The Biological Reconnaissance Survey contains a listing of wildlife species observed during the Project sites visit and is included as an Appendix to the Survey and an Appendix to this Initial Study.

Special Status Plants and Sensitive Wildlife Species

Chambers Group evaluated the potential for occurrence of special status plants and wildlife through a literature review and visit to the Project area/sites. Sensitive plant and animal species include all federal-listed and State-listed endangered and threatened species. A sensitive species was considered a potential inhabitant of the Project area if general habitat requirements (roosting, nesting, or foraging habitat, or a permanent source of water) of the species were present and/or its known geographical distribution encompassed or was adjacent to part of the Project sites. Chambers Group staff visited all habitat types on foot and evaluated the probability for special-status plants to occur on the Project sites.

Factors used to determine potential for occurrence included habitat quality, elevation, and reconnaissance survey results. Also, location of prior CNDDB records of occurrence were used as additional data only in support of the analysis from the factors noted. The “potential for occurrence” ranking is based on the following criteria.

- **Absent –** Species was not observed during focused surveys conducted at an appropriate time for identification of the species, or species is restricted to habitats that do not occur on the Project sites, or suitable habitat conditions are not present onsite

- **Low –** Habitats needed to support the species are of poor quality within the Project sites

- **Moderate –** Either habitat requirements or environmental conditions associated with the species occur within the Project sites; or, marginal habitat exists within the sites and a historical record exists of the species within the Project sites or immediate vicinity of the Project sites

- **High –** Both the habitat requirements and environmental conditions associated with the species occur within the Project sites and a historical record exists of the species within the Project sites or its immediate vicinity

- **Present –** Species was observed within the Project sites at the time of the survey

Location information about some sensitive species was not available. Therefore, for survey purposes landscape factors associated with species occurrence requirements might be considered sufficient to give a species a positive potential for occurrence.

Jurisdictional Waters Assessment

Prior to beginning the field preliminary delineation, Chambers Group examined a topographic map, aerial photograph, and the United States Fish and Wildlife Service National Wetlands Inventory Wetlands Mapper (2019) to determine locations of potential areas containing waters subject to United States Army Corps of Engineers (Army Corps), Regional Water Quality Control Board (RWQCB), or California Department of Fish and Wildlife (CDFW) jurisdiction. Chambers Group biologists examined the Project sites to identify potential jurisdiction pursuant to Section 404 and 401 of the Clean Water Act, and jurisdiction pursuant to Section 1602 of the State of California Fish and Game Code.

Results of Reconnaissance Survey

Chambers Group biologists conducted the reconnaissance survey of the Project sites on January 29, 2020. The reconnaissance survey was conducted to identify and map vegetation communities, document existing biological resources, and assess the habitat for its potential to support sensitive plant and wildlife species on the Project sites.

Soils

The Project sites fall entirely within “Urban Land-Biscailuz-Hueneme, drained complex, with 0-2 percent slopes, - - a soil complex composed of approximately 50 percent Urban land, approximately 20 percent Biscailuz and similar soils, and approximately 15 percent Hueneme drained and similar soils, together with minor soil components. Urban land is found on alluvial fans with 0-2 percent slopes and is composed of highly compact, shallow, manufactured layers typical of urban areas.

The Biscailuz Series is formed in alluvium on floodplains and lowlands and typically is composed of loam to a depth of 31 inches, followed by loamy fine sand to a depth of 43 inches.

Biscailuz soils are formed from discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock. Available water capacity is moderate at approximately 8.6 inches. This is a somewhat poorly drained soil with a water table more than 80 inches below the surface. Biscailuz soils are used for urban residential and commercial development. Ornamental plants and turf-grass are common in these areas.

The Hueneme Series is formed in nearly level alluvial plains and basins in stratified alluvium and typically is composed of fine sandy loam to a depth of 41 inches, followed by a combination of silt loam, fine sandy loam, and very fine sandy loam to a depth of 79 inches. Hueneme soils are formed from discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock. Available water capacity is high at approximately 10.5 inches. These soils a somewhat poorly drained with a water table more than 80 inches below the surface. The Biological Reconnaissance Survey appended to this Initial Study contains a soil map for the Project area.

Vegetation and Other Areas (Reference Photographs below)

The dominant vegetation community within the Project sites is Ornamental Landscaping.

Photo 1: Depicts the developed existing well site where encroachment of the new reservoir in Subarea B would occur, facing southeast.

Photo 2a: Depicts ornamental landscaping in Subarea B, facing south

Photo 2b: Depicts ornamental landscaping in Subarea B, facing southeast

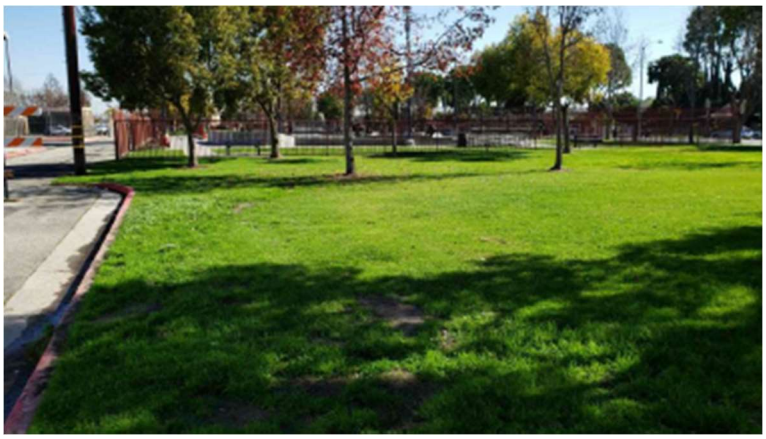

Photo 2c: Depicts ornamental landscaping in Subarea B, facing east.

Photo 3a: Depicts ornamental landscaping in Subarea A, facing south.

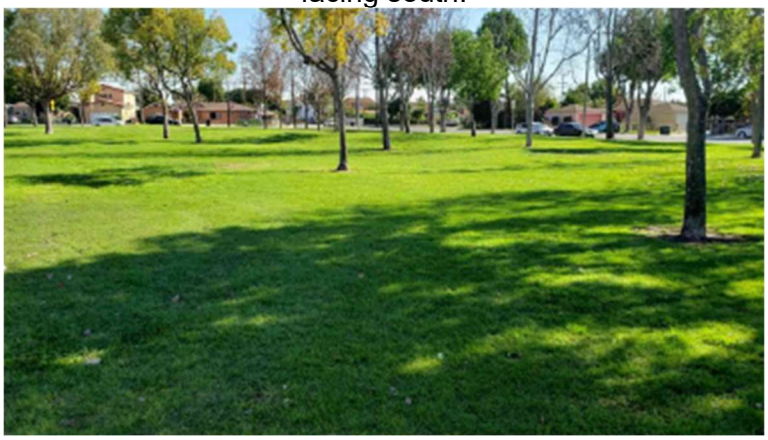

Photo 3b: Depicts ornamental landscaping in Subarea A, facing southeast.

Photo 3c: Depicts ornamental landscaping in Subarea A, facing east.

Photo 4a: Depicts ornamental landscaping in Subarea C (south), facing south.

Photo 4b: Depicts ornamental landscaping in Subarea C (south), facing southeast.

Photo 4c: Depicts ornamental landscaping in Subarea C (south), facing east.

Photo 4d: Depicts ornamental landscaping in Subarea C (north), facing northeast.

Photo 5a: Depicts ornamental landscaping in Subarea C (south), facing west.

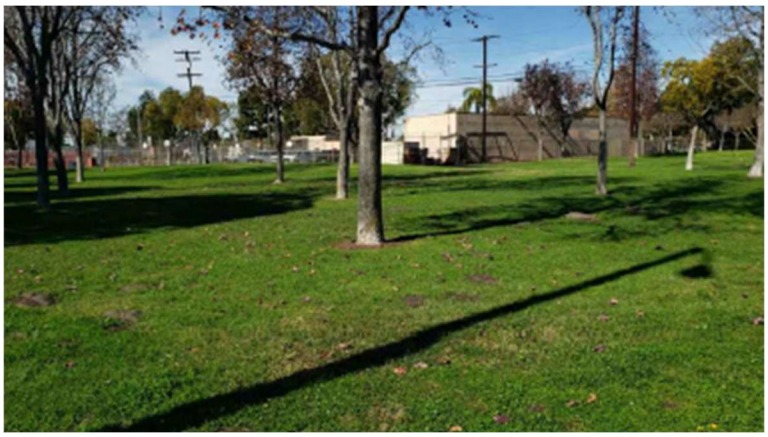

Photo 5b: Depicts ornamental landscaping in Subarea C (south), facing northwest.

Photo 5c: Depicts ornamental landscaping in Subarea C (south), facing north.

Scientific Name	Common Name
GYMNOSPERMS	
PODOCARPACEAE	**PODOCARP FAMILY**
*Podocarpus macrophyllus**	plum pine
MAGNOLIIDS	
LAURACEAE	**LAUREL FAMILY**
*Cinnamomum camphora**	camphor tree
ANGIOSPERMS (EUDICOTS)	
APIACEAE	**CARROT FAMILY**
Apiastrum angustifolium	wild celery
ASTERACEAE	**SUNFLOWER FAMILY**
*Lactuca serriola**	prickly lettuce
*Pseudognaphalium luteoalbum**	everlasting cudweed
*Sonchus oleraceus**	common sow thistle
*Sonchus sp.**	sow thistle species
*Taraxacum officinale**	common dandelion
BRASSICACEAE	**MUSTARD FAMILY**
*Lepidium didymum**	wart cress
*Sisymbrium orientale**	oriental hedge mustard
CARYOPHYLLACEAE	**PINK FAMILY**
*Stellaria media**	common chickweed
EUPHORBIACEAE	**SPURGE FAMILY**
*Euphorbia albomarginata**	rattlesnake weed
FABACEAE	**LEGUME FAMILY**
*Medicago lupulina**	black medick
*Medicago polymorpha**	bur clover
*Trifolium repens**	white clover
*Trifolium sp.**	clover
GERANIACEAE	**GERANIUM FAMILY**
*Erodium botrys**	broad-lobed filaree
HAMAMELIDACEAE	**WITCH-HAZEL FAMILY**
*Liquidambar styraciflua**	sweet gum
MALVACEAE	**MALLOW FAMILY**
*Malva parviflora**	cheeseweed
OXALIDACEAE	**OXALIS FAMILY**
*Oxalis corniculata**	creeping wood-sorrel
PLANTAGINACEAE	**PLANTAIN FAMILY**
*Plantago major**	common plantain
*Veronica arvensis**	corn speedwell
*Platanus x acerifloia**	London planetree
POLYGONACEAE	**BUCKWHEAT FAMILY**
*Polygonum arenastrum**	common knotweed
SAPINDACEAE	**SOAPBERRY FAMILY**
*Koelreuteria paniculata**	golden raintree
SOLANACEAE	**NIGHTSHADE FAMILY**
Solanum americanum	small-flowered nightshade
STERCULIACEAE	**CACAO FAMILY**
*Brachychiton populneus**	bottle tree
ANGIOSPERMS (MONOCOTS)	
ARECACEAE	**PALM FAMILY**
*Washingtonia robusta**	Mexican fan palm
CYPERACEAE	**SEDGE FAMILY**
*Cyperus sp.**	sedge
POACEAE	**GRASS FAMILY**
*Agrostis sp.**	bent grass
*Eleusine indica**	goose grass
*Pennisetum clandestinum**	kikuyu grass
*Poa annua**	annual bluegrass
*Stenotaphrum secundatum**	Saint Augustine grass

*Non-Native Species

Plant Species Observed

Ornamental Landscaping

Ornamental landscaping is present on each of the three potential Project sites and occupies 1.78 acres of the Project area. Plant species found on the Project sites typical of this community include the following: non-native turf grass; scattered weeds; and, planted ornamental trees dominated by non-native sweet gum and camphor tree.

Developed

Developed areas on the Project sites consist of asphalt or concrete pads devoid of vegetation. Subareas A and C (Project sites A and C) of the Project area have 0.13 acres of developed area.

Sensitive Plant Species

Literature reviews resulted in a list of 49 sensitive plant species that have records of occurrence on or within the vicinity of the quad containing the Project area. Ten of the 49 sensitive plant species are federal-listed and/or State-listed as endangered or threatened species. None of the 49 sensitive plant species have a potential to occur on the Project sites and all 49 are considered **absent** from the Project are due to lack of suitable habitat.

Reptiles and Amphibians

Ornamental landscaping characterizes the Project area, which supports wildlife species that are characteristic of this vegetation community. However, Chambers Group biologists did not observe reptile or amphibian species on the Project area.

Birds

Birds observed at the Project area during the reconnaissance survey included black phoebe, gull, house finch, mourning dove, northern flicker, and yellow-rumped warbler.

Mammals

Mammals occurring and/or detected in the Project area included Botta's pocket gopher and domestic dog.

Sensitive Wildlife Species

Chambers Group determined that 44 sensitive wildlife species have records of occurrence on or within the vicinity of the quad containing the Project area. Factors used to determine potential for occurrence include quality of habitat, impact of surrounding residential development, and the date and location of prior CNDDB records of occurrence. None of the 44 sensitive wildlife species returned in the literature review have the potential to occur on the Project sites and all 44 are considered **absent** from the Project sites due to lack of suitable habitat. Chambers Group biologists observed one Monarch Butterfly in the Project area during the reconnaissance survey. However, this was considered an incidental observation (traveling through the Project are) as suitable roosting habitat and host-plant species are not present on the Project sites.

Jurisdictional Waters Assessment

Pursuant to Section 404 of the Clean Water Act, the Army Corps regulates discharge of dredged and/or fill material into waters of the United States. These waters include navigable waterways and wetlands adjacent to navigable waterways, non-navigable waterways, and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways.

Pursuant to Section 401 of the Clean Water Act, the State of California regulates discharge of dredged and/or fill material into waters of the State. The RWQCB asserts jurisdiction to all areas defined as jurisdictional under Section 404 of the Clean Water Act, plus isolated waters. The State Water Resources Control Board (SWRCB) regulates all waters of the State, including isolated wetlands as identified in the California Porter-Cologne Water Quality Control Act.

Jurisdictional authority of the California Department of Fish and Wildlife (CDFW) is established under Section 1600 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river or stream. The Fish and Game Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake without notifying the CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. Additionally, CDFW does not have jurisdiction over wetlands, but has jurisdiction to protect against a net loss of wetlands. CDFW supports the wetland criteria recognized by USFWS. One indicator of wetland conditions must exist for wetlands conditions to be considered present.

The Project sites do not contain potential jurisdictional waters. No riparian habitat, wetlands or vernal pools were identified on the Project sites and a formal delineation of the Project sites will not likely be required, according to the Biological Reconnaissance Survey prepared for the Project sites.

Thresholds for Analysis

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?		**X**		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish		**X**		

and Game or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
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?				**X**

Discussion of CEQA Checklist Answers

a) b) and d)

a) Would the Project 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) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

None of the 49 special status plant species evaluated for potential occurrence on the Project sites have a moderate to high potential for occurrence. Due to the developed nature of the Project sites and accompanying regular maintenance with landscaped vegetation, the Biological Reconnaissance Survey conducted for the Project sites states ". . . there is no potential for any special status plant species to occur in any of the three subareas associated with the project." Therefore, no further plant surveys are recommended.

According to the literature review and the Biological Reconnaissance Survey conducted for the Project sites, “no special status wildlife species have the potential to occur within the project site.”

