

**NOTICE OF INTENT TO ADOPT  
A MITIGATED NEGATIVE DECLARATION**

Notice is hereby given that the City of Bellflower has prepared an Environmental Initial Study for the following location:

**PROJECT:** Caruthers Park Stormwater and Urban Runoff Capture Project  
Mitigated Negative Declaration No. MND 18-01

**LOCATION:** Caruthers Park (10500 Flora Vista Street, Bellflower, California)

**PROJECT DESCRIPTION:** The Caruthers Park Stormwater and Urban Runoff Capture Project includes the construction and operation of new infrastructure improvements. The proposed project is designed for the elimination of dry weather flow from the stormwater pipe draining to the Los Cerritos Channel and the park-adjacent Los Angeles County Flood Control District (LACFCD) channel draining to the Lower San Gabriel River as well as maximizing wet weather pollutant removal by constructing a regional stormwater capture project. Diversion rates from the two stormwater conveyances into the capture unit will be optimized to maximize the water quality benefits for both water bodies for the City of Bellflower while also providing additional benefit to upstream areas outside of municipal boundaries that have the potential to foster future partnerships. This balanced approach for the project will provide capture of runoff from the 85th percentile storm for the B11902 storm drain while additionally providing substantial water quality benefit to the LACFCD P16 drainage channel.

**APPLICANT:** City of Bellflower

Based on the environmental information gathered and analyzed for the project during the Initial Study process, the City of Bellflower has determined that there is no substantial evidence, in light of the whole record, that the project may have a significant effect on the environment. Therefore, Mitigated Negative Declaration No. MND 18-01 has been prepared to analyze the project pursuant to the requirements of the California Environmental Quality Act (CEQA).

**The 30-day public review period for this document begins on August 30, 2018 and expires on October 1, 2018.**

The Initial Study, and Mitigated Negative Declaration are available online ([www.bellflower.org](http://www.bellflower.org)) and may be reviewed by the public during normal business hours at: 1) The City of Bellflower, Planning Division located at 16600 Civic Center Drive, Bellflower, CA, and 2) Los Angeles County Library in the City of Bellflower located at 9945 E. Flower Street, Bellflower, CA.

The Planning Commission of the City of Bellflower will conduct a public hearing to consider the proposed Mitigated Negative Declaration on **November 5, 2018**, at 7:00 pm or as soon thereafter as possible, in the Bellflower City Council Chambers, City Hall, 16600 Civic Center Drive, Bellflower, California.

Please address all public comments (before the close of the environmental review period noted above) to: City of Bellflower, Attn: Bernardo Iniguez, 16600 Civic Center Drive, Bellflower, CA 90706, (562) 804-1424, ext. 2233, [biniguez@bellflower.org](mailto:biniguez@bellflower.org).

**CITY OF BELLFLOWER  
ENVIRONMENTAL CHECKLIST FORM**

**PROJECT TITLE:** Proposed Caruthers Park Stormwater and Urban Runoff Capture Project

**LEAD AGENCY  
NAME AND ADDRESS:** City of Bellflower  
16600 Civic Center Drive  
Bellflower, CA 90706

**CONTACT PERSON(S)** Bernardo Iniguez  
Public Works Manager  
562-804-1424 ext. 2233

**PROJECT LOCATION:** The project site is located at Caruthers Park, 10500 Flora Vista Street, Bellflower, California.

**PROJECT SPONSOR'S  
NAME AND ADDRESS:** City of Bellflower  
16600 Civic Center Drive  
Bellflower, CA 90706

**GENERAL PLAN DESIGNATION:** Open Space (OS)

**ZONING CLASSIFICATION:** Open Space (OS)

**PROJECT DESCRIPTION (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.):**

The Caruthers Park Stormwater and Urban Runoff Capture Project includes the construction and operation of new infrastructure improvements. The proposed project is designed for the elimination of dry weather flow from the stormwater pipe draining to the LCC and the park-adjacent Los Angeles County Flood Control District (LACFCD) channel draining to the LSGR as well as maximizing wet weather pollutant removal by constructing a regional stormwater capture project. Diversion rates from the two stormwater conveyances into the capture unit will be optimized to maximize the water quality benefits for both water bodies for the City of Bellflower while also providing additional benefit to upstream areas outside of municipal boundaries that have the potential to foster future partnerships. This balanced approach for the project will provide capture of runoff from the 85th percentile storm for the BI1902 storm drain while additionally providing substantial water quality benefit to the LACFCD P16 drainage channel.

**SURROUNDING LAND USES AND SETTING (Briefly describe the project's surroundings.):**

The project site is Caruthers Park, located at 10500 Flora Vista Street, in Bellflower, California. This park encompasses a 20-acre parcel that is owned by the City of Bellflower (Assessor's Parcel Number 7017-026-905). The park includes basketball courts, ballfields, playground and splash pad, a parking lot, and several structures (including the Carpenter House Museum, a previously recorded building P-19-186531 and a California point of historical interest). Access to the project site is provided from Flora Vista Street.

Surrounding land uses within the vicinity of the project site include a residential neighborhood to the north and west, the Lower San Gabriel River (LSGR) to the east and the Artesia (CA-91)

freeway to the south. Located adjacent to the project site to the southwest is the Bellflower Bike Trail and Pacific Electric Railway tracks (Figure 1).

Caruthers Park is located directly across the LSGR from the Los Coyotes Water Reclamation Plant (LCWRP), and the Los Angeles County Sanitation Districts (LACSD) and the Central Basin Municipal Water District (CBMWD) have expressed interest on the possible use of stormwater.

**OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (i.e., permits, financing approval, or participation agreement):**

Los Angeles County Flood Control District  
South Coast Air Quality Management District  
State Water Resources Control Board  
City of Bellflower  
California Fish and Wildlife Service  
US Army Corps of Engineers

**HAVE CALIFORNIA NATIVE AMERICAN TRIBES TRADITIONALLY AND CULTURALLY AFFILIATED WITH THE PROJECT AREA REQUESTED CONSULTATION PURSUANT TO PUBLIC RESOURCES CODE SECTION 21080.3.1? IF SO, HAS CONSULTATION BEGUN?**

No request for consultation was received.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

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

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture Resources         | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources            | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning        | <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population/Housing       | <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities/Service Systems     | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION (To be completed by the Lead Agency):** On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
Signature

Bernardo Iniguez, Public Works Manager  
Printed Name

August 30, 2018  
Date

City of Bellflower  
For

**INITIAL STUDY AND  
MITIGATED NEGATIVE DECLARATION  
FOR THE PROPOSED CARUTHERS PARK  
STORMWATER AND URBAN RUNOFF  
CAPTURE PROJECT**

Lead Agency and Applicant:

**CITY OF BELLFLOWER**  
16600 Civic Center Drive  
Bellflower, California 90706

August 30, 2018

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# **A. INTRODUCTION**

## **1. PURPOSE**

This document is an Initial Study and Mitigated Negative Declaration (IS/MND) that evaluates environmental impacts resulting from implementation of the proposed Caruthers Park Stormwater and Urban Runoff Capture Project (proposed project). This document can be found at the Bellflower City Hall, 16600 Civic Center Drive, Bellflower CA 90706, phone: (562) 804-1424.

## **2. CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS**

As defined by Section 21065 of the California Environmental Quality Act (CEQA), the proposed Caruthers Park Stormwater and Urban Runoff Capture Project constituted a “project”, and therefore, an Initial Study required preparation. As defined by Section 15063 of the State California Environmental Quality Act Guidelines (CEQA Guidelines), an Initial Study is prepared to provide the Lead Agency with information to be used as the basis for determining whether an Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), or Negative Declaration ND) would be the appropriate CEQA document for providing the necessary environmental documentation and clearance for the proposed project.

According to Section 15065 of the CEQA Guidelines, an EIR is deemed appropriate for a particular project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:

- The project has the potential to substantially degrade quality of the environment.
- The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The project has possible environmental effects that are individually limited but cumulatively considerable.
- The project could cause direct or indirect adverse effects on human beings.

According to Section 15070(a) of the CEQA Guidelines, a ND or MND is deemed appropriate when:

- The IS shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- The IS identifies potentially significant effects, but: 1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and 2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

This IS has determined that the proposed Caruthers Park Stormwater and Urban Runoff Capture Project would not result in any significant effect on the environment with the incorporation of mitigation measures contained in this document and therefore, a MND is deemed the appropriate document to provide the necessary environmental evaluations and clearance for the proposed Caruthers Park Stormwater and Urban Runoff Capture Project. This IS/MND document is prepared according to the aforementioned CEQA Guidelines and applicable requirements of the City of Bellflower.

This IS/MND provides decision-makers and the public with information that enables them to intelligently consider the environmental consequences of the proposed Caruthers Park



Stormwater and Urban Runoff Capture Project; functions as a method for fact-finding; and provides the City, concerned citizens, and other applicable public agencies with an opportunity to collectively review and evaluate baseline conditions and environmental impacts through a process of full disclosure.

### **3. LEAD AGENCY**

The City of Bellflower is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines and shall consider approval of this IS/MND for the Caruthers Park Stormwater and Urban Runoff Capture Project.

### **4. CIRCULATION OF INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION AND BACKGROUND**

This IS/MND informs the City's decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed Caruthers Park Stormwater and Urban Runoff Capture Project. The environmental review process has been established to allow public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The IS/MND will be circulated for a period of 30 days for public review and comment from August 30, 2018 to October 1, 2018. Public notice will be published once in the Herald American, which is a newspaper of general circulation and on the City website ([www.bellflower.org](http://www.bellflower.org)). Comments received on the IS/MND during the public review period will be considered and addressed in a Response to Comments document.

### **5. CONTENTS OF INITIAL STUDY**

This IS/MND document is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed Caruthers Park Stormwater and Urban Runoff Capture Project.

**A. INTRODUCTION** presents an introduction to the entire document. This section describes the scope of environmental review, environmental procedures, and contents of this IS/MND.

**B. PROJECT DESCRIPTION** describes the proposed Caruthers Park Stormwater and Urban Runoff Capture Project, including the project location and surrounding uses, site background and existing conditions, existing planning and zoning, construction schedule and phasing, scope of environmental analysis, and necessary project approvals.

**C. INITIAL STUDY/ENVIRONMENTAL CHECKLIST FORM** contains the City's IS Checklist Form. The checklist form presents results of the environmental evaluation for the proposed project and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

**D. CHECKLIST RESPONSES** evaluate each response provided in the IS checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and describing potential environmental impacts anticipated with implementation of the proposed project.

**E. PERSONS AND ORGANIZATIONS CONSULTED** identifies those persons consulted and involved in preparation of this IS/MND.

**F. SOURCES** section lists bibliographical materials used in preparation of this document.

## **B. DESCRIPTION OF CARUTHERS PARK STORMWATER AND URBAN RUNOFF CAPTURE PROJECT**

### **1. INTRODUCTION**

The City of Bellflower Public Works Department (City) seeks to implement a regional stormwater capture facility at Caruthers Park. The overarching objective of the proposed project is to optimize the configuration of the stormwater capture unit (diversion, storage, and outflow) so that the runoff and water quality goals of the associated Watershed Management Programs are met in a way that maximizes the benefit pursuant to benchmarks of runoff treatment. The project site is located in proximity of a confluence of multiple storm drain systems, which enables the opportunity to capture runoff volume from multiple tributary drainage areas that are part of both the Los Cerritos Channel (LCC) and Lower San Gabriel River (LSGR) watersheds. The proposed project would include removal of some park facilities and landscaping, construction of an underground storage facility (storm drain diversion structure and storage system) and replacement of park facilities (playground area and picnic tables), and new landscaping.

### **2. PROJECT LOCATION AND EXISTING USES**

The project site is Caruthers Park, located at 10500 Flora Vista Street, in Bellflower, California. This park encompasses a -20-acre parcel that is owned by the City of Bellflower (Assessor's Parcel Number 7017-026-905). The park includes basketball courts, ballfields, playground and splash pad, a parking lot, and several structures (including the Carpenter House Museum, a previously recorded building P-19-186531 and a California point of historical interest). Access to the project site is provided from Flora Vista Street.

Surrounding land uses within the vicinity of the project site include a residential neighborhood to the north and west, the Lower San Gabriel River (LSGR) to the east and the Artesia (CA-91) freeway to the south. Located adjacent to the project site to the southwest is the Bellflower Bike Trail and Pacific Electric Railway tracks (Figure 1).

Caruthers Park is located directly across the LSGR from the Los Coyotes Water Reclamation Plant (LCWRP). The Los Angeles County Sanitation Districts (LACSD) and the Central Basin Municipal Water District (CBMWD) have expressed interest on the possible use of stormwater.



Figure 1: Site Location and Vicinity Map

### 3. PROJECT BACKGROUND AND EXISTING CONDITIONS

#### Background

The City of Bellflower (City) is a member of the Los Cerritos Channel (LCC) Watershed Group and the Lower San Gabriel River (LSGR) Watershed Committee. These Watershed Groups were formed in response to provisions of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit Order No. R4-2012-0175 (Permit). The groups, through a cooperative and collaborative process, voluntarily developed a Watershed Management Program (WMP) complete with a common Reasonable Assurance Analysis (RAA) to ensure that discharges from the Watershed Groups will achieve compliance with the water quality goals, including applicable Total Maximum Daily Loads (TMDLs), of the Permit.

The highest priority pollutants addressed by the WMP are metals through the Los Cerritos Channel Metals TMDL and the San Gabriel River Metals TMDL, both established by USEPA, and metals and legacy organics through the Harbor Toxics TMDL, adopted by the Los Angeles Regional Water Quality Control Board. The WMP addresses these and other pollutants (bacteria exceedance being a notable one) through a multi-pronged strategy that includes water capture and infiltration as well as water capture and use.

The Watershed Groups have chosen to emphasize dry weather urban runoff and stormwater capture and infiltration or use over filtration treatment to comply with Metals TMDLs while addressing other pollutants and water supply issues. To provide the flexibility to use captured dry and wet weather urban runoff in cases where infiltration is infeasible, the watershed has proposed locating water capture facilities under parks and golf courses.

### **Los Cerritos Channel and Lower San Gabriel WMPs and Water Quality Drivers**

The LCC and LSGR Watershed Groups were voluntarily formed to address the requirements of the MS4 Permit and TMDLs for the associated water bodies collectively, among associated jurisdictions for a more concerted watershed-scale approach. The Groups' WMPs focus is on meeting water quality priorities through implementing both structural and non-structural stormwater management practices that align with the timeline assigned to pollutant removal benchmarks. A blueprint for meeting these benchmarks with appropriate practices has been established as part of the WMPs for these groups through a joint RAA that demonstrates the ability for participating jurisdictions to meet water quality targets through proper stormwater practice implementation. The outcome of the RAA is a compliance pathway that assists jurisdictions in planning as it contains both temporal and spatial guidance for when and where different stormwater controls need to be implemented to meet permit requirements. The RAA for the LCC and LSGR was conducted in a joint manner (and for the Lower L.A. River as well), and this is valuable for the City of Bellflower (as well as other municipalities located in these drainage areas) as it must balance compliance and management efforts commensurate to water quality impacts on both watersheds (Table 1).

Caruthers Park is located adjacent to both a large storm drain in the LCC watershed (LACFCD Project B11902) and a drainage channel in the LSGR watershed (LACFCD Project No. 16). Because of this, any stormwater capture designed for this site should seek to address water quality for both watersheds commensurate with compliance recommendations from the RAA. Overall runoff storage using Best Management Practices (BMPs) to achieve regulatory compliance has been identified in the RAA and is summarized in Table 1 for the cities of Bellflower and Downey which make up the drainage areas for this project. The total BMP storage volume (for all types of projects) that is recommended by the RAA is summarized in the second line of Table 1. This figure has been scaled down to include only the areas draining to Caruthers Park in line 3 of Table 1 to demonstrate runoff storage recommendations specific to this project. These numbers represent overall BMP storage targets to be met with a mix of BMP types and sizes, but the Caruthers Park project has the potential to address a sizable portion of the RAA recommendations for both cities upstream of Caruthers Park for the drainage areas draining to the site.

**Table 1: Summary of Compliance Targets from the Water Management Plans  
Reasonable Assurance Analysis**

RAA Recommendations to Achieve Final Compliance with BMPs	Bellflower		Downey	
	Los Cerritos Channel	Lower San Gabriel River	Los Cerritos Channel	Lower San Gabriel River
Total Annual Runoff Reduction	1,137 ac-ft/year	62.8 ac-ft/year	112.8 ac-ft/year	263.9 ac-ft/year
Total BMP Volume (for entire City)	118.2 ac-ft	5.5 ac-ft	10.2 ac-ft	17.5 ac-ft
BMP Volume Targets for Caruthers Park Drainage Areas	5.6 ac-ft	3.2 ac-ft	Negligible	3.3 ac-ft

**4. EXISTING PLANNING AND ZONING**

The City’s General Plan land use designation for the project site is Open Space. The Open Space category includes public or privately owned properties to be retained for open spaces purposes including public parks, utility easements, and transportation corridors. The proposed project would be consistent with these allowed uses and no change to the site’s existing general plan designation is proposed as part of the project.

The project site is zoned for Open Space (O-S). Land in the O-S Zone may be utilized for the following:

- A. Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life; areas required for ecologic and other scientific study purposes; rivers, banks of rivers and streams and watershed land.
- B. Open space for the managed production of resources, including, but not limited to agricultural lands and areas of economic importance for the production of food or fiber; areas required for the recharge of ground water basins.
- C. Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.
- D. Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic and cultural value, areas particularly suited for park and recreation purposes, including access to rivers and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- E. The keeping of horses in accordance with all requirements of Municipal Code Section 17.20.030.B.; provided, that the property where the horses are kept is immediately adjacent to real property owned or rented and occupied by the owner of the horses.
- F. Wireless communication facilities, excluding ground mounted antennas.

Open space for outdoor recreation and open space for public health and safety including areas required for the protection of water quality are permitted uses within the O-S zone.<sup>1</sup>

<sup>1</sup> City of Bellflower. Bellflower Municipal Code Section 17.64.020. Accessed April 2018, URL: [http://qcode.us/codes/bellflower/view.php?topic=17-17\\_64-17\\_64\\_020&frames=off](http://qcode.us/codes/bellflower/view.php?topic=17-17_64-17_64_020&frames=off)

The proposed project would be consistent with the permitted uses within the City's Zoning Code and no changes to the existing zoning designation is proposed as part of the project

## 5. DESCRIPTION OF THE PROJECT

As a major step toward implementing the WMP, the City of Bellflower seeks to design and implement a regional stormwater capture facility at Caruthers Park. In order to advance the development of the Caruthers Park Project, the City entered into a CIA with Caltrans to fund the Bellflower Stormwater and Runoff Capture Project.