Although no special status wildlife species have the potential to occur on the Project sites, a number of trees within the Ornamental Landscaping community on the Project sites potentially would support nesting birds. Several trees will be removed from the preferred Project site for the new water well. In compliance with the Migratory Bird Treaty Act (MBTA) and Section 10(a)(1)(A) of the Endangered Species Act, the Biological Reconnaissance Survey conducted for the Project sites states that “vegetation removal and other ground-disturbing activities associated with construction should be conducted from September 15 through January 31, when birds are not nesting; or a pre-construction nesting bird survey will likely be required within the project boundary and buffer if construction of the project is planned to occur within the nesting bird season (February 1 to September 15).”

Implementation of the following Mitigation Measures will ensure any impact to nesting birds will be reduced to a Less than Significant Level.

Mitigation Measure MM-BIO-1 – A pre-construction nesting bird survey should be conducted by a qualified biologist no more than seven (7) days prior to vegetation removal or construction activities during the nesting season.

Mitigation Measure MM-BIO-2 – If an active nest is found, all active bird nests shall be flagged in all directions, and an appropriate avoidance buffer will be established around the nest by a qualified biologist in consultation with the California Department of Fish and Wildlife. This buffer shall not be disturbed by construction activities until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young are no longer expected to be impacted by the project as determined through additional monitoring by a qualified biologist.

Mitigation Measure MM-BIO-3 – If, during the nesting season, 10 days have passed since an area has been surveyed, and construction work has not been continuous in that area, then construction work shall not take place in that area until a new nesting bird survey has been performed.

Mitigation Measure MM-BIO-4 – If active nests are observed adjacent to the project and an avoidance buffer has been established, it is recommended that a biological monitor be present on site to monitor nesting behaviors in order to assess if the nest buffer is appropriate. If the birds show any sign of stress, the buffer will be increased and work should be conducted elsewhere until fledging occurs. If necessary, the size of the buffer area may be reduced if the biologist in consultation with the California Department of Fish and Wildlife determines that the construction activity would not be likely to have adverse effects on the particular species in question.

The Project site is not an identified link in any wildlife corridor. There is no potential for Project development and operation to interfere with movement of fish or to impede use of a native wildlife nursery site.

c) Would the Project have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

NO IMPACT.

The Biological Reconnaissance Survey conducted for the Project sites states that "the project site does not contain any potential jurisdictional waters. No wetlands or vernal pools were identified in the project area and a formal delineation of the site will not likely be required. [Therefore] The project is not expected to have a substantial adverse effect on any state or federally protected waters including marshes, vernal pools, wetlands, or otherwise coastal habitat."

e) and f) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

NO IMPACT.

No special protection is afforded for trees in the City of Bell Gardens. The City Municipal Code remains silent on tree protection. The City has not adopted a relevant Habitat Conservation Plan or Natural Community Conservation Plan, and no approved local, regional or State habitat conservation plan applies to the Project sites. Therefore, due to the lack of a tree protection or tree preservation ordinance, individual trees, particularly non-native trees, are not protected. The Biological Reconnaissance Survey conducted for the Project site states "no further surveys for trees are recommended at this time."

V. CULTURAL RESOURCES

The following analysis is based on the "Cultural and Paleontological Resources Assessment Report for the Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, California," prepared by Cogstone, (February 2020).

Setting

Historic Setting – California

Juan Cabrillo was the first European to sail along the California coast in 1542. Between 1769 and 1822, the Spanish had colonized California and established missions, presidios and pueblos. Mexico won its independence from Spain in 1821 and worked to lessen the wealth and power of the missions. Mexico passed the Secularization Act in 1833, which gave mission lands to the Mexican governor and downgraded the missions' status to that of parish churches. The governor then redistributed the former mission lands, in the form of grants, to private owners. By 1868, there were more than 500 Ranchos in California, all but approximately 30 of which resulted from land grants.

In 1850, California was granted statehood. Although the United States promised to honor the land grants, the process of defining rancho boundaries and proving legal ownership became time consuming and expensive. Legal debts led to bankruptcies and increased prices for beef, hide and tallow. This combined with flooding and drought to the detriment of the cattle industry. Ranchos were divided and sold inexpensively.

Historic Setting – City of Bell Gardens

In 1771, Antonio Lugo (a corporal in the Spanish army, was given a land grant of more than 29,514 acres that included the area of what today is the City of Bell Gardens. In 1783, Lugo's son Don Antonio Maria Lugo was born, and as a young man, later built one of the largest ranches in the history of California. He named the ranch Rancho San Antonio. Don Lugo built several adobe homes within the boundaries of the grant. The original adobe dwelling was built in 1795 and remains the oldest house in Los Angeles County. The house is still standing at 7000 Gage Avenue in the City of Bell Gardens.

Henry Tifft Gage was one of Bell Gardens' most well-known citizens. Gage served as California's 29th Governor from 1898-1903. He married one of Don Antonio's great granddaughters, Frances V. Rains. As part of his marriage dowry, a 27-acre parcel was given him. He acquired Rancho San Antonio and worked extensively to restore the heritage farmhouse by 1810.

Many Japanese immigrants were attracted by the rich soil and abundant land in Bell Gardens. Japanese gardeners farmed these lands with produce and rice fields. Bell Gardens remained a farming community until the 1930s.

Bell Gardens incorporated on August 1, 1961. The City maintains only a small portion of the Lugo land grant, which is the site of Rancho San Antonio, now known as Casa Mobile Home Park. In 1991, Casa de San Antonio was named State Historical Monument No. 984.

Project Area History

The earliest topographic map for the Project area (the 1896 Downey 15' topographic map) shows street development in the Project area. The 1902 Downey 7.5' topographic map shows a dirt access road to the south. The 1923 Bell 7.5' topographic map shows Perry Road developed. The 1942 Downey 15' topographic map shows building development in surrounding areas and road development to the south and east boundaries of the Project area. The 1949 South Gate 7.5' topographic map shows a park developed to the north. The 1981 South Gate 7.5' topographic map shows building development outside the Project area.

The earliest historic aerial photograph dates to 1952 and shows building development within the Project area. Between 1972 and 1994, the buildings were demolished and replaced with landscaping. The 2003 aerial shows landscaping within the Project area and building development adjacent to the area.

Thresholds for Analysis

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		**X**		
c) Disturb any human remains, including those interred outside of formal cemeteries?		**X**		

Discussion of CEQA Checklist Answers

a) Would the Project cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5?

NO IMPACT.

Cogstone conducted a search of the California Historic Resources Information System (CHRIS) that included the entire Project area as well as a one-mile radius. Results of the record search indicate that 27 previous studies have been completed within one mile of the Project area. The results of these studies indicate there are no previously recorded cultural resources within the Project area. However, eleven cultural resources are located within the one-mile search radius, which include one historic archaeological site and ten historic built environment resources.

In addition to the South-Central Coastal Information Center records search, Cogstone consulted a variety of sources in October 2019 to obtain information about the cultural context of the Project area. The sources included the National Register of Historic Places (NRGP),

the California Register of Historic Resources (CRHR), California Historical Resources Inventory (CHRI), California Historical landmarks (CHL), and California Points of Historical Interest (CPHI). A search of the Bureau of Land Management, General Land Office Records indicates that two land patents were obtained under the California Land Act of 1851 for portions of the Project area.

Cogstone examined all undeveloped ground surface areas within the potential ground disturbance portion of the Project area and visually inspected existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.). For cultural resources, the purpose of the examinations was to verify the exact location of each identified resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources, if any. The surveyor searched for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics).

A Cogstone archaeologist and cross-trained paleontologist surveyed the Project area on January 24, 2020. No trace of the late Pleistocene to Holocene young alluvium was found within the Project area. No archaeological or paleontological resources were observed within the Project area during the field survey.

The Cultural and Paleontological Resources Assessment Report prepared for the Project area concludes as follows - -

"Based on the results of the pedestrian survey and the cultural records search, the Project Area has low sensitivity for prehistoric cultural resources. Analysis of these data sources and historical USD aerial photographs indicate that the Project Area also has low sensitivity for buried historical archaeological features such as foundations or trash pits. No further work is recommended."

No cultural resources were identified within the Project area during the intensive pedestrian survey or during any previous investigations. The CHRIS and SLF searches conducted "indicate that no cultural or tribal resources have been previously recorded within the Project Area."

The Cultural and Paleontological Resources Assessment Report prepared for the Project area further concludes as follows - -

". . . this Project will have No Impact on the significance of any historical resource. The Project will also have No Impact on the significance of any historical resource. The Project will also have No Impact on the significance of any known archaeological resource. . . These findings, along with a review of historic USDA aerial photographs, also indicate that the potential for subsurface cultural resource deposits is low."

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

The Cultural and Paleontological Resources Assessment Report prepared for the Project area concludes as follows - - ". . . the project will not disturb any known human remains." However, the Assessment Report provides that in the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. Also, all work must cease near the find immediately if human remains are encountered during Project development. Furthermore, the Assessment Report states as follows - -

"In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Pubic Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met."

The above recommendation has been memorialized as the following Mitigation Measure.

Mitigation Measure MM-CUL-1: In the event of an unanticipated discovery of an archaeological resource on any of the three potential Project sites, all Project development work must be suspended within 50 feet of the find until a qualified archaeologist evaluates the find. All work must cease immediately near any find of human remains and, in accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bones are discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Pubic Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

ENERGY

The discussion in this section is derived from information contained in the City of Bell Gardens General Plan, Blodgett Baylosis Environmental Planning, "Air Quality, Energy, Greenhouse Gas, and Noise Study" (February 6, 2020) prepared for the Project, and the "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" (2018).

Existing Setting

Federal and State agencies regulate energy use and consumption. The United States Department of Transportation, United States Department of Energy, and United States Environmental Protection Agency are three federal agencies that exercise great influence over energy policies and programs. The California Public Utilities Commission and the California Energy Commission are two State agencies that have authority over different aspects of energy.

The "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" presents a summary of, and context for, energy consumption and energy demands within the State. Excerpts follow.

- California was the fourth largest producer of crude oil among the 50 states in 2017 and, as of January 2018, third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation's jet fuel consumption in 2016.
- California's total energy consumption is second highest in the nation, but in 2016 the State's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs.
- In 2017, California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources.
- In 2017, solar PV and solar thermal installations provided approximately 16% of California's net electricity generation.

The Energy Analysis prepared for the Project focused on the three energy sources most relevant to the Project – electricity; natural gas; and, transportation fuel for vehicle trips associated with industrial uses planned for the industrial nature of the Project.

Electricity

Southern California Edison (SCE) provides electricity to the Project vicinity. SCE provides electric power to more than 14 million persons in 15 counties and in 180 incorporated cities within a service area encompassing approximately 50,000 square miles. SCE derives electricity from varied energy resources including the following: fossil fuels; hydroelectric generators; nuclear power plants; geothermal power plants; solar power generation; and, wind farms. SCE also purchases from independent power producers and utilities that include out-of-state suppliers.

Natural Gas

The California Public Utilities Commission (PUC) regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from Pacific Gas and Electric, Southern California Gas, San Diego Gas & Electric, Southwest Gas, and several smaller natural gas utilities. The vast major of California's natural gas customers are residential and small

commercial customers. Electric generators, industrial uses and other non-residential and non-commercial customers accounted for approximately 68 % of the natural gas delivered by California utilities in 2012. Most natural gas used in California originates from out-of-state natural gas basins. The PUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout California.

THRESHOLDS OF SIGNIFICANCE

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				**X**

Discussion of CEQA Checklist Answers

a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

LESS THAN SIGNIFICANT IMPACT.

Southern California Edison provides electricity service to the Project site. The Southern California Gas Company provides natural gas service to the Project site. The Energy Analysis performed for the Project indicates that according to CalEEMod V. 2016 3.2 air quality worksheets, the Project is anticipated to consume 1,416 kWH of electricity and 1,314 cubic feet of natural gas daily.

Project development and operation will result in an incremental and permanent increase in electrical consumption. Increased demand is expected to be adequately served by existing Southern California Edison facilities. Walter utility operations such as water wells, pumping stations, and water reservoirs normally will operate automatically to satisfy hydraulic system requirements. The automatic control systems also will allow scheduling of operations to that electrical consumption is minimized at the same time adequate storage for fire protection and system pressures are maintained. Energy costs comprise the major component of operating costs of water supply systems.

The largest portion of energy typically is consumed to operate the machinery, lighting, electronic controls, security equipment, and temperature controls. Overall operating cost associated with a particular pump station will be dependent upon the following: pumps; distribution system; pump drivers; and, governing energy rate schedule. The Project equipment will be new and thereby conform with the latest energy efficiency requirements. Also, the Project will comply with all

pertinent energy efficiency policies or standards that reduce inefficient use of fuels. Therefore, any impact associated with wasteful, inefficient or unnecessary consumption of energy resources during Project construction or operation would be less than significant.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

NO IMPACT.

The following are among the most relevant State and local plans that govern energy conservation and renewable energy initiatives.

- ***California Energy Action Plan II –*** The California Energy Action Plan II is the State's principal energy planning and policy document. This Plan identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. The Plan adopts a loading order of preferred energy resources to meet the State needs and to reduce reliance on natural gas and other fossil fuels.

- ***Senate Bill 350 –*** Senate Bill 350 (October 2015) establishes a requirement for California to reduce use of petroleum in cars by 50 percent to generate half of its electricity from renewable resources, and to increase energy efficiency by 50 percent at new and existing buildings - - all by year 2030.

- ***California Code of Regulations (CCR) Title 24, Part 11 –*** This regulation is intended to reduce greenhouse gas emissions associated with energy consumption. Title 24 now requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. The 2016 version of the standards became effective January 1, 2017. The Project will conform to all pertinent energy conservation requirements. Therefore, no impact will result.

Federal Regulations

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 promoted development of inter-modal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPO) were to address in developing transportation plans and programs, including some energy-related factors. To meet new ISTEA requirements, MPO adopted explicit policies defining social, economic, energy and environmental values guiding transportation systems. Transportation and access to the Project site is provided primarily by the local and regional roadway systems. *The Project would not interfere with, nor otherwise ob*struct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because the Southern California Association of Governments is not planning for intermodal facilities on or through the Project site.

Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century was signed into law in 1998. The Act builds upon initiatives established in the ISTEA legislation. TEA-21 authorizes highway, highway

safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA (e.g., flexibility in use of funds; emphasis on measures to improve the environment; focus on a strong planning process as the foundation of good transportation decisions) and also provides for investment in research and its application to maximize performance of the transportation system through such measures as deployment of Intelligent Transportation System to help improve operations and management of transportation systems and vehicle safety. The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar uses. The Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.

State of California Regulations

Integrated Energy Policy Report

Senate Bill 1389 requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety. The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report. Electricity would be provided to the Project by Southern California Edison (SCE). SCE's Clean Power and Electrification Pathway (CPEP) white paper builds on existing State programs and policies. As such, the Project is consistent with, nor obstruct implementation the goals presented in the 2016 Integrated Energy Policy Report.

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The Plan calls for the State to assist in transformation of the transportation system to improve air quality, reduce congestion, and increase efficient use of fuel supplies with the least environmental and energy costs. The Plan identifies strategies to further this plan, including provision of assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access, acts to reduce vehicle miles traveled, takes advantage of existing infrastructure systems, and promotes land use compatibilities through introduction of industrial uses on a business park-designated site. The Project therefore supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and will not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

California Code Title 24, Part 6, Energy Efficiency Standards

This Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and has been updated periodically. The 2017 Code is applicable to the

Project. The CEC indicates the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting for nonresidential buildings. Nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades. The Project will design building shells and building components, such as windows, roof systems, electrical and lighting systems, and heating, ventilating, and air conditioning systems to meet 2019 Title 24 Standards.