Caruthers Park was identified as a potential high priority site for a regional stormwater capture project for non-stormwater runoff as well as first-flush runoff from wet weather events. The proposed design, was prepared in accordance with the City of Bellflower's contributions to both the LCC watershed and the LSGR Watershed Management Programs (WMPs). A large reinforced concrete pipe (RCP) storm drain (72") adjacent to the park (BI1902 Line A, herein referred to as BI1902) draining ultimately to the LCC collects stormwater from approximately 261 acres, all within the boundary of the City of Bellflower. A 38' wide rectangular concrete stormwater channel draining to the LSGR just downstream of the park (LACFCD Project 16 Line A; herein referred to as LACFCD P16) has a drainage area of 2,995 acres, of which 1,048 acres are within the city's boundary (35%) while the remaining area is from the City of Downey. The overarching objective of the project is to optimize the configuration of the stormwater capture unit (diversion, storage, and outflow) so that the runoff and water quality goals of the associated WMPs are met in a way that maximizes the benefit pursuant to benchmarks of runoff treatment.

On-site infiltration rates determined through the geotechnical investigation are favorable for passive treatment, providing higher potential water quality treatment at a much lower cost than other discharge options. Site configuration and underground infrastructure are amenable to managing diverted stormwater from the drainage assets by gravity piping with a storage/filtration/pump system capturing dry weather flows from the drainage channel for local use in irrigation. Figure 2 presents a schematic of the proposed Caruthers Park Stormwater and Urban Runoff Capture Project and the conceptual design plans are included as part of Appendix A. The additional details of the project improvement BMP configuration are:

- Diversion from the storm drain (BI1902) at a rate of 20 cubic feet per second (cfs);
- Diversion from the storm channel (LACFCD P16) at a rate of 50 cfs;
- Construction of at least 9.7 ac-ft of subsurface storage under the park with an infiltration vault having a 5-foot minimum ponded depth;
- A hard-bottomed storage section within the vault with a pump and treatment system for non-potable uses such as on-site irrigation; and
- A gravel raft base to address potential liquefaction at the site.

These BMPs would divert and store dry- and wet- weather runoff for reuse at the park as well as stormwater runoff resulting in an average annual load reduction of 166.0 lbs. of zinc to the LCC and LSGR. This BMP would meet the budgetary constraints of the Caltrans agreement for capital costs while maximizing pollutant removal, and is therefore recommended to utilize infiltration and minimize pumping operations and maintenance costs.

The proposed project was modeled and predicted to substantially contribute to long term pollutant load reduction goals for the LCC and LSGR watersheds, while also satisfying the intent of the LCC WMP by capturing runoff in excess of the City of Bellflower's 85<sup>th</sup> percentile peak runoff volume for BI1902. The project is expected to achieve robust and comprehensive pollutant load reduction that contributes to both the LCC and LSGR WMP

for the City of Bellflower.

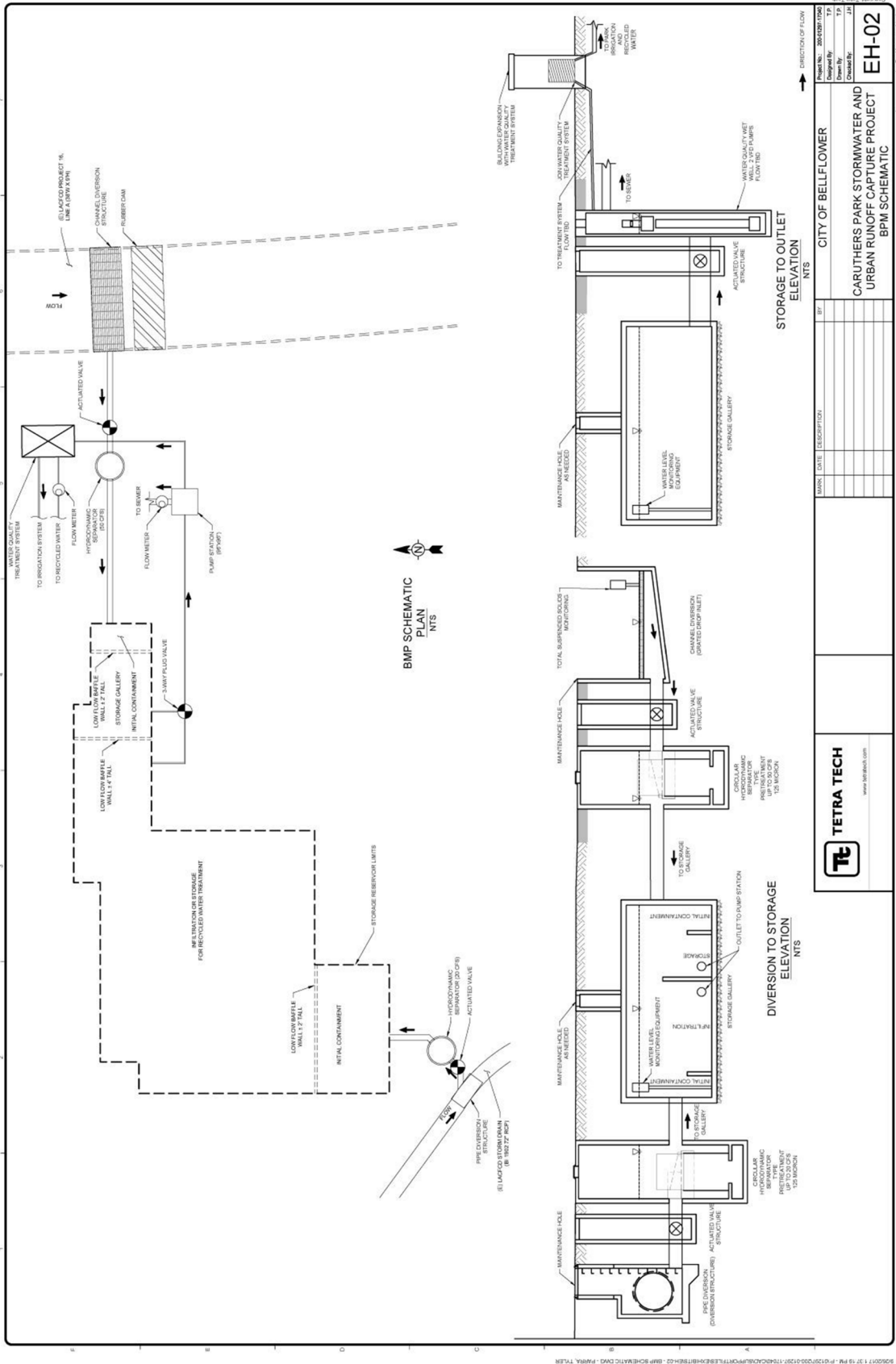


Figure 2: Project Schematic



The proposed project facilities are anticipated to include:

- A 422,500 cubic feet (9.7 acre-feet) underground storage reservoir with an infiltration section and a hard-bottomed section for pumping to a treatment system for non-potable uses such as on-site irrigation;
- Two diversion structures;
  - One structure to divert water from the Los Angeles Flood Control rectangular reinforced concrete open channel LACFCD P16 at a rate of 50 cfs (38 feet wide and 9 feet high) located along the eastern boundary of the park and parallel to the San Gabriel River channel;
  - One structure to divert water from the existing buried 72-inch diameter RCP storm drain pipe Line A B11902 at a rate of 20 cfs located along the southwestern boundary of the park;
- 2 pre-treatment units, one after each diversion structure;
- A pump station; and,
- Conveyance pipelines.

The proposed project includes the construction and operation of a storm water infiltration system within Caruthers Park that would include the removal and replacement of some park facilities and landscaping including the playground, replace the current pool with a splash pad and some picnic tables. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. The conceptual design plans including, Construction Sequencing, Demolition Plans, Grading Plans, Plans and Profiles, Details and Landscape Plan are included as Appendix A of this IS/MND.

## **6. CONSTRUCTION ACTIVITIES AND PHASING**

Project construction is anticipated to take approximately 21 months. During project construction, the project site would be secured with construction fencing and would be closed to the public. The remaining park facilities would remain open and available for park users. Construction activities are anticipated to include:

- Clearing and grubbing the existing project (including removal of existing playground) area and re-routing of the irrigation, electrical, and recycled water lines.
- Excavation and construction of the underground storage gallery.
- Construction and modification of the diversion structure, grated drop inlet, pre-treatment device, actuated valve vaults, check valve vault, wet well, pneumatic gate, and associated piping.
- Construction of irrigation elements, fine grading, planting, water quality skid, and miscellaneous site amenities including playground, splashpad and treatment building.
- Final electrical work and commissioning of the system.

In total, it is estimated that approximately 35,000 cubic yards (CY) of debris would be delivered to/from the site. Excess excavated soil would be removed off-site, approximately 12 miles to CR & R Environmental Services in Stanton, California. Construction activities would occur in four phases with general assumption provide herein:

- Phase I. Mobilization/Clearing & Grubbing/Concrete Pavement Removal
  - 45 Calendar days
  - 2,500 CY of total clearing and grubbing debris delivered off-site
  - 300 CY/day exported soil per day

- Phase II. Excavation/Trenching/Rough Grading
  - 109 Calendar days
  - 25,500 CY of soil hauled off-site
  - 750 CY exported soil per day
- Phase III. Subgrade/Utility Installation/Treatment Building/Playground
  - 183 Calendar Days
  - 9,000 CY of aggregate delivered to site, plus 825 storage units delivered to site (~40 units/day)
  - 600 CY imported soil per day
- Phase IV. Backfill/Fine Grading/Paving/Landscaping/Electrical
  - 272 Calendar days
  - No debris delivered to/from site
  - No soil imported or exported

Approximately, 83 personnel would be used for project construction with activities typically occurring Monday through Friday between the hours of 7:00 am and 6:00 pm. Table 2 identified the equipment and number of personnel per equipment types estimated for each of the Construction Phases.

**Table 2: Construction Equipment and Personnel**

Equipment (Number of Personnel per equipment type)	Construction Phases			
	Mobilization / Clearing & Grubbing / Concrete Pavement Removal	Excavation / Trenching / Rough Grading	Subgrade / Utility Installation / Treatment Building / Playground	Backfill / Fine Grading / Paving / Landscaping / Electrical
	Quantity (Operating Hours)	Quantity (Operating Hours)	Quantity (Operating Hours)	Quantity (Operating Hours)
Air Compressors (1)			1 (8)	
Cement and Mortar Mixers (2)				1 (30)
Concrete/Industrial Saws (1)	1 (8)	1 (8)	1 (4)	
Cranes (3)			3 (438)	
Excavators (1)	1 (40)			
Off-Highway Trucks (2)	3 (209)	9 (2165)	11 (1590)	
Other Construction Equipment (1)	1 pavement breaker (16)			
Pavers (2)				1 (29)
Rollers (1)		2 (24)		1 (36)
Rubber Tired Dozers (1)	1 (40)			
Skid Steer Loaders (1)			4 (1667)	
Sweepers/Scrubbers (1)				1 (2)
Tractors/Loaders/Backhoes (1)		53028		1 (24)
Trenchers (1)		2 (21)		

## 7. SCOPE OF ENVIRONMENTAL ANALYSIS

This IS/MND will provide the environmental clearance and evaluations resulting with the proposed Caruthers Park Stormwater and Urban Runoff Capture Project. Specific mitigation measures are recommended in this document to reduce potential environmental impacts to a less than significant level. Existing City regulations, programs, requirements, and

procedures that would reduce potential impacts will be referenced but are not considered specific mitigation measures, since these regulations, programs, etc. would be required for any development in the City, including the proposed project.

## 8. NECESSARY PROJECT APPROVALS

Other public agencies whose approval is required for permits, financing approval, consultation, or participation agreement, for example, is as follows:

Agency/Organization	Project Phase	Anticipated Permits, and Approvals
City of Bellflower	Prior to construction	<ul style="list-style-type: none"> <li>• Certify MND and Adopt MMRP</li> <li>• Approve Project</li> <li>• Building Permits</li> </ul>
California Fish and Wildlife Service	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• California Dept of Fish and Wildlife 1601 Streambed Alteration Agreement</li> </ul>
Los Angeles County Flood Control District	Prior to the construction of the LACFCD Project 16 Channel Diversion and LACFCD Project 1902 Storm Drain Diversion	<ul style="list-style-type: none"> <li>• Permit for the proposed diversion and inlet for the Project 16 Channel and Project 1902 storm drain.</li> </ul>
State Water Resources Control Board	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• LA Regional Board 401 Certification</li> </ul>
US Army Corps of Engineers	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• 404 Nationwide Permit for Non-Notifying Nationwide Permit (33) Temporary Construction, Access, and Dewatering.</li> </ul>
South Coast Air Quality Management District	N/A	<ul style="list-style-type: none"> <li>• Permits are not anticipated since there will not be equipment during the operation of the site once it is constructed other than small electric pumps.</li> </ul>

## C. INITIAL STUDY/ENVIRONMENTAL CHECKLIST FORM

**PROJECT TITLE:** Proposed Caruthers Park Stormwater and Urban Runoff Capture Project

**LEAD AGENCY AND ADDRESS:** City of Bellflower  
16600 Civic Center Drive  
Bellflower, CA 90706

**CONTACT PERSON:** Bernardo Iniguez  
Public Works Manager  
562-804-1424 ext. 2233

**PROJECT LOCATION:** The project site is located at Caruthers Park, 10500 Flora Vista Street, Bellflower, California.

**SPONSOR'S NAME AND ADDRESS:** City of Bellflower  
16600 Civic Center Drive  
Bellflower, CA 90706  
562-804-1424

**GENERAL PLAN DESIGNATIONS:** Open Space (OS)

**ZONING CLASSIFICATIONS:** Open Space(OS)

**PROJECT DESCRIPTION:** The Caruthers Park Stormwater and Urban Runoff Capture Project includes the construction and operation of new infrastructure improvements. The proposed project is designed for the elimination of dry weather flow from the stormwater pipe draining to the LCC and the park-adjacent Los Angeles County Flood Control District (LACFCD) channel draining to the LSGR as well as maximizing wet weather pollutant removal by constructing a regional stormwater capture project. Diversion rates from the two stormwater conveyances into the capture unit will be optimized to maximize the water quality benefits for both water bodies for the City of Bellflower while also providing additional benefit to upstream areas outside of municipal boundaries that have the potential to foster future partnerships. This balanced approach for the project will provide capture of runoff from the 85th percentile storm for the BI1902 storm drain while additionally providing substantial water quality benefit to the LACFCD P16 drainage channel. Additional details are provided in Section B and Conceptual Design Plans in Appendix A.

**ONSITE AND SURROUNDING  
LAND USES AND SETTING:**

The project site is Caruthers Park, located at 10500 Flora Vista Street, in Bellflower, California. This park encompasses a 20-acre parcel that is owned by the City of Bellflower (Assessor's Parcel Number 7017-026-905). The park includes basketball courts, ballfields, playground and splash pad, a parking lot, and several structures (including the Carpenter House Museum, a previously recorded building P-19-186531 and a California point of historical interest). Access to the project site is provided from Flora Vista Street.

Surrounding land uses within the vicinity of the project site include a residential neighborhood to the north and west, the Lower San Gabriel River (LSGR) to the east and the Artesia (CA-91) freeway to the south. Located adjacent to the project site to the southwest is the Bellflower Bike Trail and Pacific Electric Railway tracks (Figure 1).

Caruthers Park is located directly across the LSGR from the Los Coyotes Water Reclamation Plant (LCWRP), and the Los Angeles County Sanitation Districts (LACSD) and the Central Basin Municipal Water District (CBMWD) have expressed interest on the possible use of stormwater.

**OTHER REQUIRED AGENCY  
APPROVALS:**

Agency/Organization	Project Phase	Anticipated Permits, and Approvals
City of Bellflower	Prior to construction	<ul style="list-style-type: none"> <li>• Certify MND and Adopt MMRP</li> <li>• Approve Project</li> <li>• Building Permits</li> </ul>
California Fish and Wildlife Service	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• California Dept of Fish and Wildlife 1601 Streambed Alteration Agreement</li> </ul>
Los Angeles County Flood Control District	Prior to the construction of the LACFCD Project 16 Channel Diversion and LACFCD Project 1902 Storm Drain Diversion	<ul style="list-style-type: none"> <li>• Permit for the proposed diversion and inlet for the Project 16 Channel and Project 1902 storm drain.</li> </ul>
State Water Resources Control Board	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• LA Regional Board 401 Certification</li> </ul>
US Army Corps of Engineers	Prior to construction of the LACFCD Project 16 Channel Diversion	<ul style="list-style-type: none"> <li>• 404 Nationwide Permit for Non-Notifying Nationwide Permit (33) Temporary Construction, Access, and</li> </ul>

Agency/Organization	Project Phase	Anticipated Permits, and Approvals
South Coast Air Quality Management District	N/A	Dewatering. <ul style="list-style-type: none"> <li>• Permits are not anticipated since there will not be equipment during the operation of the site once it is constructed other than small electric pumps.</li> </ul>

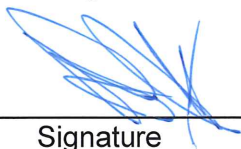
**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

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

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                    | <input type="checkbox"/> Agriculture Resources              | <input type="checkbox"/> Air Quality/GHG        |
| <input type="checkbox"/> Biological Resources          | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology/Soils          |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality            | <input type="checkbox"/> Land Use/Planning      |
| <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing     |
| <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems     | <input type="checkbox"/> Mandatory Findings of Significance |   |

**DETERMINATION:** On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A Program ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
 \_\_\_\_\_  
 Signature

\_\_\_\_\_  
 August 30, 2018  
 Date

Bernardo Iniguez, Public Works Manager  
 \_\_\_\_\_  
 Printed Name

\_\_\_\_\_  
 August 30, 2018  
 Date

## EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) 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 that the impact simply does not apply to projects like the one involved (i.e., 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 (i.e., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take into account of 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.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the 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.
- 5) Earlier analysis 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). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated”, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (i.e., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.



Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS. Would the project:</b>				
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	
<b>II. AGRICULTURE RESOURCES. 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 Dept. 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:</b>				
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 Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
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
<b>III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?			X	
<b>IV. BIOLOGICAL RESOURCES. Would the project:</b>				
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 Wildlife 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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		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
<b>V. CULTURAL RESOURCES. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?			X	
e) Cause a substantial adverse change in the significance of a tribal cultural resource as 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.		X		
<b>VI. GEOLOGY AND SOILS. Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 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?		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 wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
<b>VII. GREENHOUSE GAS EMISSIONS. Would the project:</b>				
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	
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>				
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 reasonable 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 one-quarter mile of an existing or proposed school?			X	
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

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
<b>IX. HYDROLOGY AND WATER QUALITY. Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			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, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?			X	
e) 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?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within 100-year flood hazard area structures, which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	
<b>X. LAND USE AND PLANNING. Would the project:</b>				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be a 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
<b>XII. NOISE. Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		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 expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
<b>XIII. POPULATION AND HOUSING. Would the project:</b>				
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
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
<b>XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</b>				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	
<b>XV. RECREATION.</b>				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?			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	
<b>XVI. TRANSPORTATION/TRAFFIC. Would the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	
<b>XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
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.)		X		
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

## D. CHECKLIST RESPONSES

### I. AESTHETICS. Would the project:

- a. Have a substantial adverse effect on a scenic vista? ***Less Than Significant Impact.***

A scenic vista may include, but is not limited to, designated view corridors and scenic outlooks. The City's General Plan Open Space/Recreation Element addresses the management of natural resources and the preservation and enhancement of scenic and recreation opportunities in the City. Based on a review of the General Plan, no designated scenic vistas were identified.<sup>2</sup> The proposed project includes the construction of a storm water infiltration system within Caruthers Park. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. Therefore, project visual impact would be less than significant.

- b. Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway? ***No Impact.***

The project site is not located within the vicinity of a designated or eligible state scenic highway based on a review of the California Scenic Highway Mapping System.<sup>3</sup> Therefore, no project impact would result.

- c. Substantially degrade the existing visual character or quality of the site and its surroundings? ***Less Than Significant Impact.***

The proposed project includes the construction and operation of a storm water infiltration system within Caruthers Park. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. Since the infrastructure improvements would primarily occur underground, there would be minimal visual change in comparison to existing conditions and the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. Therefore, project impact would be less than significant.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***Less Than Significant Impact.***

The proposed project would not be a substantial source of light or glare. The proposed project includes the construction and operation of a storm water infiltration system within Caruthers Park. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. The above ground building would be constructed in accordance with City standards with building materials that would not generate excessive levels of reflective glare. The building may include some low intensity

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<sup>2</sup> City of Bellflower. General Plan Open Space/Recreation Element, December 1994. Accessed April 2018, URL: <https://www.bellflower.org/civicax/filebank/blobdload.aspx?BlobID=28094>.

<sup>3</sup> California Department of Transportation. California Scenic Highway Mapping System Website. Accessed April 2018, URL: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/).



security lighting that would not be intrusive and would not represent a substantial source of new lighting. Therefore, project impact would be less than significant.

## II. AGRICULTURE RESOURCES. Would the project:

- 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-agriculture use? **No Impact.**

There are no agricultural uses on or adjacent to the project site. The City is located within the greater Los Angeles metropolitan area and is “built-out” and urbanized. The project site is the existing Caruthers Park that would continue to be utilized as a public park with implementation of the proposed project. Therefore, the proposed project would not convert farmland to non-agricultural uses and no project impact would result.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract? **No Impact.**

The project site is zoned for Open Space (O-S) and is located within a developed urban environment. There are no agricultural uses on or adjacent to the project site. While agriculture lands are a permitted use within the O-S zone, it is not the only permitted use. Open space for outdoor recreation and open space for public health and safety including areas required for the protection of water quality are also permitted uses within the O-S zone.<sup>4</sup> Implementation of the proposed project would not change the existing land use for the site. The project site is currently developed and utilized as a public park and would continue to be used as a public park with implementation of the proposed project. Therefore, the proposed project would not conflict with existing zoning for agricultural use.

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.<sup>5</sup> The project site is an existing City park and would not conflict with a Williamson Act Contract. Therefore, no project impact would result.

- 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 Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? **No Impact.**

The project site is zoned O-S and land within the O-S zone may be utilized for open space for the managed production of resources. However, there is no forest land or timberland located on or adjacent to the project site. The project site is currently utilized as a public park within a developed urban environment. Open space for outdoor recreation and open space for public health and safety including areas required for the protection of water quality are also permitted uses within the

<sup>4</sup> City of Bellflower. Bellflower Municipal Code Section 17.64.020. Accessed April 2018, URL: [http://qcode.us/codes/bellflower/view.php?topic=17-17\\_64-17\\_64\\_020&frames=off](http://qcode.us/codes/bellflower/view.php?topic=17-17_64-17_64_020&frames=off)

<sup>5</sup> California Department of Conservation. The Land Conservation Act. Accessed April 2018, URL: <http://www.conservation.ca.gov/dlrp/lca>.

O-S zone. Implementation of the proposed project would not change the existing land use for the site. The project site is currently developed and utilized as a public park and would continue to be used as a public park with implementation of the proposed project. As such, the proposed project would not conflict with existing zoning for forest land or timberland, and there would be no impact.

- d. Result in the loss of forest land or conversion of forest land to non-forest use? **No Impact.**

There is no forest land on or adjacent to the project site. The project site is currently utilized as a public park within a developed urban environment and would continue to be used as a public park with implementation of the proposed project. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use and no project impact would result.

- 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? **No Impact.**

The proposed project would not involve changes to the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use. As identified above, the project site is located with a developed urban environment and there are no agricultural uses on or adjacent to the project site. The project site is currently developed and utilized as a public park and would continue to be used as a public park with implementation of the proposed project. Therefore, no project impact would result.

### III. AIR QUALITY. Would the project:

- a. Conflict with or obstruct implementation of the applicable air quality plan? **Less Than Significant Impact.**

The project site is located within the City of Bellflower in the Los Angeles County and within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which oversees the welfare of air quality in Los Angeles County. The SCAQMD promotes air quality improvement through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and support and implementation of measures to reduce emissions from motor vehicles.

The federal CAA requires states to develop plans, known as State Implementation Plans (SIPs), stating how they will attain or maintain NAAQS. SIPs are a compilation of new and previously approved plans, programs, district rules, state regulations and federal controls. States and local air quality management agencies prepare SIPs for approval by the USEPA.

The SCAQMD in conjunction with the California Air Resources Board, the Southern California Association of Governments (SCAG) and the USEPA have prepared the Final 2016 Air Quality Management Plan (AQMP or Plan) to ensure continued progress toward clean air and reach federal and state compliance requirements over the next two decades.

The AQMP incorporates emissions projections based on growth forecasts accounted for in local and regional general plans. Local governments maintain the authority to determine the types of land use that are allowed within their

jurisdiction. For example, in city General Plans, each parcel of land within that city is given a land use designation (i.e., residential, industrial, etc.). Land use types that do not comply with general plan designations are inconsistent with the general plan. A proposed project that is inconsistent with a local General Plan is also inconsistent with the AQMP.

The proposed project site is zoned as Open Space, which includes private and publicly owned properties deemed for open space uses such as public parks, utility easements, and transportation corridors in accordance with the City of Bellflower Land Use Element of the General Plan<sup>6</sup> Thus, per the discussion above, consistency with the City’s Land Use Element ensures consistency with the General Plan. Consistency with General Plan ensures consistency with the AQMP.

Therefore, project impact would be less than significant.

- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? **Less Than Significant Impact.**

Significance thresholds are established to assist lead agencies in determining whether a project may have a significant air quality impact. Projects with emissions below established thresholds will not have a significant impact on air quality. Projects with emissions equal to or exceeding the established significance threshold will have a potentially significant adverse impact on air quality.

Since the proposed project is within the jurisdiction of the SCAQMD air quality significance thresholds established by the SCAQMD are used as a reference to determine whether the proposed project’s air emissions have a significant impact on air quality. A summary of the SCAQMD air quality significance thresholds is presented in Table 3.

**Table 3: SCAQMD Air Quality Significance Thresholds**

<b>Pollutant</b>	<b>Construction (lb/day)</b>	<b>Operation(lb/day)</b>
NOx	100	55
VOC	75	55
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550
Lead	3	3
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

Notes: CO carbon monoxide  
 lb/day pounds per day  
 NOx oxides of nitrogen (nitric oxide and nitrogen dioxide)  
 PM2.5 respirable particulate matter less than 2.5 microns in diameter  
 PM10 respirable particulate matter less than 10 microns in diameter  
 SCAQMD South Coast Air Quality Management District  
 SOx oxides of sulfur  
 VOC volatile organic compounds

Air emissions originate from construction and/or operation of a project. Construction emissions are temporary emissions occurring only while a project is being constructed and end when construction is complete. Operation emissions are long-term and begin once a project starts day to day operations.

<sup>6</sup> City of Bellflower. General Plan Land Use Element, 1994. Accessed March 2018, URL: <https://www.bellflower.org/civicax/filebank/blobdload.aspx?BlobID=28088>.

## **Operation Emissions**

The proposed project includes the construction of a storm water infiltration system within Caruthers Park. With the exception of a small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground, rendering a very small visible change to the site.

Once the proposed project is constructed, the park would be restored and its operations would resume to pre-construction conditions (e.g., neighboring residents would visit the park). The only day-to-day operational activities added by the proposed project would be the cycling of the irrigation pumps, which would operate on electricity and would not be expected to generate direct emissions of criteria air pollutants. The underground infrastructure is not expected to generate a significant source of operational activities. Operational emissions from the proposed project are not expected to differ significantly from current operations and, therefore, are not further discussed in the air quality section of this IS/MND.

## **Construction Emissions**

Emissions from the proposed project would result from construction activities including the following phases:

- Phase 1, Site Preparation. Mobilization, clearing and grubbing, concrete removal;
- Phase 2, Grading. Excavation, trenching, and rough grading;
- Phase 3, Construction. Subgrade, utility installation, construction of treatment structure, and restoring the playgrounds; and
- Phase 4, Paving. Backfilling, fine grading, paving, and landscape and electrical installation.

Construction emissions are primarily from mobile on-road sources (e.g., workers vehicles, material and equipment delivery trucks, soil haul trucks) and mobile off-road sources (e.g., concrete industrial saws, excavators, off-highway trucks, dozers, backhoes, excavators, rollers, trenchers, skid steer loaders, welders, air compressors, cranes, pavers, water trucks, concrete delivery trucks, and cement and mortar mixers). Construction activities would occur during calendar years 2018, 2019 and 2020 with most emissions occurring in 2018 and 2019.

Air emissions resulting from construction activities were calculated based on a worst-case scenario where each equipment piece in each phase runs simultaneously 8 hours per day. This approach assumes maximum daily operating time for all equipment assigned in each construction phase (i.e., Site Preparation, Grading, Construction, and Paving). Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod is widely accepted to provide a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects. The model uses pre-programmed algorithms to calculate emissions based on data entered. The algorithms are designed to take information such as project size; construction length; vehicle and equipment types; number of vehicle trips and lengths; and equipment operating hours to calculate emissions of criteria pollutants and greenhouse gases. Emission calculations take into account dust control measures such as those prescribed in SCAQMD Rule 403 and off-road vehicles using on average Tier 3 engines.

CalEEMod input values and calculated air emission results for the proposed project are provided as Appendix B and summarized in Table 4.

**Table 4: Project Construction Emissions of Criteria Pollutants (lb/day)**

Calendar Year	CO	VOCs	NOx	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
2018	34.6	1.8	37.3	0.1	4.0	2.5
2019	34.2	1.7	36.5	0.1	7.3	2.9
2020	12.0	0.4	7.8	0.0	0.6	0.5
Threshold of Significance	550	75	100	150	150	55
LST	1855	165	165	N/A	41	10
Significant?	No	No	No	No	No	No

Notes: CO carbon monoxide  
 lb/day pounds per day  
 LST localized significance threshold  
 N/A not applicable  
 NOx oxides of nitrogen (nitric oxide and nitrogen dioxide)  
 PM<sub>10</sub> respirable particulate matter less than 10 microns in diameter  
 PM<sub>2.5</sub> respirable particulate matter less than 2.5 microns in diameter  
 SOx oxides of sulfur (sulfur dioxide and sulfur trioxide)  
 VOC volatile organic compounds

As identified in Table 4, project construction impacts would be less than significant.

- c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **Less Than Significant Impact.**

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts and the change in the environment which results from the incremental impact of the project when added to other closely related past, present, or reasonably foreseeable future projects and can result from individually minor, but collectively significant project taking place over a period of time.”<sup>7</sup>

The SCAQMD has developed an approach consistent with CEQA as a possible option to determine cumulative significance. The approach provides three points of analysis as follows:

- One percent per year in project emissions reductions. This exercise consists of determining percent reductions as a result of implementation of emission measures.
- The second point consists of a 1.5 average vehicle ridership. This point focuses on maintaining a vehicle ridership average at commercial, industrial, and transportation land use projects.
- The third point involves reducing the growth in vehicle miles traveled and trips and maintaining it proportional to population growth.

Since the proposed project would neither increase operational emissions nor have an increase in vehicle trips, cumulative impacts would be less than significant in accordance with the cumulative analysis per the test points summarized above.

<sup>7</sup> South Coast Air Quality Management District, 1993 CEQA Air Quality Handbook.

- d. Expose sensitive receptors to substantial pollutants concentrations? **Less Than Significant.**

### **Localized Emissions**

Localized Significance Thresholds (LST) represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. LST are applicable for projects that generate oxides of nitrogen (NOX), carbon monoxide (CO), respirable particulate matter less than 10 microns in diameter (PM10), and respirable particulate matter less than 2.5 microns in diameter (PM2.5). LST are based the following criteria: geographic location of the project, project site size, and proximity between the project site and the nearest sensitive receptor such as residences and schools.<sup>8</sup>

### Construction Thresholds

The SCAQMD has prepared LST guidance to help lead agencies assess localized air quality impacts from projects that are less than five acres and generate NOX, CO, PM10, and PM2.5. The methodology for analyzing localized air quality impacts from proposed projects is presented in the SCAQMD *Final Localized Significance Threshold Methodology* document.<sup>9</sup> The methodology includes look-up tables with localized significance thresholds according to source receptor area for one, two and five acre proposed projects emitting CO, NOx, PM2.5, or PM10. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. Thus, only emissions generated by construction equipment and vehicles while at the site are used to evaluate LST. Construction emissions would have a localized impact if they exceeded LST.

### Construction Analysis

The project site is located in the Southeast Los Angeles County Area. The nearest receptors to the project site are residential housing units to the north and west. The estimated proximity of the nearest housing unit to the project site is 50 meters. The maximum area disturbed per day based on equipment use is 2.5 acres which would occur during phases 2 and 3. Thus, LST were based on the 5-acre LST look up table and compared against emissions calculated using CalEEMod. Based on the LST analysis, project construction emissions are below LST. LST and significance test are summarized in Table 4.

### **Carbon Monoxide Hotspots**

Carbon monoxide hotspots are associated with an increase of CO emissions caused by a project's activities. To determine the impact of a project's CO emissions on nearby receptors a CO hotspot analysis is performed on roadway intersections that may become impacted as a result of increased traffic volumes caused by a project's operation activities.

### Carbon Monoxide Hotspots Thresholds

Carbon monoxide thresholds are, as established under the California Ambient Air Quality Standards (CAAQs), 20.0 ppm for a one-hour period and 9.0 ppm for an

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<sup>8</sup> South Coast Air Quality Management District. SCAQMD Website. Accessed March 2018, URL: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

<sup>9</sup> South Coast Air Quality Management District. *Final –Localized Significance Thresholds Methodology*. June 2003, Revised July 2008.

eight-hour period. Thus, a project that causes emissions to reach or exceed the CAAQs would result in a significant impact.

Carbon Monoxide Hotspots Analysis

The proposed project would not generate additional long-term trips to existing nearby intersections. Only temporary trips would be generated during the construction part of the project. During construction, traffic would be increased minimally and would vary from phase to phase from an estimated total daily trip rate of 42 to 197. This temporary traffic volume increase is not anticipated to increase CO concentrations significantly and, therefore, further analysis is not conducted.

**Toxic Air Contaminants**

Toxic air contaminants (TACs) resulting from the proposed project would be emitted primarily through the combustion of diesel fuel by construction equipment. To determine whether construction emissions would pose a risk to the nearby residents a screening health risk assessment (SHRA) is included in Appendix G. The SHRA is prepared using SCAQMD Risk Assessment Calculator (RAC), which is designed to be consistent with the Office of Environmental Health Hazard Assessment (OEHHA) 2015 Health Risk Assessment Guidance.

Toxic Air Contaminants Thresholds

The SCAQMD prescribes the following thresholds consistent with the Office of Environmental Health Hazard Assessment (OEHHA) 2015 Health Risk Assessment Guidance:

- The maximum individual cancer risk (MICR) should not exceed one in a million ( $1 \times 10^{-6}$ ) if Best Available Control Technology for Toxics (T-BACT) is not used; or ten in one million ( $10 \times 10^{-6}$ ) if T-BACT is used.
- The cumulative cancer burden from all TACs emitted should not exceed 0.5.
- Neither the chronic hazard index (HIC), the 8-hr chronic hazard index (HIC8), nor the total acute hazard index (HIA) from all toxic air contaminants emitted should exceed 1.0 for any target organ system, or an alternate hazard index level deemed to be safe.

Toxic Air Contaminants Construction Analysis

**Screening Health Risk Assessment (SHRA).**

A SHRA was conducted for the proposed project and is included as Appendix G. Table 5 includes a summary of calculated results and their evaluation against thresholds, that if exceeded by the proposed project during construction could result in a significant impact on nearby residents. As presented in Table 5, emissions from construction sources are not anticipated to expose sensitive receptors in the nearby residential area to substantial pollutant concentrations.

**Table 5: Screening Health Risk Assessment**

Description	MICR	Cancer Burden	HIC, HIC8, HIA
Results	Residential: $6.09 \times 10^{-6}$ Commercial: $6.88 \times 10^{-8}$	$1.20 \times 10^{-1}$	$3.62 \times 10^{-3}$
Threshold	Residential: $10 \times 10^{-6}$ Commercial: $10 \times 10^{-6}$	<0.5	<1.0
Impact	No impact	No impact	No impact

- e. Create objectionable odors affecting a substantial number of people? **Less Than Significant Impact.**

The proposed project would generate odors resulting from diesel combustion by on-road and off-road construction equipment. Odors are not anticipated to be generated during the operation of the proposed project since the operation of storm water infiltration is not typically a source of odors.

Odors from construction sources would be significant if they were to become a nuisance pursuant to SCAQMD Rule 402. To become a nuisance odor resulting from the proposed project would need to generate multiple valid odor complaints.

Since the construction of the proposed project requires operation of on-road and off-road vehicles, a continuous condition for odor emission is not anticipated and objectionable odors are anticipated to be less than significant impact.

#### IV. BIOLOGICAL RESOURCES. Would the project:

- 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? **Less Than Significant Impact with Mitigation Incorporated.**

The City of Bellflower is located within southern Los Angeles County and is highly urbanized. Accordingly, the potential for candidate, sensitive, or special status species or habitats is low within City limits. The project site is located at 10500 Flora Vista Street, Bellflower, CA, and is currently maintained as a public recreational park. A query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) was conducted to determine known occurrences of candidate, sensitive, or special status species or habitats within the Whitter quadrangle, which includes the City of Bellflower, and the eight adjacent quadrangles around the project site (Tables 6 and 7).<sup>10</sup> The species presented in Tables 6 and 7 are those with any chance of potentially occurring within or adjacent to the project site based on regional occurrence. Species that only inhabit dunes, marshes, coastal flats, wetlands, vernal pools, riparian habitats, or coastal sage scrub have not been included, since those habitats are not present within or adjacent to the project site.