The Project will not be in conflict with aforementioned plans and policies. Therefore, no impact will result.

VI. GEOLOGY AND SOILS

The following discussion is based on information taken from the City of Bell Gardens General Plan, the P.A. & Associates, Inc., "Environmental Site Assessment – Sub Area A, B and C, Bell Gardens Veterans Park, Bell Gardens, California 90201," (November 20, 2019), and the "Cultural and Paleontological Resources Assessment Report for the Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, California," prepared by Cogstone, (February 2020).

Geologic Setting

The Project area (comprised of three alternative Project sites) lies within the Los Angeles Basin - - a sedimentary basin that includes the coastal plains of Los Angeles and Orange counties and out to Catalina Island. This region is bounded by the Santa Ana Mountains to the east, the Santa Monica Mountains to the north, and the San Joaquin Hills to the south. The area is part of the coastal section of the northernmost Peninsular Range Geomorphic Province and is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. The Project is mapped entirely as late Pleistocene to Holocene young alluvium (unit 2) deposited between 126,000 years ago and into historic times. These flood plain deposits consist of poorly sorted, permeable clays to sands. Deposits are poorly consolidated and may be capped by poorly to moderately developed soils. These sediments were deposited by streams and rivers on canyon floors and in flat flood plains of the area.

The Central Sub-basin of the Coastal Plain of the Los Angeles Groundwater Basin occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin. This Sub-basin commonly is referred to as the "Central Basin" and is bounded to the north by a surface divide called the La Brea high, and to the northeast and east by emergent less permeable Tertiary rocks of the Elysian, Repetto, Merced and Puente Hills. The southeast boundary between Central Basin and Orange County Groundwater Basin generally follows Coyote Creek, which is a regional drainage province boundary. The southwest boundary is formed by the Newport Inglewood fault system and the associated folded rocks of the Newport Inglewood uplift. The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin on the way to the Pacific Ocean.

Many faults, folds and uplifted basement areas affect the water-bearing rocks in the Central Basin. Most of these structures form minor restrictions to groundwater flow in the Sub-basin. The strongest effect on groundwater occurs along the southwest boundary to the Central Sub-basin. The faults and folds of the Newport-Inglewood uplift are partial barriers to movement of groundwater from the Central Basin to the West Coast Basin. The La Brea high is a system of folded, uplifted and eroded Tertiary basement rocks. The Whittier Narrows is an eroded gap through the Merced and Puente Hills that provides both surface and subsurface inflow to the Central Basin. The Rio Hondo, Pico and Cemetery faults are northeast-trending faults that project into the gap and displace aquifers. The trend of these faults parallels the local groundwater flow and does not act as significant barriers to groundwater flow.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause 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.			**X**	
ii. Strong seismic ground shaking?			**X**	
iii. Seismic-related ground failure, including liquefaction?			**X**	
iv. Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?				**X**
c) Be located in a geological 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?			**X**	
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?			**X**	
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?				**X**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			**X**	

Discussion of CEQA Checklist Answers

a) i) ii) iii) iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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?

NO IMPACT.

LESS THAN SIGNIFICANT IMPACT:

The 1.82-acre Project area is located in a seismically active portion of southern California but is not located within an Alquist-Priolo Earthquake Fault Zone or in a landslide zone. The Project site is flat and developed as a greenbelt, with turf, trees and landscaping. The Project site is not located in an Alquist-Priolo Earthquake Fault Zone; however, the project site is located in proximity to the Newport Inglewood Fault, the Whittier-Elsinore Fault and the San Jacinto Fault. No significant geotechnical constraints have been identified and the project site is considered developable from a geotechnical standpoint utilizing most standard grading and building techniques. Impacts of earthquake fault rupture are considered less than significant because standard grading and building techniques will be used to develop the proposed water tower and pump station. It is anticipated project development and operation will have a limited exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Allquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the project area or based on other substantial evidence of a known fault.

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: strong seismic ground shaking?

LESS THAN SIGNIFICANT IMPACT.

The primary seismic hazard is ground shaking due to a large earthquake on any of major active regional faults. Accordingly, as with most locations within southern California, there is potential that within the project lifetime the project structure would experience strong ground shaking as a result of seismic activity originating from regional faults. Site seismicity is typical of much of Los Angeles County. California State Law requires structures to incorporate earthquake-reducing design standards in accordance with the latest California Building Code and appropriate seismic design criteria. Project development and operation compliance with this regulatory requirement would reduce potential impacts related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking to a less than significant level.

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: seismic-related ground failure, including liquefaction?

NO IMPACT.

The project area is located in an urban area and is surrounded by developed residential properties, Bell Gardens Veterans Park, and a small commercial business. Two schools are located near the Project area. One of the three potential Project sites (Subarea B) is highly cemented. However, Subareas A and C are covered by grass and landscaping. Groundwater throughout the City is at relatively shallow depths that range from 10 to 30 feet. According to the City of Bell Gardens General Plan Safety Element, “Bell Gardens

was found to be in an area with high to moderate risk for liquefaction due to perched groundwater. Therefore, there is a potential adverse risk to the proposed water tower and pump station from seismic-induced liquefaction. California State Law requires structures to incorporate earthquake-reducing design standards in accordance with the latest California Building Code and appropriate seismic design criteria. Project development and operation compliance with this regulatory requirement would reduce potential impacts related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking to a less than significant level.

Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: landslides?

NO IMPACT.

The project sites are located in an urban area and are surrounded by developed residential properties, a small commercial building, and Bell Gardens Veterans Park. There are no hillsides or unstable soils on the project site. Therefore, project development and operation will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides will not result in impacts to landslides. No impact will result.

b) Would the project result in substantial soil erosion or the loss of topsoil?

NO IMPACT.

The project sites are located in an urban area and is surrounded by residential properties, a small commercial building, and Bell Gardens Veterans Park**.** There are no hillsides or unstable soils on the Project sites. The only exposed topsoil on the greenbelt that occupies the Project sites is within introduced landscape areas. However, Project development (grading; construction) will utilize Best Management Practices in accordance with City requirements to reduce the potential for soil runoff and with erosion to less than significant levels. Therefore, Project development and operation will not result in substantial soil erosion or loss of topsoil. No impact will occur.

c) Would the project be located in a geological 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?

LESS THAN SIGNIFICANT IMPACT.

The Project area (Project sites) is located in an urban area and is surrounded by developed residential properties, a small commercial building, and Bell Gardens Veterans Park**.** There are no hillsides or unstable soils on the Project sites. The sites are flat and do not contain any area of slope. No existing landslides are present on or adjacent to the Project site. However, the City General Plan characterizes the City as a high ground water table, and the site is located within an area subject to liquefaction. Therefore, there may be potential impacts of project development and operation involving location 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. California State Law requires structures to incorporate earthquake-reducing design standards in accordance with the latest California Building Code and appropriate seismic design criteria. Project development and operation compliance with this regulatory requirement would reduce potential impacts

d) Would the project 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?

LESS THAN SIGNIFICANT IMPACT.

The Project area (Project sites) is located in an urban area and is surrounded by developed residential properties, a small commercial building, and Bell Gardens Veterans Park**.** Expansive soils expand or contract with an increase in moisture content. Adherence to CBC standards would ensure potential impacts related to project site location on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property expansive soil will remain at a less than significant level.

e) Would the project 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?

NO IMPACT.

The Project area (Project sites) is located in an urban area and is surrounded by developed residential properties, a small commercial building, and Bell Gardens Veterans Park**.** There are no unstable soils on the project site. No septic tanks or alternative wastewater disposal systems are used. The Project will maintain lateral connections to City of Bell Gardens sewer mainlines. Therefore, no impacts would occur as a result of Project development.

f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LESS THAN SIGNIFICANT IMPACT.

Professional resource managers within the Bureau of Land Management (BLM) developed a multi-level ranking system as a practical tool to asses sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance pertaining to assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a Project area can be broadly predicted from previous records of fossils recovered from geologic units present in and/or adjacent to the Project area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impact within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered

important fossils or localities do not necessarily indicate a higher PFYC value. Rather, the relative abundance of localities is intended to be the major determinant for the value assignment.

The Project area is mapped entirely as late Pleistocene to Holocene young alluvium (unit 2). A records search revealed that all fossils previously recovered within a 10-mile radius were a minimum of eight feet deep in deposits mapped as late Pleistocene at the surface. Sediments with a Holocene component such as those of the study area produced fossils starting at 11 feet deep. As such, Projects sediments less than 10 feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. Sediments more than 10 feet below the modern surface are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near the Project area.

The Cultural and Paleontological Resources Assessment Report prepared for the Project area/sites concludes "the record search revealed no fossil localities from within the Project or immediate vicinity, however localities are known from the same sediments as found within the study area near to the Project." In addition, the late Pleistocene to Holocene young alluvium sediments less than 10 feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits and these sediments more than 10 feet below the modern surface are assigned a moderate potential for fossils)PFYC 3) due to similar deposits producing fossils at that depth near to the Project area. Furthermore, the Assessment Report indicates a record search of the Project area obtained from the Natural History Museum of Los Angeles County, the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources for fossil records.

The Cultural and Paleontological Resources Assessment finds that 'no recorded paleontological localities producing vertebrate fossils were found within 1-mile of the Project Area." However, two localities are known from Pleistocene deposits in the City of Bell Gardens between 2 and 3 miles from the Project area. Only extant species were recovered from those two localities, but extinct megafauna are known from another 11 localities between 3 and 10 miles from the Project area. All the fossils were a minimum 8 feet deep in deposits mapped as late Pleistocene at the surface, while sediments with a Holocene component produced fossils starting at 11 feet deep.

Planned vertical impacts of Project development include excavation approximately two to four feet deep for utility lines. The Assessment Report indicates that "based on fossils found in similar sediments nearby, paleontological monitoring is recommended for the excavations more than 10 feet deep into native sediments. Drilling or pile driving activities, regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context. The only instance in which such fossils will meet significance criteria is if the fossil is a species new to the region."

The Assessment Report recommends that "if unanticipated fossil discoveries are made, all work must halt within 50 feet until a qualified paleontologist can evaluate the find. Work may resume immediately outside of the 50-foot radius."

VII. GREENHOUSE GAS EMISSIONS

The discussion in this section is derived from information contained in the City of Bell Gardens General Plan, Blodgett Baylosis Environmental Planning, "Air Quality, Energy, Greenhouse Gas, and Noise Study" (February 6, 2020) prepared for the Project, the South Coast Air Quality Management District Air Quality Management Plan (March 2017), and Project plans.

Setting

The Project sites are bounded by open space/park (Bell Gardens Park) use to the north and by high density residential uses to the east, west and south. Florence Place immediately borders the Project site to the south. Perry Road borders the Project sites to the west; Emil Avenue borders the sites to the east. Currently, the most westerly portion of the Project area (Subarea B) contains a small building, water tower and pump station.

South Coast Air Basin

The Project site is located within the South Coast Air Basin (SCAB) within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is a 6,745 square mile sub-region of the SCAQMD and includes portions of Los Angeles, Riverside and San Bernardino Counties, and all of Orange County. The larger SCAQMD boundary includes 10,743 square miles. The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east.

The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with Federal and State air quality standards.

Global Climate Change Setting/Defined

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as Water Vapor, Carbon Dioxide (CO_2), Nitrous Oxide (N_2O), Methane (CH_4), Hydrofluorocarbons, Perfluorocarbons, and Sulfur Hexafluoride - - gases that remain in the atmosphere from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radioactive heat from escaping, thusly warming the earth's atmosphere. GCC also can occur naturally as it had in the past with previous ice ages.

Gases that trap heat in the atmosphere often are referred to as "greenhouse gases." These gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the earth's average temperature would be approximately 61 degrees Fahrenheit cooler than current average temperature. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

Greenhouse Gases

Water vapor (H_2O) is the most abundant, important, and variable greenhouse gas in the earth's atmosphere. Water vapor is not a pollutant; rather, in the atmosphere it maintains a climate necessary for life. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). There are no human health effects from water vapor itself. However, when some pollutants come in contact with water vapor, they can dissolve and the water vapor then can act as a pollutant-carrying agent. The primary source of water vapor is evaporation from oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

Carbon Dioxide (CO_2) is an odorless and colorless greenhouse gas. Outdoor levels of Carbon Dioxide are not sufficiently high to result in negative health effects. Carbon Dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. Carbon Dioxide is emitted from natural sources (e.g., decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; volcanic outgassing) and from anthropogenic sources (e.g., burning of coal, oil, natural gas and wood). Since the industrial revolution began in the mid-18^{th} century, the type of human activity that increases greenhouse gas emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. Since the beginning of the industrial revolution, Carbon Dioxide concentrations have increased more than 30 percent and, left unchecked, are projected to increase to nearly double the concentrations in the atmosphere at the dawn of the industrial revolution as a direct result of anthropogenic sources.

Methane (CH_4) is a very effective absorber of radiation but has an atmospheric concentration less than Carbon Dioxide and its lifetime is 10-12 years. Exposure to high levels of methane can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate. Methane has natural and anthropogenic sources. It is released as part of biological processes in low oxygen environments, such as in swamplands or in rice production. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and coal mining have added to atmospheric concentration of methane. Other anthropocentric sources include fossil fuel combustion and biomass burning.

Nitrous Oxide (N_2O) is also known as laughing gas and is a colorless greenhouse gas. Nitrous Oxide and cause dizziness, euphoria, and sometimes light hallucinations. It is considered harmless in small doses. However, in some cases heavy and extended use can cause Olney's Lesions (brain damage). Nitrous Oxide concentrations began to increase at the beginning of the industrial revolution. It is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. Also, some industrial processes (e.g., fossil fuel fired power plants, nylon production, nitric acid production, vehicle emissions) contribute to its atmospheric load.

Chlorofluorocarbons (CFC) are gases formed synthetically by replacing all hydrogen atoms in Methane or Ethane (C_2H_6) with chlorine and/or fluorine atoms. CFC are non-toxic, non-flammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface). CFC are no longer being used and therefore it is not likely health effects would be experienced. However, in confined indoor locations, working with CFC-113 or other CFC is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation. Levels of major CFC now are remaining steady or declining. However, their

long atmospheric lifetimes mean some CFC will remain in the atmosphere for more than 100 years.

Hydrofluorocarbons (HFC) are synthetic, man-made chemicals used as a substitute for CFC. They are one of three groups with the highest global warming potential. No health effects are known to result from exposure to HFC, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFC) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays that occur about 60 kilometers above the surface of the earth are able to destroy the compounds. Thereby, PFC have very long lifetimes - - between 10,000 and 50,000 years. No health effects are known to result from exposure to PFC. The two primary sources of PFC are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride (SF_6 is an inorganic, odorless, colorless, non-toxic nonflammable gas that has the highest global warming potential of any gas evaluated. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur Hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Nitrogen Trifluoride (NF_3) is a colorless gas with a distinctly moldy odor used in industrial processes and is produced in the manufacture of semiconductors and Liquid Crystal Display panels, types of solar panels and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

Carbon Dioxide Equivalent (CO_2e) is a term used for describing the difference greenhouse gases in a common unit. CO_2e signifies the amount of CO_2 that would have the equivalent global warming potential.