**Table 6: Special Status Wildlife Species with Potential to Occur**

Common Name	Scientific Name	Federal Status / State Status	Other Status
<b>Birds</b>			
Cooper's hawk	<i>Accipiter cooperii</i>	- / -	WL
Tricolored blackbird	<i>Agelaius tricolor</i>	- / SCE	SSC
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	- / -	WL
Grasshopper sparrow	<i>Ammodramus savannarum</i>	- / -	SSC
Burrowing owl	<i>Athene cunicularia</i>	- / -	SSC
Ferruginous hawk	<i>Buteo regalis</i>	- / -	WL
Swainson's hawk	<i>Buteo swainsoni</i>	- / ST	-
Yellow-breasted chat	<i>Icteria virens</i>	- / -	SSC
<b>Mammals</b>			
Pallid bat	<i>Antrozous pallidus</i>	- / -	SSC

<sup>10</sup> California Department of Fish and Wildlife. California Natural Diversity Database (CNDDDB) Bios, <https://www.wildlife.ca.gov/data/cnddb/maps-and-data>. Accessed February 1, 2018.



Common Name	Scientific Name	Federal Status / State Status	Other Status
Western mastiff bat	<i>Eumops perotis californicus</i>	- / -	SSC
Silver-haired bat	<i>Lasionycteris noctivagans</i>	- / -	-
Hoary bat	<i>Lasiurus cinereus</i>	- / -	-
Western yellow bat	<i>Lasiurus xanthinus</i>	- / -	SSC
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	- / -	SSC
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	- / -	SSC
Big free-tailed bat	<i>Nyctinomops macrotis</i>	- / -	SSC
American badger	<i>Taxidea taxus</i>	- / -	SSC
<b>Reptiles and Amphibians</b>			
California glossy snake	<i>Arizona elegans occidentalis</i>	- / -	SSC
Coast horned lizard	<i>Phrynosoma blainvillii</i>	- / -	SSC
Western spadefoot	<i>Spea hammondi</i>	- / -	SSC
<b>Invertebrates</b>			
Crotch bumble bee	<i>Bombus crotchii</i>	- / -	-
Monarch - California overwintering population	<i>Danaus plexippus</i>	- / -	-

Notes: Results based on CNDDDB query for nine regional quadrangles.  
ST = State Listed Threatened      SCE = State Candidate Endangered  
SSC = CDFW Species of Special Concern    WL = CDFW Watch List

**Table 7: Special Status Plant Species with Potential to Occur**

Common Name	Scientific Name	Federal Status / State Status	Other Status
Round-leaved filaree	<i>California macrophylla</i>	- / -	1B.2
Plummer's mariposa-lily	<i>Calochortus plummerae</i>	- / -	4.2
Intermediate mariposa-lily	<i>Calochortus weedii</i> var. <i>intermedius</i>	- / -	1B.2
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE / SE	1B.1
San Bernardino aster	<i>Symphyotrichum defoliatum</i>	- / -	1B.2
Greata's aster	<i>Symphyotrichum greatae</i>	- / -	1B.3

Notes: Results based on CNDDDB query for nine regional quadrangles.  
FE = Federally Listed Endangered    SE = State Listed Endangered  
CNPS CRPR (California Native Plant Society, California Rare Plant Rank)  
1B = Plants Rare, Threatened, or Endangered in California and elsewhere  
4 = Plants of limited distribution (Watch List)  
0.1 = Seriously threatened in California (over 80% of occurrences threatened)  
0.2 = Moderately threatened in California (20-80% occurrences threatened)  
0.3 = Not very threatened in California (less than 20% of occurrences threatened)

A general biological survey was conducted on February 7, 2018 to assess habitats onsite and potential occurrence of candidate, sensitive, or special status species. The project site has high levels of human activity and is surrounded by urban residential areas to the north and west, a concrete channel with standing water to the east, and Highway 91 to the south. The project site consists of sparsely planted pine (*Pinus* sp.), sycamore (*Platanus* sp.), eucalyptus (*Eucalyptus* sp.), and ornamental tree species, and irrigated ornamental grasses with mixed mustards (*Brassica* spp.), clovers (*Melilotus* spp., *Medicago* spp.), and other various non-native weeds. Some common bird species were observed within the project site, including black phoebe (*Sayornis nigricans*) and mourning dove (*Zenaida macroura*). No raptor species or monarch butterfly (*Danaus plexippus*) roosting sites were observed. No candidate, sensitive, or special status species were observed within or adjacent to the project site.

A visual survey for nesting birds was conducted at trees within the project site during the survey. Three inactive nests were observed in sycamores along the eastern boundary of the project site. No individuals were observed utilizing these

nests. Nesting should be anticipated because it is in close proximity to standing water in the concrete channel to the east of the project site.

Due to the use of the project site as a public park (i.e., lack of natural habitats), the potential to support the species listed in Table 6 and Table 7 is very low. The species listed in Table 6 and 7 are very unlikely to occur. However, the BMP impact area within the project site includes numerous trees that could serve as potential habitat for nesting birds. While no active bird nests were observed within the BMP impact area during the February 7, 2018 site visit, some inactive nests were observed within the larger project site. Therefore, direct removal of trees, use of heavy machinery, and/or significant ground disturbance during construction activities has the potential to disturb nesting birds if present. With implementation of mitigation measure BIO-1, project impacts to candidate, sensitive, or special status species would be reduced to less than significant. Mitigation Measure BIO-1 would not be required for activities conducted outside of the bird breeding season.

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? **No Impact.**

The CNDDDB identified four sensitive habitat types within a nine quadrangle search around the project site:

- California Walnut Woodland
- Riversidian Alluvial Fan Sage Scrub
- Southern Coastal Salt Marsh
- Walnut Forest

The project site consists of a maintained public park. None of the four sensitive habitats listed above occur within a one mile radius of the project site, nor would the project result in impacts to habitat outside the property. Additionally, no sensitive habitats were observed during the February 7, 2018 survey within or adjacent to the project site. A concrete channel with standing water was observed outside the eastern boundary of the project site, but no riparian habitat was present at this area. Therefore, the project would have no impact on any riparian habitat or other sensitive natural community.

- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? **Less than Significant Impact with Mitigation Incorporated.**

The CNDDDB indicated that riversidian alluvial fan sage scrub and southern coastal salt marsh occur within a nine quadrangle radius around the project site, but do not occur within one mile of the project site. Additionally, the U.S. Fish and Wildlife Service National Wetlands Inventory identifies a riverine channel located approximately 0.25 miles and a freshwater pond located approximately 0.5 miles to the east of the project site.<sup>11</sup> The riverine area was confirmed to be concrete during the February 7, 2018 survey. A small amount of very shallow standing water was found within the project site during the site visit due to recent irrigation of the turf grass. The concrete channel with standing water that was observed outside the eastern boundary of the project site may be affected by project activities. A formal wetlands delineation of the site has not been completed. Therefore, there is potential for these waters to be considered jurisdictional. With implementation of Mitigation Measure BIO-2, project impacts to protected wetlands

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<sup>11</sup> USFWS NWI Wetlands Mapper, <https://www.fws.gov/wetlands/data/mapper.html>. Accessed February 1, 2018.

and Waters of the U.S. would be reduced to less than significant. Anticipated permits that may be required include CDFW Section 1601, RWQCB Section 401, and potential notification under USACE Section 404.

- 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? ***Less than Significant Impact with Mitigation Incorporated.***

The project site consists of a public park surrounded by urban residential areas to the north and west, a concrete channel with standing water to the east, and Highway 91 to the south. The project site is not located within or directly adjacent to any known or mapped wildlife corridors or nursery sites and is generally isolated due to urbanization of the surrounding area. Trees within the project site may serve as potential wildlife nursery sites or aid migratory wildlife. However, with implementation of mitigation measure BIO-1, project impacts to the movement of any native resident or migratory wildlife species, established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites would be reduced to less than significant. Mitigation Measure BIO-1 would not be required for activities conducted outside of the bird breeding season.

- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***No Impact.***

The City of Bellflower does not have any local policies or ordinances that protect specific biological resources, including protected tree policies. Additionally, the project site consists of a public park surrounded by urban uses with no natural habitat other than a few trees. Project construction may require the removal or disturbance of trees; however, tree removal would be minimized to the extent practicable and would be completed per City requirements. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources and no impact would occur.

- f. Conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***No Impact.***

The City of Bellflower is not regulated by a Habitat Conservation Plan.<sup>12</sup> Additionally the project site is not located within any other approved local, regional, or state habitat conservation plan. The project site is located within a developed urban area and is maintained as a public park. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan and no impact would occur.

## **MITIGATION MEASURE:**

The following mitigation measures shall be implemented:

**BIO-1:** A preconstruction nesting bird survey shall be conducted by a qualified biologist prior to tree removal, the use of heavy machinery, or significant ground disturbance if activities are conducted within the bird breeding season (February 15 – September 15). The survey shall be required within 7 days prior to these activities if they occur in the bird breeding season. If birds are found to be actively nesting within the project site or within 250 feet of the work area, an appropriate exclusionary buffer around the active nest shall be established by the qualified

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<sup>12</sup> CDFW Conservation Plans, <https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans>. Accessed February 1, 2018.

biologist. The buffer distance will be determined based on the specific nesting bird species. No construction activities would be allowed within the buffer until the birds have fledged from the nest. Active nests and buffers would be monitored by a qualified biologist to determine if active nests are being adversely affected by project activities.

**BIO-2:** Prior to construction, a formal wetland delineation shall be performed in areas where potential wetlands, waters, or drainages subject to the jurisdiction of USACE, RWQCB, and CDFW, may be affected by the project. If jurisdictional resources are identified and would be directly or indirectly impacted, a jurisdictional delineation report will be prepared. The jurisdictional report will be used to prepare, submit, and obtain permits from the USACE, RWQCB, and CDFW, as applicable.

## V. CULTURAL RESOURCES. Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? ***Less Than Significant Impact with Mitigation Incorporated.***

A historical resource is defined in Section 15064.5(a)(3) of the CEQA Guidelines as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register of Historical Resources, included in a local register, or identified as significant in a historic resource survey are also considered historical resources under CEQA.

A project with an effect that may cause substantial adverse change in the significance of a historical resource is a project that may have a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historical resource. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historical resource such that the significance of a historical resource would be materially impaired.

For this study, the direct Area of Potential Effect (APE) is defined as the project site horizontal area and vertical depth of ground disturbance (approximately 0 to 20 feet depth). On January 29, 2018 a literature and records search was conducted for the entire Caruthers Park parcel and a 1 mile radius (centered on the park, termed the study area) at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University, Fullerton, California (Record Search File Number 18494.4553). A copy is included as Appendix C. As part of the record search, the SCCIC database of survey reports and overviews, documented cultural resources, cultural landscapes, and ethnic resources was consulted. Additionally, the search included a review of the following publications and lists: California Office of Historical Preservation (OHP) Historic Properties Directory/National Register of Historic Properties, OHP

Archaeological Determinations of Eligibility, California Inventory of Historical Resources/California Register of Historic Resources, California Points of Historical Interest, California Historical Landmarks, Caltrans Bridge Survey, ethnographic information, historical literature, historical maps, and local historic resource inventories. The record search focused specifically on the project site, APE and a 1 mile radius (study area).

The records search revealed that a total of twenty-five previous cultural resources investigations have been conducted within the project study area. No previous investigations have been conducted within the proposed APE. The SCCIC search identified 12 previously recorded resources (ten historic buildings, 2 historic structures) and forty-nine previously recorded historic buildings (listed in the OHP Historic Properties directory) within 1 mile of the APE. The forty-nine OHP listed buildings are listed as not eligible to the National Register of Historic Places but have not been evaluated for the CRHR or local listing, the twelve previously recorded cultural resources (building and structures) are not evaluated. The SCCIC literature and records search also revealed one previously recorded historic building P-19-186531: The Carpenter House Museum (P-19-186531) is located within Caruthers Park, and adjacent to the APE. The building was recorded in 1984 and the site form identifies the building as the home of Fred Carpenter, a pioneer in the dairy industry. The site is listed as a California Historical Point of Interest (P638), and is listed in the OHP Historic Properties directory and has a CHRIS Status Code of 7L: state historic landmark and points of historical interest designated prior to 1998 – needs to be reevaluated using current standards.<sup>13</sup> The site is likely eligible for listing to the CRHR.

P-19-186531 will be avoided by construction activities as it is not within the direct APE, however construction activities are proposed within approximately 20 feet of the historic building. Mitigation addressing the historic resource has been included as Mitigation Measure CR-1. As discussed in section XII Noise, it is not anticipated that the construction operations will generate vibration levels (a threshold level of 0.12 PPV) that will cause structural damage to the historic building since no blasting or pile driving will be required. With Mitigation Measure CR-1 (avoidance signage/flagging) incorporated, a less than significant impact is anticipated.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? ***Less Than Significant Impact with Mitigation Incorporated.***

On January 29, 2018 a literature and records search was conducted of the cultural resource site and project file collection through the SCCIC as described above (Appendix C). No previously recorded archaeological sites or CRHR eligible archaeological sites are recorded within or near the APE. An archeological survey was not conducted since the APE has been extensively disturbed by landscaping, the existing park, and previous grading and 4.5 to 8.5 feet of imported fill/soils across the entire APE. The native ground surface is not visible across the project.

On January 13, 2016, the Native American Heritage Commission (NAHC) was contacted to request a Sacred Lands file search. The NAHC responded on January 27, 2016 that no Native American cultural resources were identified by their search as being within the proposed project study area (Appendix D).

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<sup>13</sup> Office of Historic Preservation. 2018 The Carpenter, Historical Point of Interest. Listed California Historical Resources, available online. Accessed February 5, 2018, URL: <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19>

Based on previous geotechnical studies (Appendix E) and the SCCIC record search results, the likelihood of encountering archaeological resources in the APE is considered low to moderate. The APE has been extensively altered by previous ground disturbance, most likely the result of the Caruthers Park and associated facilities construction. The entire project area was previously graded and filled with artificial imported soils to a depth of 4.5 to 8.5 feet; it is unlikely that intact cultural deposits exist within this zone. Beneath the fill, Late Pleistocene and Holocene aged young alluvial fan deposits (Qyf) exist to a depth of 51 feet (or more)(Appendix E). This native alluvium consist of fine-grained (clay) and loose grained (sand) soils and may have the potential to contain cultural material. The SCCIC results did not identify any previously recorded archaeological sites within the APE or 1 mile of the APE; it is unclear whether this is the result of the built environment within the project area or lack of survey coverage of native soils. Therefore, the archaeological sensitivity is considered low to moderate within native alluvial soils.

If construction ground disturbance depths range within native soils, there would be a potential to impact previously unrecorded subsurface cultural resources. Mitigation addressing inadvertent discoveries of archaeological resources has been included as Mitigation Measure CR-2. With Mitigation Measure CR-2 incorporated, a less than significant impact is anticipated.

- c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? **Less Than Significant Impact with Mitigation Incorporated.**

Based on the geotechnical study (Appendix E), the soils beneath the artificial fill consists of young alluvial fan Deposits to a depth of 51 feet (or more). Holocene and Late Pleistocene Young Alluvial Fan Deposits have a low paleontological sensitivity and do not have the potential to contain paleontological resources. Older Alluvial Fan Deposits would have the potential to contain paleontological resources at depths greater than 51 feet. It is not anticipated that native soils containing paleontological resources will be disturbed as ground disturbing construction activities are not expected to extend into soils that would contain paleontological deposits. Nonetheless, in case construction ground disturbance depths range within native soils, Mitigation Measure CR-3 addressing inadvertent discoveries of paleontological resources has been included. With Mitigation Measure CR-3 incorporated, a less than significant impact is would result.

- d. Disturb any human remains, including those interred outside of formal cemeteries? **Less Than Significant Impact.**

Results of the SCCIC records search revealed there are no known burials within the APE or within 1 mile of the APE. Existing regulations require that if human remains and/or cultural items defined by the Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the Ventura County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the Most Likely Descendant (MLD) as stipulated by California PRC, Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Any

discovery of human remains would be treated in accordance with Section 5097.98 of the Public Resources Code (PRC) and Section 7050.5 of the Health and Safety Code. Therefore, with compliance with existing regulations, Project impact would be less than significant.

- e. Cause a substantial adverse change in the significance of a tribal cultural resource as 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. ***Less Than Significant Impact with Mitigation Incorporated.***

The SCCIC and NAHC sacred lands search did not identify any significant tribal cultural resources within or adjacent to the project APE. Under CEQA, Assembly Bill (AB) 52 requires a lead agency to evaluate a project's potential to impact "tribal cultural resources." In addition, AB 52 requires the lead agency to consult with any California Native American tribe that has previously requested that the lead agency provide the tribe with notice of such projects and consultation, and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources (as applicable), and alternatives and mitigation measures recommended by the tribe. In accordance with AB 52, the City of Bellflower sent letters of inquiry to Native American individuals on April 10, 2018. The following contacts were sent letters:

- Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Sandonne Goad, Chairperson Gabrielino/Tongva Nation
- Robert F. Dorame, Tribal Chair/Cultural Resources Director, Gabrielino Tongva Indians of California Tribal Council
- Andrew Salas, Chairperson, Gabrieleno Band of Mission Indians – Kizh Nation
- Charles Alvarez, Gabrielino-Tongva Tribe

As part of their AB 52 tribal consultations, the City has not received any responses from the Native American groups that were contacted.

If construction ground disturbance depths range within native soils, there would be a potential to impact previously unrecorded significant resources. Mitigation addressing inadvertent discoveries of potential significant resources have been included as Mitigation Measure CR-2.

#### **MITIGATION MEASURES:**

The following mitigation measures shall be implemented:

**CR-1: Avoidance of Historic Building (P-19-186531)**— Site P-19-186531 is approximately 20 feet from APE and will be avoided. Protective measures such as avoidance signage (e.g. no admittance) and temporary flagging or fencing (as appropriate) will be placed outside the building (at the 20-foot boundary, in an area visible to construction personnel), to protect and prohibit or otherwise restrict construction access near P-19-186531. The contractor will ensure the avoidance measure is in place prior to construction and will remove any signage or temporary flagging and/or fencing (as applicable) once construction in the area is completed.

**CR-2: Inadvertent Discoveries of Archaeological Resources**—If the construction staff or others observe previously unidentified archaeological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify the qualified project Archaeologist (retained on-call by the applicant). Construction will halt within the flagged or roped-off area. The Archaeologist will assess the resource as soon as possible and determine appropriate next steps in coordination with the City. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.

**CR-3: Inadvertent Discoveries of Paleontological Resources**—If the construction staff or others observe previously unidentified paleontological resources during ground disturbing activities, they will halt work within a 200-foot radius of the find(s), delineate the area of the find with flagging tape or rope (may also include dirt spoils from the find area), and immediately notify a qualified Paleontologist (retained on-call by the applicant). Construction will halt within the flagged or roped-off area. The Paleontologist will assess the resource as soon as possible and determine appropriate next steps in coordination with RSD. Such finds will be formally recorded and evaluated. The resource will be protected from further disturbance or looting pending evaluation.