Greenhouse gases have different Global Warming Potential values. Global Warming Potential of a greenhouse gas indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. The Global Warming Potential (100-year time horizon) ranges from 1 for Carbon Dioxide to as much as 23,900 for Sulfur Hexafluoride.

Greenhouse Gas Emissions Inventories

Global

The Intergovernmental Panel on Climate Change tracks worldwide anthropogenic greenhouse gas emissions for industrialized and developing nations. As the following **Table VIII-1** indicates, the United States as a single country was the number two producer of greenhouse gas emissions in 2016. The primary greenhouse gas emitted by human activities in the United States was Carbon Dioxide, representing approximately 81.6 percent of total greenhouse gas emissions in the United States. Carbon dioxide from fossil fuel combustion, as the largest source of United States greenhouse gas emissions, accounted for approximately 93.5 percent of the Carbon Dioxide emissions.

Table VIII.1 – GHG Emissions, By Country

Emitting Countries	GHG Emissions (Gg CO_2e)
China	11,895,765
United States	6,511,302
European Union (28 member countries)	4,291,252
India	2,643,817
Russian Federation	2,100,850
Japan	1,304,568
TOTAL	28,747,554

State of California

California has slowed significantly the rate of growth of greenhouse gas emissions due to implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a substantial contributor to the United States emissions inventory total. The California Air Resources Board compiles greenhouse gas inventories for the State of California. Based upon the 2018 greenhouse gas inventory data for the 2000 to 2016 greenhouse emissions inventory8, California emitted 429.4 $MMTCO_2e$ including emissions resulting from imported electrical power in 2015.

Effects of Climate Change in California

Public Health

Higher temperatures may increase frequency, duration and intensity of conditions conducive to air pollution formation. In addition, if global background Ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter than can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if greenhouse gas emissions are not significantly reduced. In addition, under the higher warming range scenario there could be up to 100 more days per year with temperatures above 90 degrees Fahrenheit in Los Angeles and 95 degrees Fahrenheit in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. The State's water supplies also are at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta - - a major fresh water supply.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, thereby reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. It also could adversely affect winter tourism, particularly by shortening the ski and snowboarding season.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products Statewide. California farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate Ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth. Rising temperatures could worsen quantity and quality of yield for some of California's agricultural products, including wine grapes, fruits and nuts. In addition, Global Climate Change could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Also, continued Global Climate Change could alter abundance and types of many pests, lengthen pest breeding seasons, and increase pathogen growth rates.

Forests and Landscapes

Global Climate Change has the potential to intensify the current threat to forests and landscapes by increasing risk of wildfire and altering distribution and character of natural vegetation. Since wildfire risk is determined by a combination of factors including precipitation, winds, temperature and landscape and vegetation conditions, future risks will not be uniform throughout the State. Continued Global Climate Change has the potential to alter natural ecosystems and biological diversity within the State and could decrease the productivity of the State's forests.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten California's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

Human Health Effects

The potential health effects related directly to emissions of Carbon Dioxide, Methane and Nitrous Oxide as they relate to development projects are still being debated in the scientific community. Their cumulative effects to global climate change have the potential to cause adverse effects to human health. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. The Greenhouse Gas Analysis prepared for the Project contains a graphic indicating a summary of projected global warming impact (reference technical study Exhibit 2-A). Specific health effects associated with directly emitted greenhouse gas emissions are as follows.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Discussion of CEQA Checklist Answers

a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

LESS THAN SIGNIFICANT IMPACT.

The SCAQMD has established multiple draft thresholds of significance pertaining to greenhouse gas emissions. The thresholds include 1,400 metric tons of CO_2E ($MTCO_2E$) per year for commercial projects, 3,500 $MTCO_2E$ per year for residential projects, 3,000 $MTCO_2E$ for mixed-use projects, and 7,000 $MTCO_2E$ per year for industrial projects. The SCAQMD currently has an established threshold of 10,000 $MTCO_2E$ per year for industrial development (according to the SCAQMD, this threshold may be used for all type of development if the lead agency does not have an identified threshold). The Greenhouse Gas Emissions Analysis prepared for the Project used the 3,500 $MTCO_2E$ per year threshold. The following **Table VIII-2** presents a summary of annual greenhouse gas (CO_2E) emissions from the Project. Carbon Dioxide Equivalent (CO_2E) is a term used to describe different greenhouse gases in a common and collective unit.

Table VIII-2
Projected Greenhouse Gas Emissions Inventory

Source	GHG Emissions (metric tons/year)			
	CO_2	CH_4	N_2O	CO_2E
Long-Term – Area Emissions	**4.76e-4**	**166e-6**	**0**	**5.07e-4**
Long-Term – Energy Emissions	**1.74**	**3.31e-5**	**315e-5**	**1.75**
Long-Term – Mobile Emissions	**0**	**0**	**0**	**0**
Long-Term – Total Emissions	**1.74**	**348e-5**	**3.14e-5**	**1.75**
Total Construction Emissions	**358.30**	**0.09**	**0**	**360.48**
Construction Emissions Amortized Over 30 Years				**12.02 $MTCO_eE$**
Total Operational Emissions with Amortized Construction Emissions				**13.77 $MTCO_2E$**

Significance Threshold	3,500 $MTCO_2E$

The above **VIII-2** indicates the operational CO_2E total for the Project is 1.75 $MTCO_2E$ per year and the amortized construction CO_2E total for the Project is 12.02 $MTCO_2E$ per year. This means the total annual emission are 13.77 $MTCO_2E$, which are less than the threshold. Therefore, Project development and operation would not generate greenhouse gas emissions that may have a significant impact on the environment. The resultant level of impact is less than significant.

b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

LESS THAN SIGNIFICANT IMPACT.

The following **Table VIII-3** identifies which California Air Resources Board Recommended Actions applies to the Project. Of 39 measures identified, those that would be considered to be applicable to the Project would primarily be those actions related to water conservation. As indicated in the Table, the Project would not impede implementation of California Air Resources Board Recommended Actions.

Table VIII-3
Recommended Actions for Climate Change

ID#	Sector	Strategy Name	Applicable to Project	Conflict with Project
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	No	No
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	No	No
T-3	Transportation	Regional Transportation-Related GHG Targets	No	No
T-4	Transportation	Vehicle Efficiency Measures	No	No
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	No	No
T-6	Transportation	Goods-Movement Efficiency Measures	No	No
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measures	No	No
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	No	No
T-9	Transportation	High Speed Rail	No	No
E-1	Energy	Increased Utility Energy Efficiency Programs More Stringent Standards	Yes	No
E-2	Energy	Increase Combined Heat and Power Use by 30,000 GWh	No	No
E-3	Energy	Renewable Portfolio Standard	No	No
E-4	Energy	Million Solar Roofs	No	No
CR-1	Energy	Energy Efficiency	Yes	No
CR-2	Energy	Solar Water Heating	No	No

GB-1	Green Buildings	Green Buildings	No	No
W-1	Water	Water Use Efficiency	Yes	No
W-2	Water	Water Recycling	Yes	No
W-3	Water	Water System Energy Efficiency	Yes	No
W-4	Water	Reuse Urban Runoff	No	No
W-5	Water	Increase Renewable Energy Production	No	No
W-6	Water	Public Goods Charge (Water)	No	No
I-1	Industry	Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	No	No
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	No	No
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	No	No
I-4	Industry	Refinery Flare Recovery Process Improvements	No	No
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	No	No
RW-1	Recycling and Waste	Landfill Methane Control (Discrete Early Action)	No	No
RW-2	Recycling and Waste	Additional Reductions in Landfill Methane – Capture Improvements	No	No
RW-3	Recycling and Waste	High Recycling/Zero Waste	Yes	No
F-1	Forestry	Sustainable Forest Target	No	No
H-1	Global Warming	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	No	No
H-2	Global Warming	SF6 Limits in Non-Utility and Non-Semiconductor Applications	No	No
H-3	Global Warming	Reduction in Perflourocarbons in Semiconductor Manufacturing	No	No
H-4	Global Warming	Limit High GWP Use in Consumer Products	No	No
H-5	Global Warming	High GWP Reductions from Mobile Sources	No	No
H-6	Global Warming	High GWP Reductions from Stationary Sources	No	No
H-7	Global Warming	Mitigation Fee on High GWP Gases	No	No
A-1	Agriculture	Methane Capture at Large Dairies	No	No

As indicated above, Project development and operation will result in an incremental increase in Greenhouse Gas Emissions. However, Project operational emissions will be below South Coast Air Quality Management District thresholds of significance. The Project will not introduce any conflicts with adopted initiatives designed to control future Greenhouse Gas Emissions. The Project is an “infill” development and is an important strategy in reducing regional Greenhouse Gas Emissions. As a result, impacts related to conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of Greenhouse Gases are less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS

The following analysis is based on the City of Bell Gardens General Plan and PA & Associates, Inc., "Environmental Site Assessment – Sub Area A, B and C, Bell Gardens Veterans Park, Bell Gardens, California." The scope of the Environmental Site Assessment included reviewing readily available information and environmental data pertaining to the Project site, interviewing readily available persons knowledgeable about the Project site, reviewing readily available maps, aerial photographs and records maintained by Federal, State and local regulatory agencies, and conducting a Project site visit. In addition, regulatory review was conducted in part by GeoSearch.

Setting

The Environmental Site Assessment conducted for the Project site indicates that during a site visit "there were no operations and/or processing that could potentially lead to generation, storage and/or treatment of potentially hazardous material on site." PA & Associates indicates that the Project site is not listed on any Regional Water Quality Control Board databases. In addition, there are no County of Los Angeles Department of Public Works records or County of Los Angeles Fire Department records of environmental violations on the Project site. Also, according to the South Coast Air Quality Management District there are no records for the Project site. Furthermore, there are no Department of Toxic Substances Control records of environmental violations for the Project site.

The Project site is not listed on the Department of Toxic Substances Control lien database, the United States Environmental Protection Agency lien database, or the superfund lien database.

Additionally, no oil or gas well or associated features are located within one-half mile of the Project site.

There are no visible Polychlorinated Biphenyls on the Project site, nor any pits, ponds, lagoons, wastewater, cisterns or features associated with septic systems.

No radiological substances or equipment was observed or reported stored on the Project site.

Findings of State/Federal Database Regulatory Agency Review

The GeoSearch report discusses only facilities located in the immediate site vicinity or facilities located upgradient. These facilities were selected based on the assumption that hazardous material released to the subsurface generally does not migrate laterally within the soil for a great distance, but that hazardous material can migrate into the groundwater in a generally downgradient direction. P A & Associates estimated revised distances and locations of off-site facilities that GeoSearch did not plot currently during the site vicinity reconnaissance.

Based on information provided by GeoSearch, the Project site is not listed in government databases reviewed. The following facility is located potentially upgradient from and approximately within 800 feet of the Project site: property located at 6607 Florence Place across from the Project site. This facility has an underground storage tank, but based on status and distance this facility "is not considered an environmental concern to the [Project] site."

Phase I Environmental Site Assessment Conclusions

A "recognized environmental condition" (REC) refers to the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term REC includes hazardous substances and petroleum products even under conditions that might be in compliance with laws. REC does not include "de minimis" conditions that do not present a threat to human health and/or the environment and that would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies. P A & Associates did not identify recognized environmental conditions during the site investigation.

A "historical recognized environmental condition" (HREC) refers to an environmental condition that would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment or regulatory closure. P A & Associates did not identify historical recognized environmental conditions during the site investigation.

A "controlled recognized environmental condition" (CRC) refers to a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls. P A & Associates did not identify controlled recognized environmental conditions during the site investigation.

Phase I Environmental Site Assessment Recommendation

P A & Associates recommends that prior to any subsurface investigation (as requested by the City of Bell Gardens) a Geophysical Survey must be conducted to locate any utility lines that may be present below ground in the vicinity of Subareas A, B, and C.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?			**X**	
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?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within				**X**

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?				**X**
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?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**

Discussion of CEQA Checklist Answers

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

LESS THAN SIGNIFICANT IMPACT.

The P A & Associates report prepared for the Project site delineates the following conclusions:

- ". . . it is unlikely that current and past site activities have impacted the subject site, and it is our judgment that these activities would not constitute a REC."
- ". . . it is our judgment that it is unlikely that potentially hazardous waste may be present in the soil and/or groundwater below the site, and it is our judgment that these activities would not constitute a REC."
- P A & Associates did not identify recognized environmental conditions during the course of its assessment.
- P A & Associates did not identify historical environmental conditions associated with the Project site.
- P A & Associates did not identify controlled recognized environmental conditions.

b) Would the project 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?

LESS THAN SIGNIFICANT IMPACT.

Project development on any of the three potential Project sites within the 1.82-acre Project area would involve minor grading and excavation and construction of a new water tower. Although small amounts of hazardous materials may be used during Project development/construction, long-term operation of the proposed new water tower and pumping station is not expected to employ use of hazardous materials and thereby would not pose a significant hazard to the public or the environment. Thereby, resultant environmental impacts would be less than significant. Therefore, Project development and operation impacts related to creation of 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 would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

NO IMPACT.

Suva Intermediate School is located approximately 750 feet north of the Project area, at the southwest corner of Emil Avenue and Suva Street. Suva Elementary School is located approximately 300 feet southeast of the Project area along the north side of Florence Place. As indicated in the PA& Associates report prepared for the three potential Project sites within the 1.82-acre Project area, it is unlikely hazardous waste may be present in the soil on the Project area or in the groundwater below the Project area. Project development and Project operation will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. No impact to the two schools will result.

d) Would the project 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?

NO IMPACT.

Although the Project site is vacant, the Project site was home to agricultural operations in the past. Therefore, there is a potential that agricultural-related pesticides and chemicals were used and disposed on the Project site. Residences, schools, daycare centers, playgrounds, athletic facilities, long-term facilities and medical facilities are considered sensitive receptor land uses. The Project site is located adjacent to residential land uses. However, it is not anticipated the Project site is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5.

As indicated in a) above, the P A & Associates report prepared for the Project site delineates the following conclusions:

- ". . . it is unlikely that current and past site activities have impacted the subject site, and it is our judgment that these activities would not constitute a REC."
- ". . . it is our judgment that it is unlikely that potentially hazardous waste may be present in the soil and/or groundwater below the site, and it is our judgment that these activities would not constitute a REC."
- P A & Associates did not identify recognized environmental conditions during the course of its assessment.

- P A & Associates did not identify historical environmental conditions associated with the Project site.
- P A & Associates did not identify controlled recognized environmental conditions.

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?

NO IMPACT.

The closest airports to the Project site are the San Gabriel Valley Airport, the Long Beach Airport, and Los Angeles International Airport which are, respectively, approximately 17 miles, 18 miles, and 19 miles from the Project area. The Project area is not located within an airport land use plan. Therefore, no impact would result.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

NO IMPACT.

Project design includes vehicular and emergency vehicle access from Florence Avenue, Perry Road and Emil Avenue, in addition to the existing alley north of the Project area. Project-development and Project-operational generated truck traffic will be accommodated safely on adjacent roadways. In addition, compliance with Los Angeles County Fire Authority codes, regulations, and conditions and with City of Bell Gardens emergency evacuation plans will ensure project development and operation on any of the three potential Project sites will not physically interfere with or impair an adopted emergency response plan or emergency evacuation plan. No impact to an adopted emergency response plan or emergency evacuation plan will result.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

NO IMPACT.

The Project area is thoroughly urbanized. The Project sites all are located within a greenbelt adjacent to three streets and the Bell Gardens Veterans Park. No wildland is present on, adjacent, or near the Project area. Therefore, there would be no impact from Project development or operation related to direct or indirect exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

IX. HYDROLOGY AND WATER QUALITY

The following discussion is based on information taken from the City of Bell Gardens General Plan, the P.A. & Associates, Inc., "Environmental Site Assessment – Sub Area A, B and C, Bell Gardens Veterans Park, Bell Gardens, California 90201," (November 20, 2019), and Project Plans.

Setting

Basin Boundaries and Hydrology

The Project area is located in the coastal plain of the Los Angeles Groundwater Basin -Central Sub-Basin, an area that occupies a large portion of the southeastern part of the Coastal Plan of the Los Angeles Groundwater Basin. This sub-basin commonly is referred to as the "Central Basin" and is bounded on the north by a surface divide called the La Brea high and, on the northeast, and east by emergent less permeable Tertiary rocks of the Elysian, Repeto, Merced and Puente Hills. Its southeast boundary between the Central Basin and Orange County Groundwater Basin roughly follows Coyote Creek - - a regional drainage province boundary. The southeast boundary is formed by the Newport Inglewood fault system and the associated folded rocks of the Newport Inglewood uplift. Total storage capacity of the Central Basin is 13,800,000-acre feet.

The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin to the Pacific Ocean.

Average precipitation throughout the Sub-basin ranges from 11 to 13 inches.

Hydrogeologic Information

Water Bearing Formations

Throughout the Central Basin, groundwater occurs in Holocene and Pleistocene age sediments at relatively shallow depths. Historically, groundwater flow in the Central Basin has been from recharge areas in the northeast part of the sub basin toward the Pacific Ocean on the southwest. However, pumping has lowered the water in the Central Basin and water levels in some aquifers are about equal on both sides of the Newport-Inglewood uplift, decreasing subsurface outflow to the West Coast Sub Basin.

Groundwater enters the Central Basin through surface and subsurface flow and by direct percolation of precipitation, stream flow, and applied water. The groundwater replenishes the aquifers dominantly in the forebay areas where permeable sediments are exposed at ground surface. Percolation into the Los Angeles Forebay Area is restricted due to paving and development of the surface of the forebay. Imported water purchased from metropolitan Water District and recycled water from Whittier and San Jose Treatment Plants are used for artificial recharge in the Montebello Forebay at the Rio Hondo and San Gabriel River spreading grounds.

Water levels varied over a range of approximately 25 feet between 1961 and 1977, and have varied through a range of approximately 5-10 feet since 1996. Most water wells demonstrate levels in 1999 that are in the upper portion of their recent historical range.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				**X**
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) Result in substantial erosion or siltation on- or off-site?; (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?; (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, seismic-related ground failure, including liquefaction?; (iv) Impede or redirect flood flows?			**X**	
d) In flood hazard, tsunami, or seiche zones, risk release pollutants due to project inundation?			**X**	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			**X**	

Discussion of CEQA Checklist Answers

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

LESS THAN SIGNIFICANT IMPACT.

The project area is subject to Santa Ana Regional Water Quality Control Board (SARWQCB) water quality regulations. The SARWQCB is authorized to implement a municipal stormwater permitting program as part of the National Pollutant Discharge Elimination System (NPDES) authority granted under the federal Clean Water Act. The City of Bell Gardens is required to implement a Stormwater Pollution Prevention Plan (SWPPP) that would minimize the incidence of construction-related pollutants entering the storm water system. Among the items required in a SWPPP are pollution prevention Best Management Practices (BMP) to be implemented on a Project site. Compliance with these requirements would prevent violation of water quality standards and waste discharge requirements during Project construction activities. As a result, impacts associated with violation of any water quality standards or waste discharge requirements would be less than significant.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

NO IMPACT.

The Project area (Project sites) is located within a greenbelt with turf, trees and landscaping. Subarea B does have some impervious surface. Therefore, the project site in its existing condition functions as a substantial source of groundwater recharge. Project development will increase impervious surfaces on the Project site, but not to the point of interfering substantially with groundwater recharge. No impact will result.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) Result in substantial erosion or siltation on- or off-site?;

(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?;

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, seismic-related ground failure, including liquefaction?;

(iv) Impede or redirect flood flows?

LESS THAN SIGNIFICANT IMPACT.

The Project area (Project sites) is located within a greenbelt with turf, trees and landscaping. Subarea B does have some impervious surface. No stream or river proceeds through or adjacent to the project site. The proposed water tower and pump station use would increase impervious areas on the selected Project site (and thereby within the Project area). Project development would include construction of new impervious surfaces that may result in an increase in the amount of stormwater captured on the selected Project site and conveyed to the City storm drain system. The rate or amount of change of surface runoff would not be

substantial, and the Project would be designed to comply with City building codes to minimize impacts associated with flooding. Therefore, project development and operation would not result in substantially altering 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 in which would result in flooding on- or off-site. The level of impact related to Project development and operation would be less than significant.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release pollutants due to project inundation?

LESS THAN SIGNIFICANT IMPACT.

The Project area (Project sites) is located within a greenbelt with turf, trees and landscaping. Subarea B does have some impervious surface. The City of Bell Gardens is located within an inundation area for the Hansen and Sepulveda Dams and within a Los Angeles River Flood Hazard area (Bell Gardens General Plan, Safety Element Exhibit 6-2). Therefore, Project development and operation would place the proposed tower and pump station within a flood hazard area. Adherence to State of California and City of Bell Gardens requirements would reduce the potential release of pollutants due to Project inundation to a less than significant level.

The Project sites are located substantially inland from the ocean. Therefore, tsunamis pose no threat to the project site. A seiche is an oscillation of water within a closed impoundment such as a lake or reservoir caused by seismic activity or landslide. No lakes or reservoirs are located in the City of Bell Gardens. Therefore, Project development and operation will not be exposed to inundation by seiche, tsunami or mudflow. The resultant impact level would be less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

LESS THAN SIGNIFICANT IMPACT.

Project development would include construction of new impervious surfaces that may result in a slight increase in the amount of stormwater captured on the Project site and conveyed to the City storm drain system. **P**roject development would result in short-term water quality impacts during construction activities that could contribute to significant cumulative impacts on water quality. However, Project compliance with mandatory SWPPP Best Management Practices and with City building standard requirements as well as implementation of the required Project-specific Water Quality Management Plan would ensure all impacts regarding water quality would remain at a less than significant level. Project development and operation would not otherwise substantially degrade water quality and resultant impacts would be less than significant.

X. LAND USE AND PLANNING

The following discussion is derived from the City of Bell Gardens General Plan, City of Bell Gardens Municipal Code, and Project plans.

Setting

The Project site has a land use designation of "Open Space/Parks" in the City of Bell Gardens General Plan (reference General Plan Exhibit 1-6 – Land Use Map). The Zoning designation for the three Subareas (Project sites) is Medium Density Residential (R-3) in that single-family residences occupied the Project site until the mid-1980s. The total area of the Project sites currently is a greenbelt adjacent to Bell Gardens Park. The Project site is bordered by open space/park (Bell Gardens Park) use to the north and by high density residential uses to the east, west and south. Florence Place immediately borders the Project site to the south. The City of Bell Gardens General Plan identifies Florence Place adjacent to the Project site as a Major Element (to contain medians and street trees) in the City-wide "Beautification Plan" (General Plan Exhibit 1-4).

Relevant General Plan Policies

Land Use Element

Policy 1 – The City of Bell Gardens decision-makers shall maintain open communication with the community at all times and shall tirelessly seek input from the residents and property owners regarding the future of the City.

Open Space and Recreation Element

Policy 1 – The City of Bell Gardens shall continue to protect and maintain existing open space used for recreation and shall explore opportunities for providing additional park land.

Conservation Element

Policy 3 – The City of Bell Gardens shall protect the quality of water in the underground water basin by optimizing open space.

Noise Element

Policy 2 – The City of Bell Gardens shall ensure that the noise caused by sources other than traffic are at acceptable levels.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				**X**
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				**X**

Discussion of CEQA Checklist Answers

a) Would the project physically divide an established community?

NO IMPACT.

The Project sites are located in a 1.82-acre Project area. The total area of the Project sites currently is a greenbelt adjacent to Bell Gardens Park. The Project site is bordered by open space/park (Bell Gardens Park) use to the north, by a commercial use to the west, and by residential uses to the east and south on properties that are residentially zoned. Florence Place immediately borders the Project site to the south. Project development as proposed thereby would not divide the physical arrangement of the low-density residential community.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

NO IMPACT.

The Project area site has a land use designation of "Open Space/Parks" in the City of Bell Gardens General Plan. The Zoning designation for the three Subareas (Project sites) is Medium Density Residential (R-3). Single-family residences occupied the Project sites until the mid-1980s.

The proposed water tower and pumping station use is an allowed use within these General Plan and Zoning Code designations and is an established use in the Project area. In addition, Project development and operation will respect all City of Bell Gardens development regulations and will include all feasible mitigation of any identified environmental impacts.

MINERAL RESOURCES

The discussion and analysis in this section is derived from information contained in the City of Bell Gardens General Plan, City of Bell Gardens Municipal Code, and the Project plans.

Setting

No mineral resources or mineral resource recovery sites are located on the Project site, which is not designated as a mineral resource recovery site in the City of Bell Gardens General Plan.

Thresholds for Analysis

Would the project –

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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?				**X**
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?				**X**

Discussion of CEQA Checklist Answers

a) Would the project 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?

NO IMPACT.

Mineral extraction activities do not occur on the Project site or on adjacent or nearby properties in the urbanized vicinity of the Project site. The Project site and surrounding areas are not identified as sources of important mineral resources. As such, the potential for mineral resources to occur on site is low. Furthermore, the Project site is not located within a mineral producing area as classified by the California Geologic Survey. Therefore, Project development and operation will not result in loss of availability of a known mineral resource that would be of value to the region and residents of the State. No impact would result.

b) Would the project 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?

NO IMPACT.

Mineral extraction activities are not present on the Project site. As such, the potential for mineral resources to occur onsite is low. Furthermore, the Project site is not located within a mineral producing area as classified by the California Geologic Survey. No locally-important mineral resource recovery sites are located on or near the Project site or are identified in the City of Bell Gardens General Plan. Therefore, Project development will not result in loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. No impact would result.

XI. NOISE

The following discussion is derived from the City of Bell Gardens General Plan, City of Bell Gardens Municipal Code, Blodgett Baylosis Environmental Planning, "Air Quality, Energy, Greenhouse Gas, and Noise Study" (February 6, 2020) prepared for the Project, the South Coast Air Quality Management District Air Quality Management Plan (March 2017), and Project plans.

Setting

The 1.82-acre Project area (three potential Project sites) is located within the northeastern portion of the City of Bell Gardens. The Project site is bordered by open space/park (Bell Gardens Park) use to the north and by high density residential uses to the east, west and south. Florence Place immediately borders the Project site to the south.

The City of Bell Gardens is intending to construct above-ground site improvements to its Well No. 1 Facility. The improvements would supplement the existing Well No. 1 that is located at the northeast corner of Perry Road and Florence Place. In addition, the City intends to construct new water wells and install a new water reservoir tank (tower). The new water tower would be located within one of three potential locations (Project sites) within the 1.82-acre Project area, referred to in this document as Subarea A, Subarea B, and Subarea C (reference Exhibit 1 – Project Area Map) and as described below.

Subarea A – Alternative 1 (Parcels 6358-06-902; 6358-06-910; 6358-016-907; 6358-016-913; 6358-016-914; and, 6358-016-911)

Subarea A is a building pad 14,480 square feet in area on two parcels totaling 14,922 square feet in area that are approximately 125 feet west of the northwest corner of the Emil Avenue/Florence Place intersection and approximately 25 feet north of Florence Place. Subarea A would contain a 2-million-gallon steel circular tank that would have a diameter of 120 feet and extend to a height of 24 feet. This Subarea also would contain a 25-foot by 60-foot building pad for a pump station and surge tank ((reference Exhibit 7 – Site Plan Option 2). This Subarea is immediately east of the existing Skate Park, between the Skate Park and Emil Avenue, and is separated from Subarea B.

Subarea B – Alternative 2 (Parcels 6358-016-909 and 6358-016-904)

Subarea B is a building pad immediately abutting Existing Well No. 1 to the east. This Subarea would contain a 1.41-million-gallon circular concrete tank that would be 100 feet in diameter and extend to a height of 24 feet. Subarea B would encompass14,722 square feet in area within two parcels. A 25-foot by 60-foot building pad abutting the Existing Well No. 1 location would contain a pump station and a surge tank. This Subarea is between the Existing Well No. 1 site and the existing Skate Park to the east (reference Exhibit 6 – Site Plan Option 1). Subarea B is separated from Subarea A.

Subarea C – Alternative 3 (Parcels 6358-017-910; 6358-017-911; and, 6358-017-913)

Subarea C is located in the northeast portion of the Planning area and occupies frontage exclusively along the west side of Emil Avenue. The rectangular tank would accommodate

1.48 million gallons within 9,900 square feet of a 42,788 square foot area encompassing six parcels. The tank would extend to a height of 24 feet. A 25-foot by 60-foot building pad abutting the Existing Well No. 1 location would contain a pump station and a surge tank (reference Exhibit 5– Aerial Photograph).

Noise Fundamentals

Noise is defined as "unwanted sound." Sound is mechanical energy transmitted by pressure waves through the air and is characterized by various parameters that include sound frequency, the speed of propagation, and the pressure level or energy content (amplitude). Noise levels may be described using a number of methods designed to evaluate the "loudness" of a particular noise. The most commonly used unit for measuring level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. At the other extreme, the eardrum may rupture at 140 dB. The human ear can detect changes in sound levels greater than 3.0 dBA under normal ambient conditions. **Exhibit 9** illustrates typical noise levels associated with common everyday activities.

Several factors are related to the level of community annoyance, including the following:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity; and,
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. An additional twenty-five percent of the population will not complain even in very severe noise environments.