## VI. GEOLOGY AND SOILS. Would the project:

The following discussions are based on the Geotechnical Investigation Report for the Caruthers park Stormwater Storage & Infiltration Facilities prepared by Tetra Tech. A copy is included as Appendix E of this IS/MND.

- a. Expose people or structures to potential substantial adverse effects, including the risk or 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. **Less Than Significant Impact.**

Fault rupture is the displacement that occurs along the surface of a fault during an earthquake. Based on criteria established by the California Geological Survey (CGS), faults may be categorized as active, potentially active, or inactive. Active faults are those which show evidence of surface displacement within the last 11,000 years (Holocene-age). Potentially active faults are those that show evidence of most recent surface displacement within the last 1.6 million years (Quaternary-age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive. In addition, there are buried thrust faults, which are low angle reverse faults with no surface exposure. Due to their buried nature, the existence of buried thrust faults is usually not known until they produce an earthquake.

The CGS has established earthquake fault zones known as Alquist-Priolo Earthquake Fault Zones (AP Fault Zones) around the surface traces of active faults to assist cities and counties in planning, zoning, and building regulation functions. These zones, which extend from 200 to 500 feet on each side of a known active fault, identify areas where potential surface rupture along an active fault could prove hazardous and identify where special studies are required to characterize hazards to habitable structures.



The site is not located within a designated Earthquake Fault Zone for fault surface rupture hazard. Based on a review of State of California Earthquake Fault Zone maps, the closest zoned fault for surface rupture is located within the Newport-Inglewood Fault Zone – Rose Canyon fault zone section located approximately 6.1 miles southwest of the site and is mapped within the Long Beach Quadrangle (Appendix E). Therefore, project impact is less than significant.

ii. Strong seismic groundshaking? ***Less Than Significant Impact with Mitigation Incorporated.***

Seismicity is the geographic and historical distribution of earthquakes, including their frequency, intensity, and distribution. The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The type of construction also affects how particular structures and improvements perform during ground shaking.

The project site is located in an area with a potential for strong ground motion during earthquakes. The project site is located in an area underlain by unconsolidated Holocene deposits, which are considered to be potentially hazardous with respect to ground motion potential. Earthquakes occurring within approximately 60 miles of the site are generally capable of generating ground shaking of engineering significance to the proposed construction. The project area is located in the general proximity of several active and potentially active faults.

Active faults within approximately 15 miles of the subject site include the Newport-Inglewood fault zone located 6.1 miles southwest of the site, the Whittier fault zone located 8.7 miles northeast of the site, the THUMS-Huntington Beach fault zone located approximately 11.5 miles southwest of the site, and the Palos Verdes fault located approximately 12.5 miles southwest of the site. The San Andreas Fault is located about 42 miles to the northeast of the site. The inferred trace of the potentially active Los Alamitos fault, which trends sub-parallel to the northwest-trending Newport-Inglewood fault zone, is mapped approximately 2.8 miles to southeast of the site. The Los Alamitos fault has no record of historic earthquakes but shows evidence of displacement during late Quaternary time (Appendix E). Table 8 lists selected principal known active faults that may affect the subject site and the maximum moment magnitude ( $M_{max}$ ) as published by Cao et al. (2003) for the California Geological Survey (CGS) (Appendix E).

**Table 8: Main Active Faults in the Project Site Vicinity**

<b>Fault Name</b>	<b>Approximate Fault Distance to Site<sup>1</sup> (miles)</b>	<b>Maximum Moment Magnitude<sup>2</sup> (<math>M_{max}</math>)</b>
Los Alamitos	2.8	6.2
Newport-Inglewood	6.1	7.1
Whittier	8.7	6.8
Puente Hills Blind Thrust	10.8	7.1
THUMS-Huntington Beach	11.5	7.0
Palos Verdes	12.5	7.3
Cabrillo	15.2	6.8
Charnock	15.6	6.5
Raymond	16.5	6.5
Redondo Canyon	17.3	6.5
Hollywood	18.6	6.4

Fault Name	Approximate Fault Distance to Site <sup>1</sup> (miles)	Maximum Moment Magnitude <sup>2</sup> ( $M_{max}$ )
Verdugo	19.3	6.9
Sierra Madre	20.0	7.2
Santa Monica	21.7	6.6
Anacapa-Dume	23.5	7.5
Malibu Coast	33.0	6.7
San Andreas	42.0	7.8

Notes: 1 per Jennings, 2010  
2 per Cao, et al., 2003

Potential seismic sources of significance to the project include active faults previously described and faults that are not known to break the ground surface but are considered active. This latter group of faults includes buried or “blind” thrust faults. Current tectonic models for the Los Angeles basin include the presence of buried thrust faults, several of which are considered partly responsible for the north-to-south compression of the basin. Although these faults are not currently zoned by the State of California for surface rupture hazards (Earthquake Fault Zones), many are considered capable of generating seismic shaking of significance to structures. Table 9 lists historic earthquakes that have occurred in Southern California and caused ground motion at the project site (Appendix E).

Based on the US Geological Survey (USGS) Seismic Design Maps website application for the project site, the mapped geometric mean Peak ground acceleration ( $PGA_M$ ) was estimated at 0.64g for a ground motions corresponding to the Maximum Considered Earthquake (MCE). From the Seismic Hazard Interactive website, and using the 2008 Dynamic Conterminous US v3.3.1 edition, the groundmotion for a return period of 2,475 years (2% in 50 years) corresponds approximately to a modal earthquake magnitude of moment magnitude scale ( $M_w$ ) 6.5 located at a distance of 4.5 kilometers (km) (2.8 miles).

Mitigation Measure GEO-1 requires that the building design for structures at the project use geotechnical building design recommendations that are in compliance with the 2016 California Building Code (CBC). Compliance with the CBC and the City of Bellflower’s regulatory standards will reduce impacts due to seismic ground shaking to a less than significant level. With the implementation of Mitigation Measure GEO-1; the project would have a less than significant impact.

**Table 9: Historic Earthquakes in Southern California**

Earthquake Name	Year	Fault and Fault Type	Earthquake Magnitude*	Epicenter	
				Latitude	Longitude
Northridge	1994	Northridge Thrust (Blind Thrust) (a.k.a. Pico Thrust)	6.7 $M_w$	34.21°N	118.54°W
Sierra Madre	1991	Clamshell-Sawpit Canyon Fault (Reverse)	5.8 ML	34.20°N	118.14°W
Pasadena	1988	Raymond Fault (left lateral strike-slip)	5.0 $M_w$	34.14°N	118.13°W
Whittier Narrows	1987	Puente Hills Fault (Blind Thrust Fault)	5.9 ML	34.06°N	118.08°W
San Fernando	1971	San Fernando Fault (thrust)	6.5-6.7 $M_w$	34.42°N	118.37°W
Torrance-Gardena	1941	Palos Verdes Fault (right-reverse)	4.8 ML	33.82°N 33.78°N	118.22°W 118.25°W
Long Beach	1933	Newport-Inglewood Fault	6.4 $M_w$	33.63°N	118.00°W

Earthquake Name	Year	Fault and Fault Type	Earthquake Magnitude*	Epicenter	
				Latitude	Longitude
		(right- lateral strike-slip)			
San Jacinto	1923	San Jacinto Fault (right-lateral strike-slip)	6.3 ML	34.00°N	117.24°W
San Jacinto	1918	San Jacinto Fault (right-lateral strike-slip)	6.7 Mw	33.65°N	117.43°W
Elsinore	1910	Elsinore Fault (right- lateral strike-slip)	6 ML	33.75°N	117.45°W
Fort Tejon	1857	South Central Segment of the San Andreas Fault (right-lateral strike-slip)	7.9 Mw	35.43°N	120.19°W

Notes: Mw refers to Moment Magnitude scale  
ML refers to Local Magnitude scale

iii. Seismic-related ground failure, including liquefaction? ***Less Than Significant Impact with Mitigation Incorporated.***

Liquefaction is a phenomenon in which saturated silty to sandy granular soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during an earthquake. Liquefaction effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Liquefaction typically occurs in areas where groundwater is less than 50 feet from the surface, and where the soils are composed of poorly consolidated, fine to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

Results of liquefaction and dynamic settlement (settlement of saturated and dry soils through densification over time) analyses of granular soils were completed for the project site during the geotechnical investigation conducted for the project in 2017 (Appendix E). The analyses based on Standard Penetration Test and Modified California Split-spoon sample data indicated that the majority of the on-site granular soils found at depth intervals between 8 and 51.5 feet are susceptible to liquefaction or dynamic settlement of between 4.1 and 7.8 inches. The geotechnical report states that per screening criteria No. 19 of the *Administrative Manual, County of Los Angeles Department of Public Works, Geotechnical and Materials Engineering Division GS045.0* (County of Los Angeles Department of Public Works 2014) (GS045.0), differential settlements are assumed to be half of the total settlement over a span of 30 feet, which is 3.9 inches for the site. The geotechnical report recommended use of a Geogrid-Reinforced Gravel Raft Foundation for all above and below ground structures and specified design parameters for subterranean walls to resist lateral pressure from seismic loads. Compliance with these recommendations would ensure that construction would not be significantly compromised by future seismic activity, including liquefaction. Therefore, project impact would be less than significant impact with mitigation incorporated.

Mitigation Measure GEO-1 requires that the building design for structures at the project use geotechnical building design recommendations that are in compliance with the CBC and follow the recommendations of GS045.0. Compliance with the CBC, GS045.0, and the City of Bellflower's regulatory standards will reduce impacts due to liquefaction to a less than significant level.

iv. Landslides? **No Impact.**

According to the State of California Seismic Hazard Zones Map reviewed for the geotechnical investigation, the site is not located in an Earthquake-induced Landslide Hazard Zone (California Geologic Survey 1999). Thus, the project would not be subject to, or result in, landslides, and there would be no impact.

b. Result in substantial soil erosion or the loss of topsoil? **Less Than Significant Impact.**

Soil erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur in a Project area where bare soil is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms.

The project site includes the northwest quarter of Carruthers Park which is predominantly landscaped in turf grass, trees and shrubs. The project site also includes cement sidewalks, play structures, and a wading pool/water-park area.

Project construction would result in ground surface disruption during excavation and grading that would create the potential for erosion to occur. Wind erosion would be minimized through soil stabilization measures required by the SCAQMD Rule 403 (Fugitive Dust), such as daily watering. Potential for water erosion would be reduced by implementation of standard erosion control measures imposed during site preparation and grading activities. As discussed in more detail under Section IX, *Hydrology and Water Quality*, the project would be subject to all existing regulations associated with the protection of water quality. Construction activities would be carried out in accordance with applicable City standard erosion control practices required pursuant to the CBC and the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit issued by the Los Angeles Regional Water Quality Control Board (LARWQCB), as applicable. Consistent with these requirements, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared that incorporates temporary BMPs to control water erosion during the project's construction period such as silt fencing, fiber rolls, hydroseeding, and straw bales. Following project construction, the site would be restored to landscaping and play structures similar to the current development. Thus, construction and operational impacts due to erosion or the loss of topsoil would be less than significant with compliance with applicable regulatory requirements.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? **Less Than Significant Impact with Mitigation Incorporated.**

Impacts related to liquefaction and dynamic settlement, and landslides are discussed under Responses VI (a.iii and a.iv). Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to the combination of gravity and earthquake shaking. Such movement can occur on slope gradients of as little as one degree. Lateral

spreading typically damages pipelines, utilities, bridges, and structures. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e. retaining wall, slope, or channel) and to a lesser extent on ground surfaces with a very gentle slope. As stated in Response VI (a.iii), the project site is susceptible to liquefaction, and design recommendations have been prepared to mitigate settlement estimated up to 7.8 inches. Because of the relatively close proximity of the free face of the nearby LACFCD P16 drainage channel, the site is subject to a hazard of lateral spreading. The proposed project will not alter the already existing lateral spreading hazard. The estimated lateral displacements at the project site due to lateral spreading are about 6 inches. Per the Los Angeles County guidelines (GS 045.0), lateral displacements of less than 12 inches can be mitigated solely by the structural solution described in Mitigation Measure GEO-1 rather than requiring ground improvement methods. Therefore, project impact would be less than significant with mitigation incorporated.

Mitigation Measure GEO-1 requires that the building design for structures at the project use geotechnical building design recommendations that are in compliance with the 2016 California Building Code (CBC). Compliance with the CBC and the City of Bellflower's regulatory standards will reduce impacts due to unstable soil conditions of liquefaction, dynamic settlement, and lateral spreading to a less than significant level.

- 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? **Less Than Significant Impact.**

Soils with shrink-swell or expansive properties typically occur in fine-grained sediments and cause damage through volume changes as a result of a wetting and drying process. Structural damage may occur incrementally over time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. No expansive soils were encountered during the geotechnical investigation; therefore, no significant impact is anticipated (Appendix E).

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? **No Impact.**

The proposed project includes infrastructure improvements to improve water quality. No wastewater requiring service by sewer, septic tank or alternative wastewater disposal system would be generated by the proposed project. Therefore, no project impact would result.

#### **MITIGATION MEASURES:**

The following mitigation measures shall be implemented:

**GEO-1:** Mitigation Measure GEO-1 requires that the building design for structures at the project use geotechnical building design recommendations that are in compliance with CBC, and follow the recommendations in the County of Los Angeles' guidance document GS045.0. Compliance with the CBC, GS045.0, and the City of Bellflower's regulatory standards will reduce impacts due to seismic ground shaking, liquefaction, dynamic settlement, and differential spreading to a

less than significant level.

**VII. GREENHOUSE GAS EMISSIONS. Would the project:**

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***Less Than Significant Impact.***

Regulated greenhouse gases (GHGs) include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). GHGs are commonly quantified in the equivalent mass of CO<sub>2</sub>, denoted CO<sub>2</sub>eq, which takes into account the global warming potential (GWP) of each individual GHG compound. The most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide.

Significance Thresholds

The Governor's Office of Planning and Research (OPR) in cooperation with the Resources Agency, the California Environmental Protection Agency (Cal/EPA), and the ARB developed the *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review Technical Advisory* in an effort to facilitate an informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents.<sup>14</sup> The general approach presented in the OPR's Technical Advisory (i.e., determining GHG emissions, identifying significance, and mitigating impacts) is employed in the following sections.

On December 5, 2008, pursuant to state law (i.e., CEQA Guidelines 15064.7) the SCAQMD Governing Board adopted a proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The significance threshold is applicable for stationary sources and can be used for determining significant impacts for proposed projects.<sup>15</sup> Under the interim significance thresholds projects can emit up to 10,000 metric tons (MT) per year of CO<sub>2</sub>eq before being deemed as having significant air quality impacts.

There are no other federally, statewide, or regionally established significance thresholds to support impact assessments of GHG emissions from proposed projects. Instead, the state has pursued other initiatives to meet GHG reduction goals. Some of those initiatives include the pursuit of low-emission vehicle programs, low carbon fuel standards, heavy-duty vehicle GHG regulations, and renewable energy technologies (e.g. wind and solar power).

Impact Analysis

Greenhouse gas emissions resulting from the proposed project would occur primarily during the construction of the proposed project. GHG emissions resulting from the operation of the proposed project are deemed insignificant, and are, therefore, not further discussed. GHG emissions from the construction activities of the proposed project were calculated using CalEEMod. CalEEMod output results are included in Appendix B. The total calculated GHG emissions resulting from the construction activities are summarized in Table 10. As presented in Table 10, GHG

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<sup>14</sup> OPR (Governor's Office of Planning and Research), 2008. Technical Advisory. *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.*

<sup>15</sup> SCAQMD (South Coast Air Quality Management District), 2008. *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans.*

emissions from construction activities do not exceed either the annual or amortized emissions and therefore represent a less than significant impact.

**Table 10: Project GHG Construction Emissions (tons per year)**

Calendar Year	GHG
2018	271
2019	407
2020	12
Total	690
Amortized over 30 years	23
Threshold of Significance	GHG emissions is < 10,000 MTCO <sub>2</sub> eq/yr, includes construction emissions amortized over 30 years & added to operational GHG emissions
Significant?	No

Notes: GHG greenhouse gas  
MTCO<sub>2</sub>eq/yr metric tons of carbon dioxide equivalent per year

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Less Than Significant Impact.**

GHG emissions would conflict with applicable plans, policy or regulation if the proposed project conflicts with any of the plans, policies or regulations adopted for the purpose of reducing GHG emissions in the City of Bellflower.

The current applicable GHG plan is the City of Bellflower's 2012 Climate Action Plan (CAP). The CAP is designed to help the City achieve its part of the GHG goals addressed in the California Climate Change Scoping Plan (Scoping Plan), which lays out California's strategy for meeting the GHG emission reduction goals of Assembly Bill (AB) 32. AB 32 was signed into law on September 27, 2006, and it requires the ARB to develop and implement regulations and initiatives to reduce GHG emissions to 1990 levels, or lower, by 2020.

GHG emission reduction goals are primarily based on strategies aimed at reducing both energy usage and pollution. Since the proposed project would not result in an increase of either population (which requires energy) nor emissions sources and does not require a general plan amendment, it is consistent with and will have a less than significant impact on, the implementation of the City's General Plan, the City's CAP, and the State's Climate Change Scoping Plan. Therefore, project impact is less than significant.

**VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:**

- a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials? **Less Than Significant Impact.**

A hazardous material is defined as any material that due to its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health or to the environment if released. Hazardous materials include, but are not limited to, inorganic and organic chemicals, solvents, mercury, lead, asbestos, paints, cleansers, or pesticides.

Hazardous materials may be used during the construction phase of the project. Hazardous materials that may be used include, but are not limited to, fuels (gasoline and diesel), paints and paint thinners, adhesives, surface coatings and possibly herbicides and pesticides. Generally, these materials would be used in concentrations that would not pose significant threats during the transport, use and

storage of such materials. Furthermore, it is assumed that potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, including California Occupational Safety and Health Administration (OSHA) requirements, and Title 8 and 22 of the Code of California Regulations. Accordingly, risks associated with hazards to the public or environment posed by the transport, use or disposal of hazardous materials during construction are considered less than significant with compliance with required standards and regulations.

Operation activities would include routine maintenance associated with the re-opened area of the park and proposed diversion and infiltration structures. Maintenance activities related to landscaping include the use of fertilizers and the use of light equipment (such as lawn mowers and edgers). These types of activities use small amounts of hazardous materials. Operation and or maintenance of the diversion and infiltration structures could involve the use of small quantities of potentially hazardous materials in the form of cleaning solvents, rust inhibitors, or chemicals associated with operational up-keep of the diversion system equipment. These hazardous materials are regulated by stringent federal and state laws mandating the proper transport, use, storage and disposal of hazardous materials in accordance with product labeling. The use of these substances at the project site is not considered to present a health risk when used in accordance with manufacturer specifications and with compliance to applicable regulations. Furthermore, storage of these materials at the project site when not in use is not part of the proposed action. Thus, potential impacts from the routine transport, use or disposal of hazardous materials resulting from project operations would be less than significant.

- 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? ***Less Than Significant Impact.***

It is not anticipated that the proposed project could 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. The proposed project could involve the use of some hazardous and flammable substances during the construction phase. These substances could include vehicle fuels and oils in the operation of heavy equipment for site grading and project construction. Construction vehicles onsite may require routine maintenance or repair that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials would be used in small quantities and stored in a manner that would pose a less than significant hazard to the public.

Operation activities associated with the public park and proposed diversion and infiltration systems would not involve the use of acutely hazardous materials or waste, and the limited use of any hazardous materials would be contained, stored, and used in accordance with manufactures' instructions. Due to the limited use of small quantities, the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials in to the environment. A less than significant impact would occur in this regard.



- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? **Less Than Significant Impact.**

The nearest school, Valley Christian Elementary School located at 17408 Grand Avenue, is located approximately 0.25 miles south of the project site past the 91 Freeway. Construction of the project would involve the temporary use of hazardous substances in the form of paint, adhesives, surface coatings and other mechanical equipment finishing materials, and, fuels and lubricants for heavy equipment. All materials would be used, stored, and disposed of in accordance with applicable laws and regulations and manufacturers' instructions. A less than significant impact would occur in this regard.

Operation of the proposed project would not create a significant risk of exposure to hazardous materials for the public or the environment, including schools. Types of hazardous materials to be used in association with the project include small quantities of potentially hazardous materials such as fertilizers for park landscape maintenance and cleaning solvents, rust inhibitors, and lubricants associated with up-keep of the diversion system equipment. These hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The potential for creation of a significant hazard through handling or routine transport of hazardous materials or the release of hazardous materials into the environment within a quarter-mile of an existing school is considered less than significant.

- 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 create a significant hazard to the public or environment? **No Impact.**

Government Code Section 65962.5, amended in 1992, requires CalEPA to develop and update annually the Cortese List, which is a list of hazardous waste sites and other contaminated sites. While Government Code Section 65962.5 makes reference to the preparation of a list, many changes have occurred related to web-based information access since 1992 and information regarding the Cortese List is now compiled on the websites of the Department of Toxic Substances Control (DTSC), the State Water Board, and CalEPA. The DTSC maintains the EnviroStor database, which includes sites on the Cortese List and identifies potentially hazardous sites where cleanup actions or extensive investigations are underway or complete. The database provides a listing of Federal Superfund sites (National Priorities List); State Response sites; Voluntary Cleanup sites; and School Cleanup sites. Based on a review of the EnviroStor database, the project site is not identified on any of the above lists,<sup>16</sup> or CalEPA's list of sites with active Cease and Desist Orders or Cleanup and Abatement Orders or list of contaminated solid waste disposal sites,<sup>17</sup> or the State Water Board's Geotracker Database, which provides a list of leaking underground storage tank sites that are included on the Cortese List.<sup>18</sup> Therefore, no project impact would result.

- 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

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<sup>16</sup> Department of Toxic Substances Control, EnviroStor Database at <http://www.envirostor.dtsc.ca.gov/public/>; accessed October 2017.

<sup>17</sup> CalEPA's List of Active CDO and CAO sites; online at <http://www.calepa.ca.gov/sitecleanup/corteselist/>; accessed October 2017.

<sup>18</sup> State Water Resources Control Board, <https://geotracker.waterboards.ca.gov/>; accessed October 2017.

project result in a safety hazard for people residing or working in the project area? **No Impact.**

The project site is not within an airport land use plan and it is not located within two miles of a public airport or public use airport. The nearest airport is the Long Beach Municipal Airport, located approximately 4.25 miles southwest of the project site, with the Airport Influence Area extending only to within 3.75 miles of the project site. Therefore, the proposed project would not result in an airport-related safety hazard for people residing or working in the project area and no project impact would result.

- f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? **No Impact.**

There are no private airstrips in the vicinity of the project site and the project site is not located within a designated airport hazard area. Therefore, the proposed project would not result in airport-related safety hazards for the people residing or working in the Project area and no project impact would result.

- g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? **Less Than Significant Impact.**

The project site is currently used for recreational activities and the proposed project would add water quality improvement infrastructure within the park. The proposed project includes the construction of a storm water infiltration system within Caruthers Park. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. No changes to the existing roadway network are proposed as part of the project. Therefore, the proposed project would not interfere with an emergency response or evacuation during long-term project operations.

While it is expected that the majority of construction activities for the project would be confined on-site, short-term construction activities may temporarily affect access on streets during certain periods of the day. Minor traffic control may be necessary during the trenching activities for the storm drains and discharge lines as well as for the hauling of export from the project during the excavation phase. However, through-access for drivers, including emergency personnel, along all roads would still be provided. As needed, the City would implement traffic control measures (e.g., construction flagmen, signage, etc.) to maintain flow and access consistent with Public Works requirements. Further, the times of day and locations of potential temporary lane closures would be coordinated so that they do not occur during peak periods of traffic congestion, to the extent feasible. Such events would be coordinated with neighboring construction projects, as necessary. Truck routes for material and equipment deliveries, as well as for soil export and disposal, would require prior approval by the City's Public Works Department. As such, construction is not expected to result in inadequate emergency access. Therefore, project impact would be less than significant.

- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? **Less than Significant Impact.**

The project site is located within an urbanized area. No wildlands are present within the City or the project area. Therefore, the proposed project would not

expose people or structures to a significant risk involving wildland fires and project impact would be less than significant.

**IX. HYDROLOGY AND WATER QUALITY. Would the project:**

- a. Violate any water quality standards or waste discharge requirements? ***Less Than Significant Impact.***

The project is located at Caruthers Park within the City of Bellflower. The project consists of redeveloping a portion of Caruthers Park with a regional stormwater BMP which would capture non-stormwater runoff, as well as first-flush runoff from wet weather events, from a 72-inch storm drain.

The proposed project would require site work and grading. Construction activity could result in soil erosion and loss of topsoil which could then affect water quality. Since the project is anticipated to disturb greater than one acre of land (including laydown and stockpile areas), the project must comply with the State Water Resources Control Board Order No. 2009-0009-DWQ, *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit). The Construction General Permit requires development of a Storm Water Pollution Prevention Plan (SWPPP); implementation of erosion and sediment best management practices; monitoring; and reporting. Pursuant to the Construction General Permit, prior to terminating permit coverage the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity. As such, potentially significant water quality impacts would not occur.

Projects in the City must comply with the Planning and Land Development Program requirements described in Los Angeles Regional Water Quality Control Board Order No R4-2012-0175 (as amended), *Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges Within the Coast Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4* (LA County MS4 Permit). Accordingly, redevelopment projects that result in 1) the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site; or 2) an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements; or 3) an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, must then design and implement post-construction controls to mitigate stormwater pollution. Based on the site configuration drawing presented in the *Preliminary Engineering Design Report*<sup>19</sup> the proposed project would not trigger additional post-construction controls pursuant to the requirements of the LA County MS4 Permit. Additionally, the overarching objective of the proposed project is to divert dry- and wet-weather runoff from the City of Bellflower MS4 such that there is a net improvement to both stormwater runoff and receiving water quality. Improved water quality in comparison to existing conditions would be considered a beneficial impact of the proposed project. As such, potentially significant water quality impacts from the final constructed project would not occur.

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<sup>19</sup> Tetra Tech. Caruthers Park Stormwater and Urban Runoff Capture Project Preliminary Engineering Design Report. December 5, 2017.

- b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? **Less Than Significant Impact.**

The proposed project would consist of an underground reservoir with a capacity of 7.5 acre-feet of storage. The underground reservoir would be perforated, thereby promoting infiltration of the stored dry- and wet-weather runoff into the underlying aquifer. As such, there would be a net increase in recharge rate at the site. Therefore, project impact would be less than significant.

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? **Less Than Significant Impact.**

The project site is predominantly covered with pervious surfaces comprised of open ball fields. The project site would be excavated to install the infiltrative underground reservoir. The final elevation and grade of the project site would be similar to current conditions. The project would be graded so that stormwater would either infiltrate or flow into City catch basins. The project would not substantially alter the drainage pattern of the project site or vicinity, or result in any substantial erosion or siltation. The San Gabriel River, which runs in the north-south direction through the City, would not be altered. As such, a less than significant impact would occur.

- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less Than Significant Impact.**

The project site is predominantly covered with pervious surfaces comprised of open ball fields. The project site would be excavated to install the infiltrative underground reservoir. The final elevation and grade of the project site would be similar to current conditions. The surface conditions of the project site would remain predominantly pervious, allowing for on-site infiltration. The proposed project would be graded so that stormwater would either infiltrate or flow into City catch basins. The proposed project would not substantially increase the rate or amount of runoff such that flooding would occur onsite. The San Gabriel River, which runs in the north-south direction through the City, would not be altered. As such, a less than significant impact would occur.

- e. 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? **Less Than Significant Impact.**

The proposed project consists of redeveloping a portion of Caruthers Park with a regional stormwater BMP which would capture non-stormwater runoff, as well as first-flush runoff from wet weather events, from a 72-inch storm drain and 38-inch wide stormwater channel. The final surface conditions of the project site would remain similar to existing conditions. The final site conditions would not contribute substantial additional sources of polluted runoff. Additionally, the overarching objective of the proposed project is to divert dry- and wet-weather runoff from the

City of Bellflower MS4 such that there is a net improvement to both stormwater runoff and receiving water quality. Improved water quality would be considered a beneficial impact of the proposed project. The final site conditions will be predominantly pervious and would not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. A less than significant impact would occur.

- f. Otherwise substantially degrade water quality? **Less Than Significant Impact.**

The overarching objective of the proposed project is to divert dry- and wet-weather runoff from the City of Bellflower MS4 such that there is a net improvement to both stormwater runoff and receiving water quality. This would be considered a beneficial impact of the proposed project. As discussed above, the proposed project would be required to comply with the Construction General Permit including implementation of a SWPPP that is designed to control erosion and sedimentation during and immediately after construction. Compliance with the Construction General Permit, including implementation of erosion and sediment control BMPs, will prevent substantial degradation of water quality. The final surface conditions of the project site would remain similar to existing conditions. The final site conditions will be predominantly pervious and would not contribute substantial additional sources of polluted runoff. Therefore, a less than significant impact would occur.

- g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? **No Impact.**

No housing is included as part of the proposed project. The project site is not located within a 100-year flood hazard area as mapped on Flood Insurance Rate Map Number 06037C1840F that indicates the project site is located within Zone X.<sup>20</sup> Zone X includes areas of 0.2 percent annual chance of flood; areas of one percent annual chance of flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from one percent annual chance of flood. As such, no project impact would occur in this regard.

- h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? **No Impact.**

As discussed above, the project site is not located within a 100-year flood hazard area which would impede or redirect flood flows. As such, no impact would occur in this regard.

- i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? **Less Than Significant Impact.**

As discussed above, the project site is not located within a 100-year flood hazard area. The San Gabriel River is located to the east of the project site. The San Gabriel River (Levee System ID No. 33) has met the minimum certification outlined in Title 44, Code of Federal Regulations, Section 65.10 (44 CFR 65.10) according to FEMA, and they plan to fully accredit the levee system on FIRM 06037C18404F dated September 26, 2008, as providing protection from the 1-percent annual

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<sup>20</sup> FEMA Mapping Information Platform, FEMA Flood Insurance Rate Map Number 06037C184F. FEMA <https://hazards.fema.gov>, accessed April 2018.

chance (base) flood.<sup>21</sup> The project is within the Whittier Narrows Dam inundation zone (United States Army Corps of Engineers, Los Angeles District).<sup>22</sup> The proposed project is infrastructure improvements that would not house people or otherwise increase the risk of exposure to risks related to potential flooding. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam and project impact would be less than significant.

j. Inundation by seiche, tsunami, or mudflow? ***Less Than Significant Impact.***

A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant disturbance undersea, such as a tectonic displacement of sea floor associated with large, shallow earthquakes. Mudflows occur as a result of downslope movement of soil and/or rock under the influence of gravity.

Project impacts associated with inundation by seiche, tsunami, or mudflow would be less than significant. There are no large water bodies located near the project site. The San Gabriel River is located to the east of the project site. As discussed above, the San Gabriel River (Levee System ID No. 33) has met the minimum certification outlined in Title 44, Code of Federal Regulations, Section 65.10 (44 CFR 65.10) according to FEMA. Based on the review of the Los Alamitos Quadrangle/Seal Beach Quadrangle, Tsunami Inundation Map for Emergency Planning issued March 1, 2009 by the California Geological Survey, the project site is not located within an area that is mapped as tsunami inundation area. The nearest mapped tsunami inundation area is about 5.8 miles to the south of the site. Therefore, a tsunami is not considered to be a potential seismic hazard to the site. The potential for mudflows to affect the proposed uses would be less than significant given the relatively flat topography and amount of intervening development.

X. **LAND USE AND PLANNING. Would the project:**

a. Physically divide an established community? ***No Impact.***

The proposed project would not physically divide an established community. The project site is located at Caruthers Park, an approximately 14.1-acre parcel owned by City of Bellflower. The park is adjacent to residential uses to the north and west, the Lower San Gabriel River to the east, and the Artesia (CA-91) freeway to the south. Access to the park is provided by existing City streets including Ripon Avenue and Flora Vista Street. The site is currently used as a public park and would continue to do so with implementation of the proposed project. Implementation of the proposed project would result in primarily subsurface improvements to the City's stormwater system and would not make any changes to existing city streets. Therefore, the proposed project would not divide an established community and no project impact would result.

b. Conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to the general plan, specific

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<sup>21</sup> FEMA. Letter to Mr. Knabe dated April 29, 2014.

<sup>22</sup> United States Army. Corps of Engineers. Whittier Narrows Dam Emergency Plan: Inundation Maps. 1985.

plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? **No Impact.**

The City's General Plan land use designation for the project site is Open Space. The Open Space category includes public or privately owned properties to be retained for open spaces purposes including public parks, utility easements, and transportation corridors. The proposed project would be consistent with these allowed uses and would not conflict with the Open Space General Plan land use designation.

The project site is zoned for Open Space (O-S). Land in the O-S Zone may be utilized for the following:

- G. Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life; areas required for ecologic and other scientific study purposes; rivers, banks of rivers and streams and watershed land.
- H. Open space for the managed production of resources, including, but not limited to agricultural lands and areas of economic importance for the production of food or fiber; areas required for the recharge of ground water basins.
- I. Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.
- J. Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic and cultural value, areas particularly suited for park and recreation purposes, including access to rivers and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- K. The keeping of horses in accordance with all requirements of Municipal Code Section 17.20.030.B.; provided, that the property where the horses are kept is immediately adjacent to real property owned or rented and occupied by the owner of the horses.
- L. Wireless communication facilities, excluding ground mounted antennas.

Open space for outdoor recreation and open space for public health and safety including areas required for the protection of water quality are permitted uses within the O-S zone.<sup>23</sup> The project site is currently developed and utilized as a public park and would continue to be used as a public park with implementation of the proposed project. Therefore, the proposed project would not conflict with existing zoning and no project impact would occur.

- c. Conflict with any applicable habitat conservation plan or natural community conservation plan? **No Impact.**

The City of Bellflower is not regulated by a Habitat Conservation Plan.<sup>24</sup> Additionally the project site is not located within any other approved local, regional,

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<sup>23</sup> City of Bellflower. Bellflower Municipal Code Section 17.64.020. Accessed April 2018, URL: [http://qcode.us/codes/bellflower/view.php?topic=17-17\\_64-17\\_64\\_020&frames=off](http://qcode.us/codes/bellflower/view.php?topic=17-17_64-17_64_020&frames=off)

<sup>24</sup> CDFW Conservation Plans, <https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans>. Accessed February 1, 2018.

or state habitat conservation plan. The project site is located within a developed urban area and is maintained as a public park. Therefore, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan and no impact would occur.

**XI. MINERAL RESOURCES. Would the project:**

- 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? **No Impact.**

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that all cities address significant mineral resources, classified by the State Geologist and designated by the State Mining and Geology Board, in their General Plans.

The City of Bellflower is urban and almost completely developed. This includes the project site, that is currently developed and utilized as a public park. The City's General Plan Conservation Element does not identify any known mineral resource areas.<sup>25</sup> Therefore, no project impact would result.

- 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? **No Impact.**

As noted above, the City's General Plan Conservation Element does not identify any known mineral resource areas. According to the Conservation Element Background Technical Report, all traditional energy sources consumed by land uses of the City are imported. There are no wells producing oil or natural gas or coal deposits.<sup>26</sup> Furthermore, the project site is an existing City park and no mineral resource recovery sites would be affected. Therefore, no project impact would result.

**XII. NOISE. Would the project result in:**

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Less Than Significant.**

Noise is defined as unwanted sound; however, not all unwanted sound rises to the level of a potentially significant noise impact. To differentiate unwanted sound from potentially significant noise impacts, the City has established noise regulations that take into account noise-sensitive land uses. The following analysis evaluates potential noise impacts at nearby noise-sensitive land uses resulting from construction and operation of the proposed project. As discussed below, the project is expected to have a less than significant impact on preexisting noise conditions with implementation of the prescribed mitigation measures and would not violate any codes or ordinances.

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<sup>25</sup> City of Bellflower. General Plan Conservation Element, December 1994. Accessed April 2018, URL: <https://www.bellflower.org/civicax/filebank/blobdload.aspx?BlobID=28093>

<sup>26</sup> City of Bellflower. Background Technical Report, December 1994. Accessed April 2018, URL: <https://www.bellflower.org/civicax/filebank/blobdload.aspx?BlobID=28093>.



## Noise Principles and Descriptors

Audible sound is a physical disturbance in a medium, such as air, that is capable of being detected by the human ear. Sound waves in air are caused by variations in pressure above and below the static value of atmospheric pressure. Sound is measured in units of decibels (dB) on a logarithmic scale. The “pitch” (high or low) of the sound is a description of frequency, which is measured in Hertz (Hz). Most common environmental sounds are composed of a composite of frequencies.<sup>27</sup>

Sound from a source spreads out as it travels away from the source, and the sound pressure level diminishes with distance in accordance with the “inverse square law.” Individual sound sources are considered “point sources” when the distance from the source is large compared to the size of the source. An example of a point source could be construction equipment or stationary machinery. Sound from a point source radiates in a hemispherical manner, which yields a 6 dB sound level reduction for each doubling of the distance from the source. In contrast, a line source is a source of noise that emanates from a linear (one-dimensional) geometry. An example of a line source could be a roadway or railroad. Sound from a line source radiates cylindrically, which typically yields a 3 dB sound level reduction for each doubling of the distance from the source. In addition to distance attenuation, the air absorbs sound energy converting it to heat. Atmospheric effects (e.g., wind, temperature, humidity) and terrain/vegetation also influence sound propagation and attenuation over large distances from the source.<sup>28</sup>

An individual’s noise exposure is a measure of noise over a period of time, whereas a noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual. These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts.<sup>29</sup>

The time-varying characteristic of environmental noise over specified periods of time is described using statistical noise descriptors in terms of a single numerical value, expressed as dBA. The most frequently used noise descriptors are summarized below:<sup>30</sup>

- L<sub>eq</sub>:** The L<sub>eq</sub>, or equivalent sound level, is used to describe the noise level over a specified period of time, typically 1-hour, i.e., L<sub>eq(1)</sub>, expressed as L<sub>eq</sub>. The L<sub>eq</sub> may also be referred to as the “average” sound level.
- L<sub>max</sub>:** The maximum, instantaneous noise level.
- L<sub>min</sub>:** The minimum, instantaneous noise level.