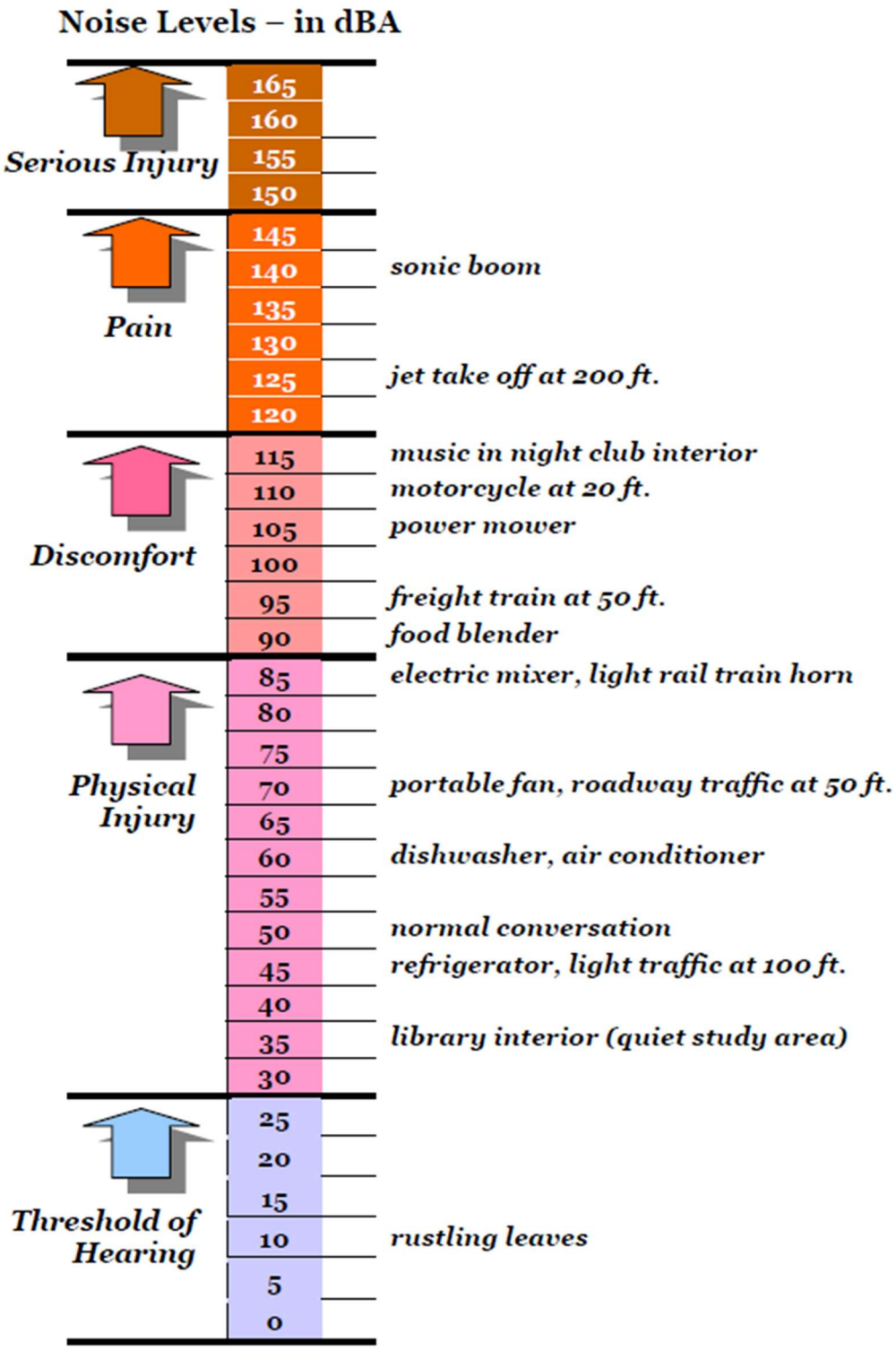

EXHIBIT 9
TYPICAL NOISE LEVELS
Source: Blodgett Baylosis Environmental Planning

Changes of less than 3.0 dB are noticeable to some people under quiet conditions while changes of less than 1.0 dB are discernible only by few people under controlled, extremely quiet conditions. In general, an increase of between 3.0 dB and 5.0 dB in ambient noise level is considered to represent the threshold for human sensitivity. Noise levels also may be expressed as dBA where "A" weighting has been incorporated into the measurement metric to account for increased human sensitivity to noise. The A-weighted measurements correlate will with the perceived noise levels at lower frequencies.

Noise may be generated from a point source such as machinery, or from a line source such as a roadway segment containing moving vehicles. Because the area of the sound wave increases as the sound gets farther and farther from the source, less energy strikes any given point over the surface area of the wave. This phenomenon is known as "spreading loss." Due to spreading loss, noise attenuates (decreases) with distance. Stationary, or point, noise subject to spreading loss experiences a 6.0 dBA reduction for every doubling of the distance beginning with the initial 50-foot distance. Noise emanating from travelling vehicles, also referred to as a line source, decreases by approximately 3.0 dBA 50 feet from a source over a hard, unobstructed surface such as asphalt, and by approximately 4.5 dBA over a soft surface, such as vegetation. For every doubling of distance thereafter, noise levels drop another 3.o dBA over a hard surface and 4.5 dBA over a soft surface.

Time variation in noise exposure typically is expressed in terms of the average energy over time (called L_{eq}), or alternatively, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. Other values that typically are noted during a noise survey include the L_{min} and L_{max} that represent the minimum and maximum noise levels obtained over a given period, respectively.

Thresholds of Significance

Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		**X**		
b) Generation of excessive groundborne vibration or groundborne noise levels?		**X**		
c) For a project located within the vicinity of a private airstrip or 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				**X**

expose people residing or working in the project area to excessive noise levels?				

Discussion of CEQA Checklist Answers

a) **Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

The ambient noise environment in which the Project area is located is typical of an urban residential neighborhood. The noise environment is dominated by traffic using adjacent streets. In addition, Bell Gardens Veterans Park activities are a secondary noise source. The Noise Analysis prepared for the Project included a series of 100 discrete measurements recorded at two separate locations (Location 1 and Location 2).

Location 1 was near the northeast corner of Perry Road and Florence Place, next to the existing water well and pump house. Location 2 was on the west side of Emil Road, south of the alley. Measurements were captured five feet above the ground surface. Measurements taken at Locations 1 and 2 were captured free from any obstructions approximately five feet above the ground surface. Measurements were taken on Tuesday, January 21, 2020, at 1:45 a.m. **Table XIII-1** below indicates the variation in noise levels over time during the measurement period. The L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Average noise levels during the measurement period were 66.5 dBA for Location 1 and 60.5 dBA for Location 2.

Table XIII-1
Noise Measurement Results

Noise Metric	Noise Level (dBA) for Location 1	Noise Level (dBA) for Location 2
L_{max} (Maximum Noise Level)	93.1	66.3
L^{99} (Noise levels <99% of time)	77.1	65.6
L^{90} (Noise levels <90% of time)	73.3	63.5
L^{75} (Noise levels <75% of time)	70.5	61.8
L^{50} (Noise levels <50% of time)	66.9	60.5
L_{min} (Minimum Noise Level)	52.2	54.3
Average Noise Level	66.5	60.5

Project construction noise levels were estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model Version 1.1. The distance used between construction activity and the nearest sensitive receptors varied depending on the individual pieces of equipment. The model assumes a 10.0 dBA reduction due to attenuation from the existing block wall located along the west side of the Project site and from the use of mandatory sound suppressing appurtenances on construction equipment. The Noise Analysis prepared for the Project conducted construction noise modeling for the site preparation phase, the grading phase, the building construction phase, and the paving phase.

Results of the construction noise modeling are presented in **Table XIII-2** below.

Table XIII-2
Construction Noise Levels at the Nearest Sensitive Receptors

Construction Phase	Noise Levels (dBA)
Site Preparation	87.3
Grading	89.4
Construction	84.2
Paving	78.4
Coatings	76.8

As demonstrated in **Table XIII-2**, the noisiest phase of construction is anticipated to be the grading phase, which would result in 89.4 dBA at the property line of the sensitive receptors located to the west. Construction noise is regulated under Section 16.24.120 (Construction of buildings and projects) of the City of Bell Gardens Municipal Code, which states as follows.

"Between the hours of 7:00 p.m. of one day and 8:00 a.m. of the next day, it is unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment, or perform any outside construction or repair work on buildings, structures, or projects, or operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, or other construction device in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance, unless beforehand a permit therefor has been duly obtained from the officer or body of the city having the function to issue permits of this kind."

Exhibit 10 illustrates typical noise levels from construction equipment. However, the Noise Analysis prepared for the Project recommends that the following Mitigation Measures be considered for implementation because the Measures "would lead to additional reductions in construction noise."

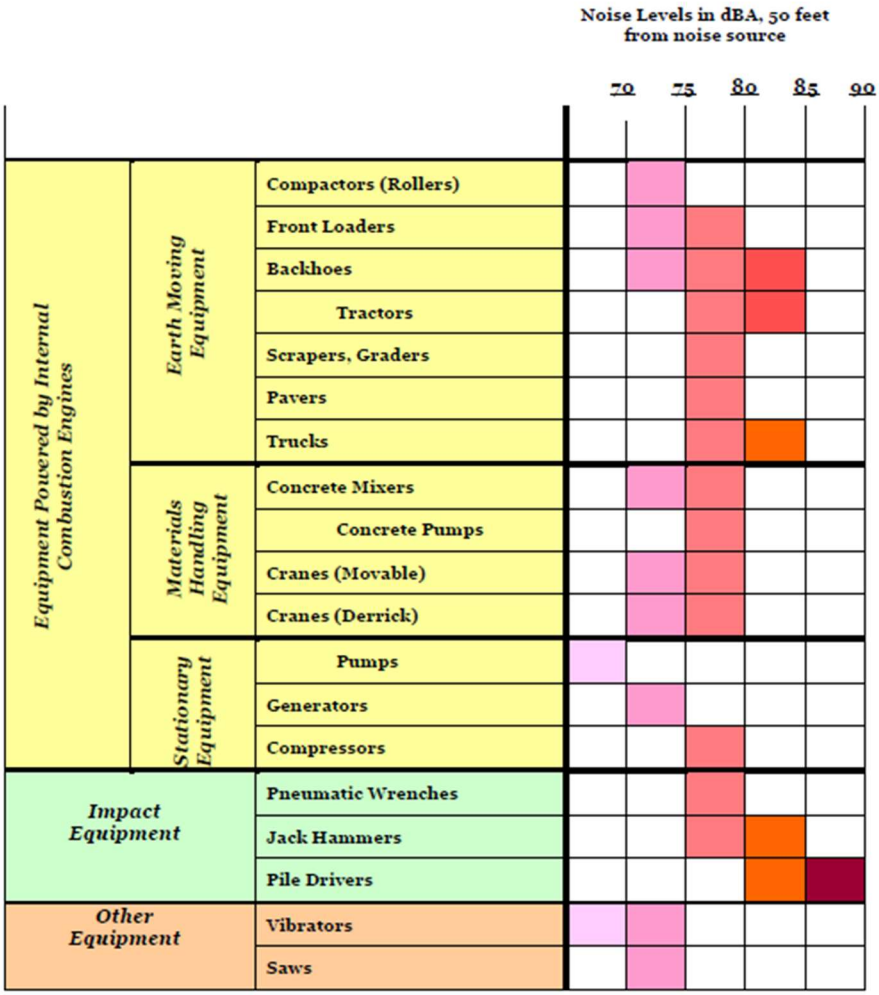

EXHIBIT 10
TYPICAL CONSTRUCTION EQUIPMENT NOISE
Source: Blodgett Baylosis Environmental Planning

Mitigation Measure MM-N-1 – Construction staging areas must be located within the alley area at least 200 feet from the nearest residential unit.

Mitigation Measure MM-N-2 – The use of electric powered construction equipment should be considered, if feasible.

Mitigation Measure MM-N-3 – If electric powered construction equipment is determined to be infeasible, the Project contractors must utilize construction equipment that contains all available mufflers, engine barriers, and other applicable sound suppressing appurtenances.

Mitigation Measure MM-N-4 – The contractors must notify local residents regarding construction times and local contact information by placing a notice in the form of a sign along the Project site's eastern boundary. The notice shall include the name and phone number of the local contact person residents may call to complain about noise. Upon receipt of a complaint, the contractor must respond immediately by reducing noise to meet Code requirements. IN addition, copies of

all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City of Bell Gardens Community Development Director.

Project operation will result in a number of additional noise sources. The pump house will contain the electric powered pump. The electrical motor will generate a continuous hum while it is operational. A power transformer will be located outside the pump. The transformer will not result in any noise that would be audible outside the well site. In addition, a back-up diesel generator located next to the transformer will provide emergency power, but only will be used during power outages and during testing. A field study was conducted to ascertain potential noise levels that would be generated by the pump house equipment. The field study was conducted on an existing operational pump house in Chino. The analysis determined that there was a continuous "hum" that generated an average noise level of between 65.9 dBA and 66.9sBA during measurements. A City of Bell Gardens staff person on-site indicated the equipment was installed more than 10 years ago and new bearings and other maintenance were necessary. The following Mitigations are required to ensure the Project's future noise impact on the residential development is lessened to the fullest possible extent.

Mitigation Measure MM-N-5 – All machinery and noise generating equipment must be enclosed in the pump house structure.

Mitigation Measure MM-N-6 – All ventilation, ducts, or other openings into the pump house must be properly baffled to facilitate noise attenuation. Vents and other openings should be directed away from the nearest noise sensitive receptors.

Mitigation Measure MM-N-7 – No audible alarms will be permitted. All alarm devices must consist of silent alarms that will not disturb the neighboring residences.

Mitigation Measure MM-N-8 – All maintenance on the equipment, including testing of generators, must occur during daytime.

Implementation of these Mitigation Measures will reduce potential Project noise impacts to a less than significant level.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

Use of heavy equipment during Project construction phases will result in potential noise impacts. The construction activities will occur in relatively close proximity to residential land uses considered to be sensitive receptors. Another source of vibration includes vibration resulting from operation of empty haul trucks. However, if a roadway is smooth the ground-borne vibration from traffic is rarely perceptible. The background vibration velocity level in residential usually is around 50 vibration velocity level (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 BdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people.

Although people have varying sensitivities to vibrations at different frequencies, in general people are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Building vibration also can take the form of an audible low-

frequency rumbling noise - - ground-borne noise. Ground-borne noise usually is only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60-200 Hz), or when the structure and construction activity are connected by foundations or utilities such as sewer and water pipes.

The following **Table XIII-3** presents a summary of levels of vibration and the usual effect on people and buildings. The United States Department of Transportation (U.S. DOT) has guidelines for vibration levels from construction pertaining to their activities, and recommends the maximum peak-particle-velocity levels remain below 0.05 inches per second at the nearest structures. Vibration levels above 0.5 inches per second have the potential to cause architectural damage to normal dwellings.

Table XIII-3
Common Effects of Construction Vibration

VdB	Effects on Humans	Effects on Buildings
<0.005	Imperceptible	No effect on buildings
0.005 to 0.015	Barely perceptible	No effect on buildings
0.02 to 0.05	Level at which continuous vibrations begin to annoy occupants of nearby buildings	No effect on buildings
0.1 to 0.5	Vibrations considered unacceptable for persons exposed to continuous or long-term vibration	Minimal potential for damage to weak or sensitive structures
0.5 to 1.0	Vibrations considered bothersome by most people; however, tolerable if short-term in length	Threshold at which there is a risk of architectural damage to buildings with plastered ceilings and walls. Some risk to ancient monuments and ruins.
1.0 to 2.0	Vibrations considered unpleasant by most people	United States Bureau of Mines data indicate that blasting vibration in this range will not harm most buildings. Most construction vibration limits are in this range.
>3.0	Vibration is unpleasant	Potential for architectural damage and possible minor structural damage

Although typical levels from vibration generally do not have the potential for any structural damage, some construction activities such as pile driving and blasting can produce vibration levels that may have the potential to damage some vibration sensitive structures if performed within 50 to 100 feet of the structure. Most construction vibration is in the mid- to upper-frequency range and therefore has a lower potential for structural damage.

Various types of construction equipment have been measured under a wide variety of construction activities with an average of source levels reported in terms of velocity levels. There is a considerable variation in reported ground vibration levels from construction activities. Data in the following **Table XIII-4** provides a reasonable estimate for a wide range of soil conditions. Based on Transit Noise and Vibration Impact Assessment (FTA, May 2006), a vibration level of 102 VdB (velocity in decibels 0.5 inches per second [iii/sec] or higher) FTA, May 2006) is considered safe and would not result in any construction vibration damage.