<sup>27</sup> Harris, C.M, Handbook of Acoustical Measurements and Noise Control, September 1998.

<sup>28</sup> Harris, C.M, Handbook of Acoustical Measurements and Noise Control, September 1998.

<sup>29</sup> California Department of Transportation, Technical Noise Supplement, Section 2.2.2.1, September 2013.

<sup>30</sup> Harris, C.M, Handbook of Acoustical Measurements and Noise Control, September 1998

- L<sub>x</sub>:** The noise level exceeded for specified percentage (x) over a specified time period; i.e., L<sub>50</sub> and L<sub>90</sub> represent the noise levels that are exceeded 50 and 90 percent of the time specified, respectively.
- L<sub>dn</sub>:** The L<sub>dn</sub> is the average noise level over a 24-hour day, including an addition of 10 dBA to the measured hourly noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account nighttime noise sensitivity. L<sub>dn</sub> is also termed the day-night average noise level or DNL.

**CNEL:** Community Noise Equivalent Level (CNEL), is the average noise level over a 24-hour day that includes an addition of 5 dBA to the measured hourly noise levels between the evening hours of 7:00 p.m. to 10:00 p.m. and an addition of 10 dBA to the measured hourly noise levels between the nighttime hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity during the evening and nighttime hours, respectively.

**City of Bellflower Municipal Code**

The City of Bellflower’s Municipal Code Chapter 8.32 Noise provides a nuisance clause, but does not specify noise threshold limits for noise sensitive land uses that would apply for this project.

Construction hours of operation are regulated under Building Code of the City of Bellflower Section 118. No construction activities may commence within the City of Bellflower except as set forth in Table 11 or as otherwise approved by the Building Official:

**Table 11: Construction Hours of Operations**

Day(s)	Start Time	End Time
Monday through Friday	7:00 a.m.	6:00 p.m.
Saturdays	8:00 a.m.	6:00 p.m.
Sundays and City Holidays	Not Permitted	Not Permitted

Construction includes, without limitation, site preparation, demolition, grading, excavation, and the erection, improvement, remodeling, or repair of buildings or structures, including operation of equipment or machinery and the delivery of material associated with those activities, irrespective of whether a building permit is required for the construction.

**City of Bellflower Noise Element to the General Plan (1994)**

In addition to the previously described provisions of the City’s Municipal Code, the City has also established noise guidelines in the Noise Element to the General Plan that are used for planning purposes. These guidelines are based in part on the community noise compatibility guidelines established by the California State Governor’s Office of Planning and Research and are intended for use in assessing the compatibility of various land use types with a range of noise levels.<sup>31</sup> Table 12, *Guidelines for Noise Compatible Land Uses*, provides the guidelines of land use compatibility for community noise sources. The CNEL noise levels for specific land uses are classified into four categories: (1) “normally acceptable” (2) “conditionally acceptable” (3) “normally unacceptable” and (4) “clearly unacceptable.” A CNEL value of 70 dBA is considered the dividing line between a “conditionally acceptable” and “normally unacceptable” noise environment for noise sensitive land uses, including residences, transient lodgings, schools, and library.

<sup>31</sup> State of California, General Plan Guidelines, Governor’s Office of Planning and Research, 2003.

The following policies that are applicable to the project address Citywide noise issues:<sup>32</sup>

- Policy 1.4: Limit construction activities which impact adjacent residential uses to the hours of 7 a.m. to 8 p.m. during weekdays and Saturdays.
- Policy 1.5: Require construction activities to incorporate feasible and practical techniques which minimize noise impacts on adjacent areas.
- Policy 1.7: Ensure the outdoor noise limits for residential uses do not exceed 60 dBA CNEL for single family uses and 65 dB L<sub>dn</sub> for multiple family uses.
- Policy 1.8: Ensure the indoor noise limits for all residential uses do not exceed 45 dB CNEL.
- Policy 1.9: Actively pursue sound wall mitigation measures with California Department of Transportation (Caltrans) and the Metropolitan Transit Authority (MTA).

**Table 12: Guidelines for Noise Compatible Land Uses**

Land Use Categories	Day-Night Average Exterior Sound Level (CNEL, dB)						
	50	55	60	65	70	75	80
Residential Single-Family, Duplex, Mobile Homes	A	A	A/C	C	N	U	U
Residential Multi-Family	A	A	A/C	C	N	U	U
Transient Lodging, Hotel, Motel	A	A	A/C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	A/C	A/C	C/N	N	U
Auditorium, Concert Hall, Amphitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/N	U	U
Playground, Neighborhood Park	A	A	A	A	A/U	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	A/N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A	A/C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

Notes:

Based on the Governor's Office of Planning and Research, "General Plan Guidelines", 1990. To help guide determination of appropriate land use and mitigation measures vis-a-vis existing or anticipated ambient noise levels.

A = Normally Acceptable: Specified land use is satisfactory, based upon the assumption buildings involved are conventional construction without any special noise insulation.

C = Conditionally Acceptable: New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning would suffice.

N – Normally Unacceptable: New construction or development generally should be discouraged. A detailed analysis of the noise reduction requirements must be made and noise insulation features included in the design of a project.

U – Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: City of Bellflower General Plan, Noise Element, 1994.

### Existing Conditions

The existing noise environment with the vicinity of Caruthers Park consists of vehicle noise from the Artesia Freeway and from local street traffic from Flora Vista Street, Woodruff Avenue, and Alondra Boulevard. There is a railroad track and adjacent bike path located directly south of Caruthers Park. Adjacent land uses include single family residential developments located approximately 110 feet west across Ripon Avenue and 100 feet across Flora Vista Street. The San Gabriel River Channel is located directly east of the park. No ambient noise monitoring

<sup>32</sup> City of Bellflower, Noise Element to the General Plan, 1994.

data have been identified for the project vicinity, but existing land use patterns and street patterns as well as the existing noise contours published in the City of Bellflower's Noise Element indicate that the existing ambient noise levels at the proposed project site should be at or below 65 dBA CNEL.

### Thresholds of Significance

The City's Municipal Code and Noise Element regulates exterior noise levels. Therefore, the proposed project would result in a significant noise impact if:

- Project construction activities occur between outside allowed construction hours of operation identified within the City's Municipal Code;
- Project operational noise sources exceed 60 dBA CNEL for single family uses and 65 dB  $L_{dn}$  for multiple family uses.

With respect to the community noise assessment for construction and operational noise levels, changes in noise levels of less than 3 dBA are generally not discernable to most people, while changes greater than 5 dBA are readily noticeable and would be considered a significant increase. Therefore, the significance threshold for mobile source noise is based on human perceptibility to changes in noise levels (increases) with consideration of existing ambient noise conditions and City's guidelines for noise compatible land use in Table 12.

### Construction Noise

The City of Bellflower's Municipal Code exempts construction equipment operating between the daytime hours of 7:00 a.m. to 6:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on Saturdays. The construction of the proposed project would be conducted during weekdays between the hours of 7:00 a.m. to 6:00 p.m. in compliance with Building Code Section 118 requirements. No nighttime or work on Saturdays is anticipated. No construction work on Sundays or City holidays would occur. Therefore, the noise impacts generated by the construction of the proposed project would comply with the City of Bellflower's policies and is, therefore, considered to be a less than significant impact.

### Operational Noise

The City of Bellflower's Municipal Code Chapter 8.32 Noise provides a nuisance clause, but does not specify noise threshold limits for noise sensitive land uses. The City of Bellflower's Noise Element to the General Plan does provide policies to ensure outdoor noise levels limits for residential use does not exceed 60 dBA CNEL for single family uses and 65 dBA  $L_{dn}$  for multiple family uses. The proposed project is proposing a pump station that includes a 20 feet deep wet well with three pumps. Two of the pumps would be rated at 19 horsepower (hp) and one pump will be rated at 16 hp. Given the size of the pumps and that they would be enclosed within the pump house at a depth of 20 feet, the noise levels generated from the proposed project would comply with the City of Bellflower's Municipal Code and the City of Bellflower's Noise Element to the General Plan. Therefore, these noise levels are considered to be less than significant.

- b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? **Less Than Significant.**

Operation of the proposed project facilities would not generate vibration; however, construction of the underground storage facilities and pump house as well as the site grading would require the use of equipment that could generate vibration. Possible sources of vibration may include bulldozers, dump trucks, backhoes,

rollers, and other construction equipment that produces vibration. No blasting would be required at the project site.

Project construction activities would occur within approximately 100 feet from single family residences. According to the Federal Transit Administration (FTA) guidelines, a vibration level of 65 VdB is the threshold of perceptibility for humans.<sup>33</sup> For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (Federal Transit Administration 2006). Based on the levels published by the FTA and the type of equipment proposed for use at the proposed project, coupled with the distance to the existing identified noise sensitive receptors, analysis shows that all identified sensitive receptors would be below the maximum vibration level of 80 VdB. This vibration level is considered acceptable for impacts to residential homes and is, therefore, considered to be a less than significant impact.

There is an historical building (the Carpenter House, state primary number P-19-186531) located approximately 20 feet from the projects northwestern boundary line. For buildings extremely susceptible to vibration damage, such as historical buildings, the FTA has established a threshold level of 0.12 Peak-Partial-Velocity (PPV) inches per second (in/sec)<sup>32</sup>. At a distance of 20 feet the project would generate a vibration level of 0.09 PPV in/sec from earthmoving equipment. These levels are the FTA threshold and it is not anticipated that the construction operations will generate vibration levels that will cause structural damage since no blasting or pile driving will be required. Therefore, these impacts are considered to be less than significant.

- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? **Less Than Significant.**

The dominant noise sources in the vicinity of the project site is traffic noise associated with the Artesia Freeway, I-605, Alondra Boulevard, Woodruff Avenue, and Flora Vista Street. Based on existing traffic volumes, noise impacts to adjacent residences range from 64 dBA CNEL to 67 dBA CNEL. The operation of the proposed project would generate periodical maintenance that would result in a minimal increase in traffic noise levels resulting in an overall increase of less than one dBA. An increase in the ambient noise levels of three dBA is considered significant. Since the proposed project is shown to only increase the overall ambient community noise level by less than one dBA, it is considered to be a less than significant impact.

The proposed project is proposing a pump station that includes a 20 feet deep wet well with three pumps. Two of the pumps will be 19 horsepower (hp) and one pump will be 16 hp. Given size of the pumps and that they will be enclosed within the pump house at a depth of 20 feet the noise levels generated from the proposed project will be well below the existing traffic noise and will result in a less than one dBA increase to the existing noise level. Since the proposed project is shown to only increase the overall ambient community noise level by less than one dBA, it is considered to be a less than significant impact.

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? **Less Than Significant Impact With Mitigation Incorporated.**

Construction of the Caruthers Park storm water capture facility site is planned to start in August of 2018 and last approximately 21 months. Project construction activities are anticipated to occur in phases and include site clearing and pavement

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<sup>33</sup> Federal Transit Authority, Noise and Vibration Manual, 2006.

removal, excavation and grading, utility installation, and backfill and fine grading. These construction activities would require a variety of equipment. Typical construction equipment would not be expected to generate noise levels above 90 dBA at 50 feet, and most equipment types would typically generate noise levels of less than 85 dBA at 50 feet.

The highest noise levels during construction are normally generated during the use of earth moving equipment or pavement removal. The site clearing, pavement removal, and excavation would incorporate the loudest equipment used at the site. This equipment is expected to generate a maximum instantaneous noise level ( $L_{max}$ ) ranging from 73 to 83 dBA at single family homes located at a distance of 110 feet. The utility installation, backfill, and fine grading construction would result in noise levels ranging from 73 to 78 dBA  $L_{max}$  at a distance of 110 feet. The noise levels from the construction would be loud enough to temporarily interfere with speech communication outdoors and indoors with the windows open. Project construction would occur between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday as well as implement standard noise reduction measures. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction, and the implementation of Mitigation Measure NOISE-1, the temporary increase in noise due to construction is considered to be a less than significant impact with mitigation incorporated.

The construction of the proposed project would generate maximum number of trips during Phase 3 with 197 daily trips. The construction route is expected to enter the site from the I-605, west bound on Alondra Boulevard, south on Woodruff Avenue, and east on Flora Vista Street. Noise level increases as a result of project traffic near residential developments would result in a less than 2 dBA increase along Flora Vista Street. Noise levels along Woodruff Avenue and Alondra Boulevard at residential developments would result in no change in noise levels as a result of the project construction traffic. Therefore, noise impacts from the project construction traffic would result in a less than significant impact.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project area to excessive noise levels? **No Impact.**

Maps and aerial photos for the project region show no public airport or public use airport located within 2 miles of the project site. Therefore, no project impact would result.

- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? **No Impact.**

Maps and aerial photos for the project region show no private airstrips located within 2 miles of the project site. Therefore, no project impact would result.

#### **Mitigation Measure:**

The following mitigation measure shall be implemented:

**NOISE-1:** Construction noise levels shall fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and sensitive receptor, and the presence or absence of barriers between noise source and receptors. Therefore, the project applicant should require construction contractors to limit standard construction activities as follows:

- Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment

redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).

- Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible.
- If needed impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.
- Electrically-powered equipment will be used instead of pneumatic or internal combustion powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas will be located as far as practicable from noise-sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.

### XIII. POPULATION AND HOUSING. Would the project:

- 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)? **Less Than Significant Impact.**

The proposed project would make improvements to the City's stormwater system. The project site is an existing city park and would continue operating as a public park with implementation of the proposed project. The construction of the proposed project would require construction workers. However, due to the relatively small size of the project and short duration of project construction activities, the proposed project would not induce employees to move to the project vicinity and induce population growth or the need for housing. During long-term project operations, workers would be needed for routine maintenance activities. However, the proposed project would not generate a substantial number of new jobs. Therefore, project impact would be less than significant.

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? **No Impact.**

The project site is an existing city park that contains no housing units. Since no existing housing would be removed, there would be no need for the construction of replacement housing elsewhere. Therefore, no project impact would result.

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? **No Impact.**

The project site is an existing city park that contains no housing units. No people would not be displaced as a result of the proposed project since no existing housing units would be removed. Therefore, no project impact would result.

### XIV. PUBLIC SERVICES.

- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection? ***Less Than Significant Impact.***

Fire protection services for the City, including the project site are provided by the Los Angeles County Fire Department (LACFD). The LACFD has two stations located within the City: Station 23, located at 9548 East Flower Street, approximately 1.2 miles west of the project site; and Station 98, located at 9814 Maplewood Avenue, approximately 2.1 miles northwest of the project site. The proposed project is located within the existing Caruthers Park and includes the construction and operation of a storm water infiltration system. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. Since these infrastructure improvements would primarily be underground and the proposed project would not result in an increase use of park facilities, project impact on fire protection services would be less than significant.

ii. Police Protection? ***Less Than Significant Impact.***

Police protection services for the City, including the project site, are provided by the Los Angeles County Sheriff's Department (LASD). The City of Bellflower Sheriff's Substation is located at 16615 Bellflower Boulevard approximately one mile northwest of the project site. The proposed project is located within the existing Caruthers Park and includes the construction and operation of a storm water infiltration system. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. Since these infrastructure improvements would primarily be underground, and the proposed project would not result in an increase use of park facilities or induce population growth into the area through the generation of a substantial number of new jobs, project impact on police protection services would be less than significant.

iii. Schools? ***Less Than Significant Impact.***

Demand for educational services is typically linked to an increase in population growth in the area through the development of new housing units or the generation of new jobs. The proposed project includes water quality improvement facilities that would not increase housing or induce population growth through the generation of a substantial number of new jobs that could in turn increase the need for schools. Therefore, project impact is less than significant.

iv. Parks? ***Less Than Significant Impact.***

Demand for park and recreational services is typically linked to an increase in population growth in the area through the development of new housing units or the generation of new jobs. The water quality improvement facilities do not increase housing stock and do not result in the movement or relocation of people. Therefore, project long-term operational impact is less than significant.



During construction, some park users may elect to use other parks. The proposed project is located within the existing Caruthers Park and would remove and replace the existing playground area and some picnic tables. Construction is anticipated to occur from approximately August 2018 through April 2020 and would result in the temporary disruption of park activities within the construction zone. Since park facilities would resume after construction and construction activities would be short term and temporary, project impact from construction activities would be less than significant.

v. Other Public Facilities? ***Less Than Significant Impact.***

The proposed project includes water quality improvement facilities that are infrastructure improvements that would not increase housing or induce population growth through the generation of substantial number of new jobs that could in turn increase the need for new public facilities. Therefore, project impact is less than significant.

## **XV. RECREATION.**

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.***

Demand for park and recreational services are typically linked to an increase in population growth in the area through the development of new housing units or the generation of new jobs. The water quality improvement facilities do not increase housing stock and do not result in the movement or relocation of people. Therefore, project long-term operational impact is less than significant.

During construction, some park users may elect to use other parks. The proposed project is located within the existing Caruthers Park and would remove and replace the existing playground area and some picnic tables. Construction is anticipated to occur from approximately August 2018 through April 2020 and would result in the temporary disruption of park activities within the construction zone. Since park facilities would resume after construction and construction activities would be short term and temporary, project impact from construction activities would 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? ***Less Than Significant Impact.***

The proposed project is located within the existing Caruthers Park and would temporarily remove and replace the existing playground area and some picnic tables. The playground area will resume operation after construction is complete. Construction is anticipated to take approximately 21 months and would result in the temporary disruption of park activities within the construction zone. Park activities would resume after construction. No expansion of recreational facilities is proposed as part of the proposed project. Therefore, project impact is less than significant.

## **XVI. TRANSPORTATION/TRAFFIC. Would the project:**

The following discussions are based on the findings and conclusions of the focused traffic analysis prepared by Kunzman Associates, Inc. for the proposed project. A copy is included as Appendix F of this IS/MND.

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? ***Less Than Significant.***

The project site is the Ruth R. Caruthers Park, a 14.1 acre parcel owned by the City of Bellflower located adjacent to the Lower San Gabriel River and north of the SR-91 Freeway. Access for the on-site parking lot is provided at the eastern terminus of Flora Vista Street.

### Roadway Facilities

Primary access roadways in the vicinity of the project site include Woodruff Avenue, California Avenue, Grand Avenue, Chicago Avenue, View Park Avenue, Flora Vista Street, and Ripon Avenue. These are primarily two-lane undivided local roads, with the exception of Woodruff Avenue, which is a four-lane undivided roadway classified as a Secondary Arterial in the City of Bellflower General Plan Circulation Element. Intersections in the project vicinity are either un-signed or stop-controlled, with the exception of Woodruff Avenue at Flora Vista Street, which is traffic signal-controlled.

### Local Truck Routes

The City of Bellflower Municipal Code, Section 10.20.010, identifies the following streets as designated truck routes:

- Alondra Boulevard from Hayter Avenue to the east side of the San Gabriel River (east City boundary).
- Artesia Place from Woodruff Avenue to Bixby Avenue.
- Artesia Boulevard from Downey Avenue (west City boundary) to the west side of the San Gabriel River (east City boundary).
- Bellflower Boulevard from one hundred fifty (150) feet south of Rose Street (south City boundary) to Flower Street.
- Bellflower Boulevard from Alondra Boulevard to Foster Road.
- Clark Avenue from Artesia Boulevard to Rosecrans Avenue.
- Somerset Boulevard from Lakewood Boulevard to Woodruff Avenue.
- Downey Avenue from Artesia Boulevard to four hundred fifty (450) feet north of Park Street (north City boundary).
- Flora Vista Street from Woodruff Avenue to Bellflower Boulevard and on Cornuta Avenue from Flora Vista Street (East of Cornuta) to Flora Vista Street (West of Cornuta). Also that no truck parking at any time will be permitted on these streets included above.
- Flower Street from Lakewood Boulevard to Woodruff Avenue.
- Rosecrans Avenue from Lakewood Boulevard to the east side of the San Gabriel River (east City boundary).
- Woodruff Avenue from one hundred fifty (150) feet south of Rose Street (south City boundary) to Foster Road.

### Project Construction Trip Generation

The proposed project will be constructed in four (4) general phases:

Phase I: Mobilization, clearing & grubbing, and concrete removal (45 calendar days)

- Approximately 10 employees are anticipated for Phase I. Approximately 2,500 CY of clearing and grubbing debris will be exported from the site at a rate of approximately 300 CY per day.

Phase II: Excavation, trenching, and rough grading (109 calendar days)

- Approximately 28 employees are anticipated for Phase II. Approximately 25,500 CY of soil will be exported from the site at a rate of approximately 750 CY per day.

Phase III: Subgrade, utility installation, treatment building, and playground (183 calendar days)

- Approximately 37 employees are anticipated for Phase III. Approximately 9,000 CY of concrete aggregate material will be delivered to the site at a rate of approximately 600 CY per day. Additionally, 825 empty storage units will be delivered to the site at a rate of approximately 40 units per day. They will be used to temporarily store stormwater runoff.

Phase IV: Backfill, fine grading, paving, landscaping, and electrical (272 calendar days)

- Approximately 7 employees are anticipated for Phase IV. No materials will be imported/exported from the site.

Each phase is expected to generate a different number trips depending on the activities involved. Grading will affect approximately 3.1 acres. One water truck will be used for dust control. A total of 83 personnel are expected throughout the entire construction period based on the construction equipment needed and anticipated operation schedule.

Traffic Table 13 shows the trip generation forecast for each phase of construction. As shown in Table 13, the maximum trips generated by construction of the proposed project are forecast to occur during Phase III, with 197 daily trips (two-way), including 37 employee trips during the morning and evening commuter peak hours.

**Table 13: Project-Generated Trips During Construction**

Description	Phase 1	Phase 2	Phase 3	Phase 4
	Mobilization/Clearing & Grubbing/Concrete Removal	Excavation/Trenching/ Rough Grading	Subgrade/Utility Installation/Treatment Building/ Playground	Backfill/Fine Grading/Paving/ Landscaping/Electrical
Duration (Calendar Days)	45	109	183	272
<u>Construction Crew</u>				
Employees	10	28	37	7
Personal Vehicle Trips Per Day <sup>1</sup>	20	56	74	14
<u>Soil Export &amp; Material Delivery</u>				
Export Debris/Soil (Cubic Yards)	2,500	25,500	0	0
Import Aggregate Material (Cubic Yards)	0	0	9,000	0
Total Import/Export Per Day (Cubic Yards)	300	750	600	0
Truck Trips Per Day <sup>2</sup>	22	54	43	0
<u>Storage Unit Delivery</u>				
Storage Units Delivered Per Day	0	0	40	0
Truck Trips Per Day <sup>2</sup>	0	0	80	0
Total Daily Trips <sup>3</sup>	42	110	197	14
AM/PM Commuter Peak Hour Trips <sup>4</sup>	10	28	37	7

Notes: 1 Based on number of employees needed to operate equipment (see Appendix C). Assumes each employee arrives in a separate vehicle.

2 Based on an average dump truck capacity of 14 cubic yards.

3 Based on daily trips that will occur regularly during each phase (i.e., equipment delivery trips are excluded since these would not occur on a daily basis).

4 Based on each employee entering during the morning peak hour and exiting during the evening peak hour. Assumes hauling to occur during off-peak hours.

Employee trips were derived based on the number of employees needed to operate the construction equipment in accordance with the construction equipment breakdown contained Appendix C of the focused traffic analysis (Appendix F). Each employee is assumed to arrive in a separate vehicle and generate one inbound trip during the morning peak hour of commuter traffic and one outbound trip during the evening peak hour of commuter traffic.

Removal of clearing/grubbing debris during Phase I is estimated to generate approximately 22 daily truck trips based on an average dump truck capacity of 14CY. Soil export hauling during Phase II is estimated to generate approximately 54 daily truck trips. Delivery of concrete aggregate material during Phase III is estimated to generate approximately 43 daily truck trips. Each storage unit delivery during Phase III is estimated to generate one inbound trip and one outbound trip.

It should be noted, the construction trip generation shown in Table 13 is based on trips that are expected to occur regularly during each phase. In other words, trips associated with equipment delivery are excluded since these trips would not occur on a daily basis. After project construction is complete, trips generated by the proposed storm water infiltration system are not expected to occur on a daily basis and are considered nominal.

#### Construction Trip Distribution and Haul Routes

Employee trips and trips associated with other non-haul trucks will have a variety of origins and destinations throughout the region, and thus will use a variety of regional roadways to access the site. Ultimately, all construction-related vehicles are proposed to access the project site via Flora Vista Way at Woodruff Avenue. The hauling destination is located approximately 12 miles southeast of the project site at CR&R Waste and Recycling Services in the City of Stanton, California.

#### Impact Analysis

Project construction trips would be short term and temporary. The maximum trips generated by construction of the proposed project are forecast to occur during Phase III, with 197 daily trips (two-way), including 37 employee trips during the morning and evening commuter peak hours. To the extent possible, it is recommended that hauling operations be scheduled to occur during off-peak hours of the surrounding roadway system (i.e., avoid 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM). After project construction is complete, trips generated by the long-term project operation of the proposed project are not expected to occur on a daily basis and are considered nominal. Therefore, project impact is less than significant.

- b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?  
***Less Than Significant Impact.***

The identification of the study area, including intersections and highway segments requiring analysis, are typically based on an estimate of the two-way project trip contribution. In accordance with the 2010 Los Angeles County Congestion Management Program, the following criteria are used to determine if a Congestion Management Program monitored facility requires analysis for potential project-related transportation impacts:

- All Congestion Management Program (CMP) arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips

during either the morning or evening weekday peak hours (of adjacent street traffic);

- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions);
- Mainline freeway monitoring locations where the project will 150 or more trips, in either direction, during either the morning or evening weekday peak hours.

Many jurisdictions throughout Los Angeles County have adopted similar thresholds for identifying local intersections and roadway segments for further analysis. These requirements are not forecast to be satisfied by the proposed Caruthers Park Storm Water and Urban Runoff Capture Project.

Trips generated during construction of the proposed project are not forecasted to exceed the thresholds requiring further analysis of roadway facilities as established by the Los Angeles County Congestion Management Program (CMP). Therefore, no further CMP analysis is required. As noted above, after project construction is complete, trips generated by the long-term project operation of the proposed project are not expected to occur on a daily basis and are considered nominal. The maximum trips generated by construction of the proposed project are forecast to occur during Phase III, with 197 daily trips (two-way), including 37 employee trips during the morning and evening commuter peak hours. Trips generated during construction of the proposed project are not forecast to satisfy the thresholds requiring further analysis of roadway facilities as established by the Los Angeles County Congestion Management Program. Therefore, project impact would be less than significant.

- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? **Less Than Significant Impact.**

The project site is not located within close proximity to an airport. The nearest airport is the Long Beach Airport, located approximately six miles south of the project site. The proposed project would not introduce structures substantial enough to interfere with existing flight paths, or result in a measurable increase in airport traffic that would result in substantial safety risks. The proposed project includes improvements to the stormwater system that would primarily be located below ground. Therefore, project impact would be less than significant.

- d. Substantially increase hazards due to a design feature (i.e., sharp curves or dangerous intersections) or incompatible uses (i.e., farm equipment)? **No Impact.**

The proposed project includes improvements to the stormwater system that would primarily be located below ground. No changes to existing roadways are proposed as part of the project. Therefore, no project impact would result from a design feature or incompatible use impacting traffic.

- e. Result in inadequate emergency access? **Less Than Significant Impact.**

The project site is currently used for recreational activities and the proposed project would add water quality improvement infrastructure within the park. The proposed project includes the construction of a storm water infiltration system within Caruthers Park. With the exception of the small building housing the pumps designed to support the park's landscape irrigation, all the storm water infiltration system components (e.g., vaults and pipe system) would be installed underground. No changes to the existing roadway network are proposed as part of the project.

Therefore, the proposed project would not result in inadequate emergency access during long-term project operations.

While it is expected that the majority of construction activities for the project would be confined on-site, short-term construction activities may temporarily affect access on streets during certain periods of the day. Minor traffic control may be necessary during the trenching activities for the storm drains and discharge lines as well as for the hauling of export from the project during the excavation phase. However, through-access for drivers, including emergency personnel, along all roads would still be provided. As needed, the project would implement traffic control measures (e.g., construction flagmen, signage, etc.) to maintain flow and access consistent with what is typically done for a public works project. Further, the times of day and locations of potential temporary lane closures would be coordinated so that they do not occur during peak periods of traffic congestion, to the extent feasible. Such events would be coordinated with neighboring construction projects, as necessary. Truck routes for material and equipment deliveries, as well as for soil export and disposal, would require prior approval by the City's Public Works Department. As such, construction is not expected to result in inadequate emergency access. Therefore, project impact would be less than significant.

- f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? ***Less Than Significant Impact.***

Existing transit facilities in the project vicinity includes Long Beach Transit Bus Route 92 runs along Woodruff Avenue. Long Beach Transit Bus Route 92 runs on Monday through Friday only and key service points include several high schools, California State University at Long Beach, and the Metro Blue Line Station at Downtown Long Beach. There is a multi-use bike trail (Class I) adjacent to Flora Vista Street from Woodruff Avenue to California Avenue that continues in its diagonal alignment to Ripon Avenue. A Class III bike route along Ripon Avenue and Flora Vista Street connects the multi-use trail to the San Gabriel River Trail at the eastern terminus of Flora Vista Street. The proposed project would make improvements to the stormwater system and no changes to roadways, bus routes, bicycle, or pedestrian facilities are proposed. Therefore, project impact would be less than significant.

## **XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:**

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? ***Less Than Significant Impact.***

The proposed project is an infrastructure project designed to improve water quality. The proposed project would require site work and grading. Construction activity could result in soil erosion and loss of topsoil which could then affect water quality. Since the project is anticipated to disturb greater than one acre of land (including laydown and stockpile areas), the project must comply with the State Water Resources Control Board Order No. 2009-0009-DWQ, *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit). The Construction General Permit requires development of a SWPPP; implementation of erosion and sediment BMPs; monitoring; and reporting. Pursuant to the Construction General Permit, prior to terminating permit coverage the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity.

Projects in the City must comply with the Planning and Land Development Program requirements described in Los Angeles Regional Water Quality Control

Board Order No R4-2012-0175 (as amended), *Waste Discharge Requirements for Municipal Separate Storm Sewer System Discharges Within the Coast Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4* (LA County MS4 Permit). Accordingly, redevelopment projects that result in 1) the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site; or 2) an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements; or 3) an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction stormwater quality control requirements, must then design and implement post-construction controls to mitigate stormwater pollution. Based on the site configuration drawing presented in the *Preliminary Engineering Design Report*<sup>34</sup> the proposed project would not trigger additional post-construction controls pursuant to the requirements of the LA County MS4 Permit. Additionally, the overarching objective of the proposed project is to divert dry- and wet-weather runoff from the City of Bellflower MS4 such that there is a net improvement to both stormwater runoff and receiving water quality. As such, the proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board and project impact would be less than significant.

- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **Less Than Significant Impact.**

The proposed project would not require water or wastewater services as part of long term operations. Therefore, no project impact would result. During Project construction, a negligible amount of wastewater would be generated by construction workers. It is anticipated that portable toilets would be provided by a private company and the waste disposed off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a point where, and at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained and project impact would be less than significant.

- c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **Less Than Significant Impact with Mitigation Incorporated.**

Potential environmental impacts associated with the proposed project including construction of the proposed new stormwater drainage facilities are discussed by environmental resources topics throughout this IS/MND. While there are no specific mitigation measures for stormwater required; mitigation measures were identified for other resources topics to reduce potential impacts associated with short term temporary impacts from construction. Therefore, project impact would be considered less than significant with mitigation incorporated.

- d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? **No Impact.**

The proposed project would not require water service. Therefore, no significant project impact would result.

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<sup>34</sup> Tetra Tech. Caruthers Park Stormwater and Urban Runoff Capture Project Preliminary Engineering Design Report. December 5, 2017.

- e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **Less Than Significant Impact.**

During Project construction a negligible amount of wastewater would be generated by construction workers. It is anticipated that portable toilets would be provided by a private company and the waste disposed off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a point where, and at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. The proposed project would not generate wastewater upon operation of the project. Therefore, project impact would be less than significant.

- f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? **Less Than Significant Impact.**

Trash and recycling services are provided by CR&R Incorporated. According to CR&R, waste generated in Bellflower is sent to the CR Transfer and Material Recovery Facility in Stanton, Southeast Resource Recovery Facility (SERFF) in Long Beach, with most of the loads going to the Downey Area Recycling and Transfer Facility (DART) in Downey.<sup>35</sup> DART is permitted to receive, handle and process up to 5,000 tons per day of waste 24 hours per day, 7 days a week. Residual waste from the facility is transferred to a fully-permitted Class III landfill or transformation facility. In 2019, the average annual tonnage is estimated to be 320,000 DART.<sup>36</sup> Construction and operation of the proposed project would not generate a substantial amount of solid waste. Operation of the proposed new facilities would generate a nominal amount of trash and debris as part of long-term project operation. The resultant waste from operation of the proposed project, is not anticipated to be substantially more than is currently generated by the existing park use. Short-term construction activities would generate some additional waste and debris that would require recycling and waste removal services. Construction materials would be recycled to the extent feasible. Therefore, project impact is less than significant.

- g. Comply with Federal, State, and City statutes and regulations related to solid waste? **Less Than Significant Impact.**

The proposed project would comply with regulations related to solid waste. The California Integrated Waste Management Act of 1989 (AB 939) requires each local jurisdiction to divert 50% of its waste from landfills. In an effort to comply with AB 939, on December 8, 2003 the Bellflower City Council adopted Ordinance No. 1055, the C&D Waste Management Plan Ordinance of the City of Bellflower. The ordinance requires diversion, via reuse or recycling, of 100% of all inert debris, such as concrete and dirt, and 50% of the remaining C&D debris generated by all construction and renovation projects whose total cost, or projected cost are greater than or equal to \$50,000. On September 13, 2010, the City Council amended the C&D Ordinance to include all demolition projects of any valuation. Applicants for such projects are required to submit a Waste Management Plan (WMP) prior to being issued a building or demolition permit.<sup>37</sup> Therefore, with compliance with existing regulations project impact would be less than significant.

## **XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.**

<sup>35</sup> CR & R. Cr & R Email dated April 23, 2018 from Axel Jimenez.

<sup>36</sup> County Sanitation Districts of Los Angeles County. Transfer/Processing Report For Downey Area Recycling and Transfer Facility as updated January 2016.

<sup>37</sup> City of Bellflower. Construction & Demolition Waste Management Plan. Accessed April 2018, URL: <https://www.bellflower.org/depts/pw/waste.asp>.



- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ***Less Than Significant with Mitigation Incorporated.***

The proposed project includes infrastructure improvements at the existing Caruthers Park. The City of Bellflower is located within southern Los Angeles County and is highly urbanized. Accordingly, the potential for candidate, sensitive, or special status species or habitats is low within City limits. The preceding analysis does not reveal any significant unmitigable impacts to the environment. Based on these findings, the proposed project is not expected to degrade the quality of the environment, adversely impact biological resources, or eliminate important examples of the major periods of California history or prehistory.

The City hereby finds that impacts related to degradation of the environment, biological resources, and cultural resources would be less than significant with mitigation incorporated, as necessary.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? ***Less Than Significant with Mitigation Incorporated.***

The proposed water quality infrastructure project would not result in individually limited, but cumulatively considerable significant impacts. As discussed in Responses I through XVII, all environmental issues discussed above would result in either no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated with the implementation of the proposed project. Once operational, the proposed project would have a beneficial impact on water quality and use of the park would be similar to existing conditions. Construction of the proposed project would result in some short-term temporary impacts such as additional vehicle trips, air emissions and noise. Use of construction equipment would cause an increase of air emissions during construction activities; however, impacts to air quality would be short-term and less than significant. Noise impacts would also be temporary and less than significant with the implementation of mitigation measures. The project's contribution to potential cumulative impacts related to these other issues would be less than cumulatively considerable. Therefore, project impact would be less than significant with mitigation incorporated.

- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***Less Than Significant with Mitigation Incorporated.***

Based on the analysis of the project's impacts in the Responses I thru XVII, no environmental effects have been identified in this IS/MND that would cause substantial adverse effects, either directly or indirectly, on human beings. While there would be a variety of effects during construction such as traffic, noise and air quality, these impacts would be less than significant based on compliance with applicable regulatory requirements and established impact thresholds, as well as the prescribed mitigation measures, where applicable. The proposed project does not involve the use of hazardous materials in a manner that pose any unusual risks. Additionally, the proposed project: 1) does not involve operational noise that will interfere with surrounding uses; 2) will not create a traffic hazard; 3) will not create adverse impacts to water bodies; and 4) will not generate any hazardous wastes. Based on the analysis in this IS/MND, the City finds that direct and indirect impacts to human beings would be less than significant with mitigation incorporated, as necessary.

## **E. PREPARERS OF DOCUMENT AND CONSULTED PERSONS AND AGENCIES**

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