Table XIII-4
Vibration Source Levels for Construction Equipment

Construction Equipment		PPV@25 feet (inches/second)	Noise Levels (VdB)@ 25 feet
Pile Driver (Impact)	Upper Range	1.58	112
	Typical	0.644	104
Pile Drive (Sonic)	Upper Range	0.734	105
	Typical	0.170	93
Clam Shovel Drop		0,202	94
Large Bulldozer		0,089	87
Loaded Trucks		0,076	86
Small Bulldozer		0,035	79

Project implementation will not require use of any aforementioned vibration generating equipment. Therefore, potential impacts related to vibration will be minimal. The Noise Analysis prepared for the Project provides the following Mitigation Measure to decrease potential Project development (construction) Noise impacts to a less than significant level.

Mitigation Measure MM-N-9 – The City of Bell Gardens shall ensure that contractors conduct demolition and construction activities between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. to 12:00 p.m. on Saturdays, with no construction permitted on Sundays or Federal holidays.

c) For a project located within the vicinity of a private airstrip or 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?

NO IMPACT.

The Project area and sites are not located within two miles of a public use airport. Compton/Woodley Airport is approximately 6.8 miles to the southwest of the Project site. The Long Beach Airport is approximately 10.7 miles to the southeast. The Project site is not located within the Runway Protection Zones (RPZ) of any aforementioned airports. Therefore, the Project will not be exposed to excessive Noise levels generated by aircraft approaching or taking off from any nearby airports. Therefore, no impact is associated.

XII. POPULATION AND HOUSING

The following discussion is derived from the City of Bell Gardens General Plan, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, and Project plans.

Setting

The Project site has a land use designation of "Open Space/Parks" in the City of Bell Gardens General Plan (reference General Plan Exhibit 1-6 – Land Use Map). The Zoning designation for the three Subareas is Medium Density Residential (R-3) in that single-family residences occupied the Project site until the mid-1980s. The total area of the three potential Project sites currently is within a greenbelt adjacent to Bell Gardens Veterans Park. The Project area is bordered by open space/park (Bell Gardens Veterans Park) use to the north and by high density residential uses to the east, west and south. Florence Place immediately borders the Project site to the south.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	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)?				**X**
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				**X**

Demographic Setting

The City of Bell Gardens occupies 2.5 square miles and has a population is approximately 44,000.

Regulatory Setting

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The stated goals of the RTP/SCS are the following:

- Align Plan investments and policies with improving regional economic development and competitiveness
- Maximize mobility and accessibility for all people and goods in the region

- Ensure travel safety and reliability for all people and goods in the region
- Preserve and ensure a sustainable regional transportation system
- Maximize productivity of the transportation sy8stem
- Protect the environment and health of our residents by improving air quality and encouraging active transportation (such as walking and bicycling)
- Actively encourage and create incentives for energy efficiency, where possible
- Encourage land use and growth patterns that facilitate transit and active transportation

RTP/SCS land use strategies for achieving its goals include the following.

- Reflect the Changing Population and Demands – Shifting to development of more small-lot, single-family and multi-family housing in line with current housing demand
- Focus New Growth around Transit – Focusing housing and employment growth in High Quality Transit Areas in support of Transit Oriented Development and active transportation infrastructure
- Plan for Growth around Livable Corridors – Revitalizing commercial strips through integrated transportation and land use planning, resulting in increased economic activity and improved mobility options
- Provide More Options for Short Trips – Pursue land use strategies, Complete Streets integration, and a set of State and local policies to encourage the use of alternative modes of transportation for short trips
- Support Local Sustainability Planning – Support local planning practices that help lead to a reduction of greenhouse gas emissions, including Sustainable Planning & Design, Sustainable Zoning Codes, and Climate Action Plans

City of Bell Gardens General Plan Housing Element

The 2014-2021 City of Lynwood Housing Element contains goals and policies that address the City's current and future housing needs, including a housing program that responds to identified needs. Housing Element Goals include preserving and improving existing housing, encouraging a variety of housing types, providing housing assistance where needed and feasible, removing governmental constraints to development of new housing opportunities, and promoting equal housing opportunities.

Housing needs are determined by the demographic characteristics of the population (e.g. age, household size, employment, income levels), the characteristics of its housing (i.e. number of units, age of units, tenure, size, cost), and the nature of the community (e.g. suburban, industrial, agricultural, resort-tourism, high tech, schools, parks, transportation).

The following Housing Element Goals and Policies apply to the Project.

- Goal 2 – Encourage a variety of housing types to meet the needs of City residents
- Goal 4 – Remove Governmental Constraints top the Development of New Housing Opportunities
    - Policy 4.2 – Provide for streamlined, timely, and coordinated processing of residential projects to minimize holding costs and encourage housing production

<u>Discussion of CEQA Checklist Answers</u>

a) Would the project 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)?

NO IMPACT.

The Project site is vacant, unpaved and void of vegetation. Therefore, Project development and operation would not result in displacing any persons and no impact would result.

Project development will provide temporary construction employment for approximately 16 persons. Project operation will provide employment opportunities for approximately 4 service employees such as truck drivers, mechanics and maintenance personnel. It can be anticipated that a portion of the new jobs will be filled by residents of nearby unincorporated areas and residents of nearby cities and no additional affordable or market rate housing would be required.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

NO IMPACT.

The Project site is used as a local park. The Project involves development and operation of a new above ground water reservoir on what currently is park land. Project development and operation will not result in population growth in or around the City of Bell Gardens, whether directly or indirectly. Therefore, Project development and operation would not result in displacing any people or housing.

XIII. PUBLIC SERVICES

The following discussion is derived from information in the City of Bell Gardens General Plan and on the City of Bell Gardens web site.

Setting

The City of Bell Gardens is located within the Greater Los Angeles Region. The City is serviced by Los Angeles County agencies and by City services.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) 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 following public services:				
i) Fire Protection?				**X**
ii) Police Protection?				**X**
iii) Schools?				**X**
iv) Parks?			**X**	
v) Other public facilities?				**X**

Discussion of CEQA Checklist Answers

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 following public services:
Fire Protection – NO IMPACT
Police Protection – NO IMPACT
Schools – NO IMPACT
Parks – LESS THAN SIGNIFICANT IMPACT
Other public facilities – NO IMPACT

Fire Protection – The Los Angeles County Fire Department provides fire protection and emergency services to the Project area/sites. Fire Station 29, Battalion 3, Division 6 provides these services to the Project sites. This Station is located at 7000 Garfield Avenue adjacent to the Bell Gardens Veterans Park, approximately 0.4 mile west of the Project sites. Project development and operation would not result in a need for new or expanded facilities. No impact would result.

Police Protection – The Bell Gardens Police Department provides law enforcement services to residents and businesses in the City of Bell Gardens. The services provided include the following: crime prevention; traffic and congestion control; safety management; emergency response; and, homeland security. The Bell Gardens Police Department is located at 7100 Garfield Avenue within the City. Project development and operation would not demand additional protection services that the Project sites do not already have. In addition, Project development and operation would not require or result in construction of new or physical police facilities. No impact would result.

Schools – The Project sites are located in the Montebello Unified School District service area, which has the following two schools located within ¼ mile of the Project sites - - Suva Elementary School, and Suva Intermediate School. Project development and operation will not generate additional residential population or need for housing. Therefore, Project development and operation would not generate a student population nor indirectly cause or contribute to a need to construct new or physically altered public school facilities. No impact would result.

Parks – Project development and operation will result in a decrease in open space area currently used for passive recreation. The entire greenbelt in which the three potential Project sites are located occupies 1.82 acres. The future selected Project site will occupy substantially less than one acre. The adjacent Bell Gardens Veterans Park will continue to provide extensive public areas and facilities for passive and active recreational uses. Thereby, Project development and operation will not result in a substantial physical deterioration of a recreation facility. The resultant impact will be less than significant.

Other Public Facilities – The Project involves construction of a new/improved water well and pumping station. Project development and operation will not result in a demand for other pubic facilities such as libraries, community recreation centers, post offices, or animal shelters. Therefore, Project development and operation would not adversely affect other public facilities or require the construction of new or modified public facilities. No impact would result.

XIV. RECREATION

The following discussion is derived from information in the City of Bell Gardens General Plan, the City of Bell Gardens web site, and Project plans.

Setting

The City of Bell Gardens is largely built out with residential, commercial and industrial uses supported by a system of roadways. According to the City of Bell Gardens General Plan Land Use Element, there are a combined 181.2 acres of parks, open space and vacant land within the City, which translates to 11.4 percent of the City area.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) 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?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion of CEQA Checklist Answers

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?

LESS THAN SIGNIFICANT IMPACT.

Project development of any of the three alternative Project sites will result in less landscaped open space that can be used for passive recreational activities. However, the adjacent Bell Gardens Veterans Park will continue to provide extensive areas and facilities for both passive and active recreational use by the public. Project development thereby will not result in substantial physical deterioration of a recreation facility and the resultant level of impact will be less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

NO IMPACT.

Project development of any of the three alternative Project sites will not include recreational facilities or require construction or expansion of recreational facilities. The adjacent Bell Gardens Veterans Park will continue to provide extensive areas and facilities for both passive and active recreational use by the public. Thereby, no impact will result.

XV. TRANSPORTATION

The following discussion is derived from Infrastructure Engineers, "Traffic Impact Analysis – Florence Place Water Well & Reservoir Project, (February 28, 2020), Southern California Association of Governments, "2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life," Los Angeles, CA, (2016), and Project plans.

Setting

The City of Bell Gardens is evaluating three potential alternate locations for a new above-ground water reservoir and support facilities. The existing Water Well and pump station is located at the northeast corner of Perry Road and Florence Place. Two of the tree alternate locations are adjacent to and north of Florence Place and bordered buy the alley to the north. One of the alternate locations (Subarea C) is located at the northwest corner of Emil Avenue and Florence Place. It is estimated that Project development will occur over an approximate 15-month timeframe.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				**X**
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				**X**
c) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

Discussion of CEQA Checklist Answers

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

NO IMPACT.

The City of Bell Gardens follows the "Traffic Impact Analysis Report Guidelines" that Los Angeles County has developed. The Guidelines specify that a traffic report generally is necessary if a project generates more than 500 trips per day or where other possible adverse impacts are identified. The Traffic Impact Analysis prepared for the Project indicates that "development of the proposed project will not come anywhere close to meeting the County 500 trip per day threshold" and "therefore further traffic impact analysis is not required."

A Congestion Management Plan (CMP) analysis for a Project must be provided where a Project meets criteria established by the County of Los Angeles CMP Land se Analysis Guidelines. A CMP Traffic Impact Analysis is required for all projects that are required to prepare an Environmental Assessment based on local determination or projects requiring a traffic study. The geographic area examined in the Traffic Impact Analysis must include the following at a minimum.

- All CMP arterial monitoring intersections, including freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours
- Main line freeway monitoring locations where the project will add 150 or more trips, in either direction, during the a.m. or p.m. weekday peak hours
- Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system

The Traffic Impact Analysis prepared for the Project indicates that the project "will not add 50 or more trips during either the a.m. or p.m. peak hours" and "therefore no CMP analysis is required." In addition, no CMP freeway mainline monitoring is required because Project development and operation will not add 150 or more freeway trips in either direction during the a.m. or p.m. weekday peak hours. Therefore, based on CMP criteria no further traffic impact analysis is required.

Although maintenance crews occasionally will travel to the Project sites, those trips will be infrequent and result in an insignificant amount of traffic. The Traffic Impact Analysis prepared for the Project stated that Project development and operation "will not generate any appreciable traffic since the facilities are not staffed on a regular daily basis" and therefore no significant traffic impact will result. Therefore, Project development and operation will not conflict with City of Bell Gardens General Plan or other plan policies pertaining to transit, roadway, bicycle and pedestrian facilities. In addition, Project development and operation will not conflict with any City of Bell Gardens ordinance pertaining to the City circulation system. No impact will result.

b) Would the project conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

NO IMPACT.

CEQA Guidelines Section 15064.3 (Determining the Significance of Transportation Impacts) describes specific considerations for evaluating a project's transportation impacts. This section states that generally vehicle miles traveled is the most appropriate measure of transportation impacts. Vehicle Miles Traveled refers to the "amount and distance of automobile travel attributable to a project." The specific Section referenced indicates that if existing models or methods are not available to estimate the vehicle miles traveled for the

particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively and that "for many projects, a qualitative analysis of construction traffic may be appropriate." In the case of this Project, a qualitative conclusion is appropriate in that the Traffic Impact Analysis prepared for the Project expresses trip generation as vehicle trips to and from the particular uses proposed; that is, to and from the future water well, pumping station, and reservoir tank. The Traffic Impact Analysis indicates that once constructed at any of the three potential Project sites, the noted uses "will not generate any appreciable traffic since they are not staffed on a regular basis." An "insignificant amount of traffic" will result from maintenance crews that will travel occasionally to the Project sites. The following **Table XVII-1** (Construction Equipment Summary) indicates a peak of 8 equipment operators were assume in the Traffic Impact Analysis based on one operator per piece of equipment and 2 supervisors to be on the Project site. This equates to approximately 10 personnel traveling to and from the Project area and the transport of construction vehicles and equipment. Assuming 4 trips per day per person working on the Project site (morning inbound; lunch outbound; lunch return; evening outbound). The limited number of trips associated with Project construction during the approximate 15-month construction period would not exceed the capacity of the existing surrounding circulation (roadway) system.

Table XVII-1
Construction Equipment Summary

Construction Phase	Tractors	Loaders	Back-Hoes	Rubber Tire Dozers	Exca-vators	Forklift	Crane	Equip-ment Opera-tors
Site Preparation	**1**	**2**	**2**	**3**				**8**
Tank Install	**1**	**1**	**1**		**2**	**3**		**8**
Pump Station Install	**1**	**1**				**3**	**1**	**6**

The Traffic Impact Analysis prepared for the Project states that "less than significant impacts associated with traffic and congestion would result from construction of the proposed project and no mitigation is required." However, the Traffic Impact Analysis does recommend that the City of Bell Gardens notify adjacent property owners/residents and business owners of the construction schedule and maintain access to adjacent residential and commercial areas.

c) Would the project substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

LESS THAN SIGNIFICANT IMPACT.

Project development will occur in three phases: site preparation; installation of tank, control equipment, and installation of yard piping to tanks; and, installation of pump station, piping from tanks to pump station and discharge, final grading, and drainage. The following equipment is assumed to be operating eight hours each workday during the site preparation phase: one tractor; two loaders; two backhoes; and, three rubber-tire dozers. The following equipment is assumed to be operating eight hours each workday during the installation of tank, control equipment, and installation of yard piping to tanks phase: two excavators; one tractor; one loader; one backhoe; and, three forklifts. The following equipment is assumed to be operating eight hours each workday during the installation of pump station, piping from

tanks to pump station and discharge, final grading and drainage phase: one crane; one loader; three forklifts; and, one tractor.

Project development and operation do not include roadway, access, or trail modifications and thereby will not increase hazards due to a geometric design feature or incompatible use. No construction will occur within a public roadway. No impact will result.

d) Would the project result in inadequate emergency access?

LESS THAN SIGNIFICANT IMPACT.

Project development (grading; construction) would involve some truck and grading mechanical transport. Although no public construction would occur within any public roadway, any temporary closure of a roadway lane would necessitate traffic control measures. The City of Bell Gardens will provide a schedule and plan for any temporary roadway lane closure to that vehicular traffic will continue to flow smoothly and so the safety of crews working adjacent to vehicular travel lanes or to the alley that borders the Project area to the north would be ensured. The resultant level of impact would be less than significant.

XVI. TRIBAL CULTURAL RESOURCES

The following discussion is derived from City of Bell Gardens General Plan, and Cogstone, "Cultural and Paleontological Resources Assessment Report for the Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, California, (February, 2020)

Setting

Prehistoric Chronology

The following **Table V-1** illustrates cultural patterns and phases for the Project area.

Table V-1
Cultural Patterns and Phases

Phase	Dates BP	Material Culture	Other Traits
Topanga 1	8,500 to 5,000	Abundant manos and metates; many core tools and scrapers; few but large points, charmstones, cogged stones, early discoidals; faunal remains rare	Shellfish and hunting important; secondary burials under metate cairns (some with long bones only); some extended inhumations; no cremations
Topanga 2	5,000 to 3,500	Abundant but decreasing manos and metates; adoption of mortars and pestles; smaller points, cogged stones, late discoidals; fewer scraper planes and core tools; some stone balls and charmstones	Shellfish important; addition of acorns; reburial of long bones only; addition of flexed inhumations (some beneath metate cairns); cremations rare
Topanga 3	3,500 to 1,300	Abundant but decreasing manos and metates; increasing use of mortars and pestles; wider variety of small projectile points; stone-lined ovens	Hunting and gathering important; flexed inhumations (some under rock cairns); cremations rare; possible subsistence focus on yucca/agave
Angeles IV	1,300 to 800	Cottonwood arrow points for arrow appear; *Olivella* cupped beads and *Mytilus* shell disks appear; some imported pottery appears; possible appearance of ceramic pipes	Changes in settlement pattern to fewer but larger permanent villages; flexed primary inhumations; cremations uncommon
Angeles V	800 to 450	Artifact abundance and size increases; steatite trade from islands increases; larger and more elaborate effigies	Development of mainland dialect of Gabrielino; settlement in open grasslands; exploitation of marine resources declined and use of small seeds increased; flexed primary inhumations; cremations uncommon
Angeles VI	450 to a50	Addition of locally made pottery, metal needle-drilled *Olivella* beads; addition of Euroamerican	Use of domesticated animals; flexed primary inhumations continue; some cremations

		material culture (glass beads and metal tools	

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the post-contact period (i.e., after A.D. 1542). One of the first changes in Gabrielino culture after contact was population loss due to disease, coupled with resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euroamerican tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euroamerican material culture increased through time until it constituted the vast majority of materials used. Locally produced brown ware pottery appears along with metal needle-drilled *Olivella* disk beads.

The ethnographic mainland Gabrielino subsistence system was primarily based on terrestrial hunting and gathering, although nearshore fish and shell fish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. Additionally, a number of European plant and animal domesticates were obtained and exploited. Ethnographically, the mainland Gabrielino practices interment and some cremation.

Ethnography

Early Native American peoples of the Project area are poorly understood. The Gabrielino (Tongva) replaced early Native American peoples about 1,000 years ago. The Gabrielinos were semi-sedentary hunters and gatherers who spoke a language that is part of the Takic language family. Their territory encompassed an area stretching from Topanga Canyon in the northwest to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast, and the Southern Channel Islands - - an area of more than 2,500 square miles. At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some villages housed up to 150 people. In addition to permanent villages, the Tongva occupied temporary seasonal campsites used for a variety of activities such as hunting, fishing, and gathering plant resources.

The Gabrielino are considered to have been one of the wealthiest tribes and to have greatly influenced tribes with whom they traded. Houses were domed; circular structures were thatched with tule or similar materials. The best-known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings that reflected an elaborately developed artisanship.

The primary food zones utilized were marine, woodland, and grassland. Plant foods were the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for leaching of acorns. Grass seeds were the next most abundant plant food used along with chia. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Mushrooms and tree fungus were delicacies. Various teas were made from flowers, fruits, stems and roots for medicinal cures as well as for beverages.

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in streams; salmon were available they ran in larger creeks. Marine foods were extensively utilized. Sea mammals, fish and crustaceans were hunted and gathered from the shoreline and from the open ocean

using reed and dugout canoes. Shellfish were the most common resource, including abalone, turbans, mussels, clams, scallops, bubble shells, and others.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is; 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		**X**		

Discussion of CEQA Checklist Answers

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is;

1) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**
2) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

On October 24, 2019, Cogstone conducted a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC). On November 12, 2019, the NAHC responded that a search of the SLF was completed and there are no sacred lands or resources known within the Project area. The Cultural and Paleontological Resources Assessment Report prepared for the Project area concludes as follows - - ". . . the project will not disturb any known human remains."

Although no sacred lands or resources were identified, to ensure any potential impact related to Tribal Cultural Resources the following Mitigation Measures are recommended.

Mitigation Measure MM-TCR-1: In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it.

Mitigation Measure MM-TCR-2: Also, all work must cease near the find immediately if human remains are encountered during Project development. In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Pubic Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met."

Mitigation Measure MM-TCR-3: (Upon Discovery of a Finding) Upon discovery of any tribal cultural or archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All tribal cultural and archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request preservation in place or recovery for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, additional protective mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The

treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.

Mitigation Measure MM-TCR-4: (Public Resources Code Sections 21083.2(b) for unique archaeological resources). Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. All Tribal Cultural Resources shall be returned to the Tribe. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to the Tribe or a local school or historical society in the area for educational purposes.

Mitigation Measure MM-TCR-5: (Unanticipated Discovery of Human Remains and Associated Funerary Objects). Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Mitigation Measure MM-TCR-6: (Resource Assessment & Continuation of Work Protocol). Upon discovery of human remains, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the discovery location. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are human and subsequently Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

Mitigation Measure MM-TCR-7: (Kizh-Gabrieleno Procedures for burials and funerary remains). If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Mitigation Measure MM-TCR-8: (Treatment Measures). Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Mitigation Measure MM-TCR-9: (Professional Standards). Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

UTILITIES AND SERVICE SYSTEMS

The following discussion is derived from the City of Bell Gardens General Plan, City of Bell Gardens web site, Infrastructure Engineers, "Traffic Impact Analysis – Florence Place Water Well & Reservoir Project, (February 28, 2020), P.A. & Associates, Inc., "Environmental Site Assessment – Sub Area A, B and C, Bell Gardens Veterans Park, Bell Gardens, California 90201," (November 20, 2019), and Project plans.

Setting

The City of Bell Gardens currently serves its community through a single groundwater well (Well Number 1) and a single connection to imported water from the Metropolitan Water District of Southern California. Currently, Well Number 1 can produce only 900 gallons per minute, which forces the City to purchase expensive imported water. Project development and operation would replace the existing well pump with a pump that can increase its output

to 1,500 gallons per minute. In addition, Project development would include redevelopment of the existing well and construction of a new 2-million-gallon reservoir tank with a new booster pump station.

Thresholds of Significance

Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation of the construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?			**X**	
b) Have sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			**X**	
c) 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?				**X**
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

Discussion of CEQA Checklist Answers

a) Would the project require or result in the relocation of the construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

LESS THAN SIGNIFICANT IMPACT.

Project development involves construction of new water system improvements associated with the City-owned water district. Development and operation of the improved water pumping station and the increased capacity of the new water tower will not require new wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities that could cause significant environmental effects. The Project itself - - construction of a new and expanded water facility - - would result in no significant environmental effects, as noted in this Initial Study. Therefore, the level of impact of Project development and operation would be less than significant.

b) Would the project have sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

LESS THAN SIGNIFICANT IMPACT.

The City of Bell Gardens and the Golden State Water Company deliver water to residents, businesses and agencies in Bell Gardens. The water system owned by the City of Bell Gardens is contracted and maintained through Liberty Utilities. Project development and operation would serve to enhance the water supply and distribution system by improving the reliability of supplying water. Project development and operation would add to the existing water system anywhere from a 1.41-million-gallon water reservoir to a 2-million-gallon water reservoir tank with a booster pump station. This added supply and efficiency will serve the Project and the Bell Gardens community during the foreseeable future during normal, dry and multiple dry years. Therefore, the resultant level of impact of Project development and operation would be less than significant.

c) Would the project 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?

NO IMPACT.

Project development and operation would not involve any uses that would place demand on wastewater treatment systems. Therefore, no impact would result.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

LESS THAN SIGNIFICANT IMPACT.

The Sanitation District operates a comprehensive solid waste management system that serves the needs of a large portion of Los Angeles County. Private haulers provide trash collection for commercial land uses in the City of Bell Gardens and dispose of such trash in contracted landfills. Athens Services provides waste collection and trash disposal service to Bell Gardens residences, businesses and agencies. Athens Services diverts solid waste through reuse, recycling, and composting actions. Project development would generate construction waste, of which most would be recycled. Project operation would generate little solid waste not in excess of State or local standards or in excess of the capacity of local

infrastructure. Therefore, the level of impact pertaining to generation of solid waste by Project development and operation would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

LESS THAN SIGNIFICANT IMPACT.

All Project development-generated solid waste will be disposed of by the contractor at an approved site. During Project development the contractor will be required to adhere to City of Bell Gardens and County of Los Angeles ordinances pertaining to waste reduction and recycling. Project operation of the water system improvements will not be generating waste. Therefore, Project development and operation level of impact related to compliance with federal, State and local management and reduction statutes and regulations related to solid waste will be less than significant.

WILDFIRE

The following narrative is based on information contained in the City of Bell Gardens General Plan, the City of Bell Gardens Municipal Code, Cal Fire Hazard Maps, and the Project Plans.

Setting

The City of Bell Gardens is completely developed with urban uses and is not in proximity to the nearest State-designated fire hazard zone, which is in Hacienda Hills and more than approximately 7 miles from the Project site. The Project site is located within an urbanized area that CAL FIRE does not designate as a Very High Fire Hazard Severity Zone.

Thresholds of Significance

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slop instability, or drainage changes?				**X**

Discussion of CEQA Checklist Answers

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

NO IMPACT.

Project development and operation would not impede emergency response to the Project site or Project vicinity. Project development (grading and construction) would be limited to the Project site. Project development (grading; construction) would involve some truck and grading mechanical transport. Although no public construction would occur within any public roadway, any temporary closure of a roadway lane would necessitate traffic control measures. The City of Bell Gardens will provide a schedule and plan for any temporary roadway lane closure to that vehicular traffic will continue to flow smoothly and so the safety of crews working adjacent to vehicular travel lanes or to the alley that borders the Project area to the north would be ensured. The resultant level of impact would be less than significant.

b) Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

NO IMPACT.

The City of Bell Gardens is completely developed with urban uses and is not in proximity to the nearest State-designated fire hazard zone, which is in Hacienda Hills and more than approximately 7 miles from the Project site. The Project site is located within an urbanized area that CAL FIRE does not designate as a Very High Fire Hazard Severity Zone.

The three potential Project sites all are located within a greenbelt adjacent to three streets and the Bell Gardens Veterans Park. No wildland is present on, adjacent, or near the Project area. Therefore, there would be no impact from Project development or operation due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

NO IMPACT.

Project development involves construction of a new water well/tank and associated pumping station on one of three potential sites within the 1.82-acre Project area. As such, the Project itself is comprised of a new water supply infrastructure. Installation and maintenance of this infrastructure will not result in an impact related to exacerbation of fire risk or temporary or ongoing impacts to the environment.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

NO IMPACT.

The Project area and the three potential Project sites within the 1.82-acre property is fully landscaped with turf, shrubs and trees. The Project area is generally level, not subject to flooding and has no unstable slopes. Therefore, Project development and operation would have no impact related to exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage courses.

MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially 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, substantially 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?

LESS THAN SIGNIFICANT IMPACT.

Findings of Fact: Construction of above-ground improvements to the Bell Gardens Well No. 1 Facility and construction of a new 24-foot tall water reservoir tank (tower) on one of three potential locations (Project sites) within a 1.82-acre Project area will not substantially alter the physical state of the Project area. The Biological Reconnaissance Study conducted for the Project area indicated the following potential impact levels of Project development and operation could be mitigated to a less than significant level: impacts to candidate, sensitive, or special status species; impacts to riparian habitat or other sensitive natural community; and, interference with movement of any native resident or migratory wildlife species. Mitigation Measures are noted in this Initial Study (reference Section IV – Biological Resources).

The Cultural and Paleontological Resources Assessment Report prepared for the Project area indicated that the potential for subsurface archaeological finds or deposits is low. Any discovery of archaeological, paleontological, human remains or tribal cultural resources that may occur during Project development will be subject to Mitigation Measures delineated in the Cultural Resources and Tribal Cultural Resources Sections of this document. The resultant impact will be reduced to a less than significant level.

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)?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

Findings of Fact: The Project area (Project sites) is a greenbelt with landscaping. Project development and operation has the potential to result in impacts in the following CEQA threshold subject areas: Aesthetics; Air Quality; Biology; Noise; and, Cultural Resources/Tribal Cultural Resources**.** All identified impacts would be less than significant in nature; or, less than significant with incorporation of Mitigation Measures, with the exception of Project contribution to a non-attainment area for Ozone and Particulates. Mitigation Measures have been provided to reduce potential short-term Project development (grading; construction) emissions. In addition, short-term Project development-generated impacts pertaining to exposure of nearby residences to noise and groundborne vibration would be less than significant with adherence to stipulated Mitigation Measures. The additional impacts identified would not be cumulatively considerable in that the Project vicinity is fully developed with residential, commercial and recreational uses and not other current projects or probable future projects exist. The

resultant level of impact of Project development and operation would be less than significant, with the exception of short-term impacts to Air Quality.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED.

Findings of Fact: Based on the analysis in this Initial Study and on the findings and conclusions within the technical studies performed for the Project and/or Project area (Project sites), Project development (grading; construction) would result in substantial short-term effects pertaining to Air Quality and Noise/Groundborne Vibration. However, implementation of stipulated Mitigation Measures would reduce the Noise/Groundborne Vibration impacts to a less than significant level. The Project area, as is the South Coast Air Basin, is non-attainment in Ozone and Particulate levels. The Initial Study identifies Mitigation Measures that will reduce Project development impact related to Air Quality; Project operation will not contribute to non-attainment levels.

REFERENCES

Blodgett Baylosis Environmental Planning, "Air Quality, Energy, Greenhouse Gas, and Noise Study" (February 6, 2020) prepared for the Project, the South Coast Air Quality Management District Air Quality Management Plan (March 2017)

California Air Resources Board, "California's 2017 Climate Change Scoping Plan – The Strategy for Achieving California's 2030 Greenhouse Gas Target," (November, 2017)

Cal Fire Hazard Maps

Chambers Group, "Results of the Biological Reconnaissance Survey for the Upgrade Water Well Pump and Install New Reservoir Site Located in Bell Gardens, California," (February 10, 2020)

City of Bell Gardens, "Bell Gardens Today," (Fall, 2019)

City of Bell Gardens, "Emergency Operations Plan," (October 15, 2019)

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Cogstone, "Cultural and Paleontological Resources Assessment Report for the Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, California, (February, 2020)

Infrastructure Engineers, "Traffic Impact Analysis – Florence Place Water Well & Reservoir Project, (February 28, 2020)

P.A. & Associates, Inc., "Environmental Site Assessment – Sub Area A, B and C, Bell Gardens Veterans Park, Bell Gardens, California 90201," (November 20, 2019)

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Southern California Association of Governments, "2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life," Los Angeles, CA, (2016)