County of San Diego

Brian Albright
DIRECTOR
PHONE (858) 966-1301

Department of Parks and Recreation
5500 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CA 92123

November 11, 2021

Environmental Review Update Checklist Form
For projects with Previously Approved Environmental Documents

WATERFRONT PARK ACTIVE RECREATION PROJECT ADDENDUM

The California Environmental Quality Act (CEQA) Guidelines Sections 15162 through 15164 set forth the criteria for determining the appropriate type of additional environmental documentation to be completed, if any, when there is a previously adopted Negative Declaration (ND) or a previously certified Environmental Impact Report (EIR) covering the project for which a subsequent discretionary action is required. This Environmental Review Update Checklist Form has been prepared in accordance with CEQA Guidelines Section 15164(e) to explain the rationale for determining whether any additional environmental documentation is needed for the subject discretionary action.

1. Background on the previously certified EIR, Supplemental EIRs, and Addenda pertaining to the proposed project:

   SAN DIEGO COUNTY ADMINISTRATION CENTER WATERFRONT PARK DEVELOPMENT AND MASTER PLAN

   - A Final EIR (2003 FEIR) for the San Diego County Administration Center Waterfront Park Development and Master Plan (Waterfront Park Master Plan) project (Project No. KK3421, State Clearinghouse [SCH] No. 2002081089) was certified by the County of San Diego Board of Supervisors on May 6, 2003. The project consisted of a Master Plan for the development of the Waterfront Park Master Plan, which included the conversion of the project site into a civic greenspace surrounding the historic County Administration Center Building. Specifically, the project provided three tiers of public use areas: 1) a series of "garden rooms" along Pacific Highway on either side of the County Administration Center Building; 2) a fountain, promenade and terrace area forming a strip to the west of the County Administration Center Building and extending from Grape Street on the north to Ash Street on the south, respectively; and, 3) a civic greenspace (lawn area) between the promenade and Harbor Drive, along the western portion of the project site. The project was found to have significant effects to: air quality, cultural and paleontological resources, hazards and hazardous materials, hydrology and water quality, geology and soils, noise and transportation/ circulation. The 2003 FEIR found that with incorporation of mitigation measures, impacts to air quality, cultural and

paleontological resources, hazards and hazardous materials, hydrology and water quality, geology and soils, and transportation/ circulation were reduced below a level of significance. Impacts associated with noise remained significant and unavoidable as there is no feasible mitigation to reduce significant noise impacts. The complete list of impacts and mitigation measures are identified in the previously certified 2003 FEIR (Table S-1 of the FEIR). A Mitigation Monitoring and Reporting Program, Findings Concerning Mitigation of Significant Environmental Effects, and a Statement of Overriding Considerations for the noise impacts associated with the project were adopted by the San Diego County Board of Supervisors on May 6, 2003.

- An Addendum to the 2003 FEIR, dated January 19, 2011, was considered by the Board of Supervisors in connection with approval of revised components of the Waterfront Park Master Plan project on January 25, 2011. This Addendum evaluated more detailed construction and operation details for the approved project analyzed in the 2003 FEIR for the Waterfront Park Master Plan project. This addendum determined that even with the more detailed project information, development of the project would not result in new or substantially more severe environmental impacts than those previously identified in the certified 2003 FEIR.

- An Addendum to the 2003 FEIR, dated May 12, 2011, was considered by the Board of Supervisors in connection with approval of revised components of the Waterfront Park Master Plan project on May 24, 2011. This Addendum evaluated the consolidation of the northern subterranean lot (152 spaces) with the southern lot (98 spaces) into a single 250 space lot located on the south side of the County Administration Building. The consolidated lot would be accessible via a single driveway located on Ash Street between Pacific Highway and Harbor Drive. This Addendum determined that the consolidation and new configuration of the southern parking lot would not result in new or substantially more severe environmental impacts than those previously identified in the certified 2003 FEIR.

2. Lead agency name and address:

   County of San Diego, Department of Parks and Recreation
   5500 Overland Avenue, Suite 410 (MS029)
   San Diego, CA 92123

   a. Contact: Nicole Ornelas, Project Manager
   b. Phone number: (858) 243-7185
   c. E-mail: nicole.ornelas@sdcounty.ca.gov

3. Project applicant's name and address:

   County of San Diego
   Department of Parks and Recreation
   5500 Overland Avenue, Suite 410 (MS029)
   San Diego, CA 92123

   a. Contact: Nicole Ornelas
   b. Phone number: (858) 243-7185
   c. E-mail: nicole.ornelas@sdcounty.ca.gov

4. Summary of the activities authorized by present permit/entitlement application(s):

   The Waterfront Park Active Recreation project (proposed project) consists of the construction and operation of a new active recreation area on a 2.1-acre portion of the larger Waterfront Park (previous project), located at 1600 Pacific Highway in downtown San Diego in San Diego County. Specifically, the project site is comprised of the northeastern corner of the Waterfront Park and is bound by Grape Street to the north, Pacific Highway to the east, the San Diego County Administrative Center (CAC) Building to the south, and a water feature and open green space areas within Waterfront Park to the west. Figure 1 shows the location of the project site. The project site is currently developed with a passive recreational garden area, a portion of which would be demolished as part of the project.

   The project proposes development of an active recreational park on a previously mass graded passive recreational project site. The proposed project would expand recreation resources within Waterfront Park and in downtown San Diego and would continue to be operated and maintained by the County of San Diego Department of Parks and Resources (DPR), who is the lead agency for this project. As shown in Figure 2, the project site would be separated into various components associated with different recreational activities, including an off-leash dog zone, basketball court, pickleball courts, a T-ball field, table tennis area, and an outdoor fitness area. Figure 3 shows the proposed fencing surrounding the different recreational components. All proposed recreational facilities would be available for pick-up games/use and would not be able to be reserved. No structures or restrooms would be constructed as part of the project. The proposed project would also construct walkways, an Americans with Disabilities (ADA) accessible ramp, and benches and would preserve the existing garden located along the eastern boundary of the project site. Additionally, temporary umbrellas may be used throughout the site on an as-needed basis. Each of the project components are discussed in greater detail below.

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SOURCE: ESRI, 2018. ESA, 2021.

Waterfront Park Active Recreation Project

Figure 1
Regional and Local Location

ESA

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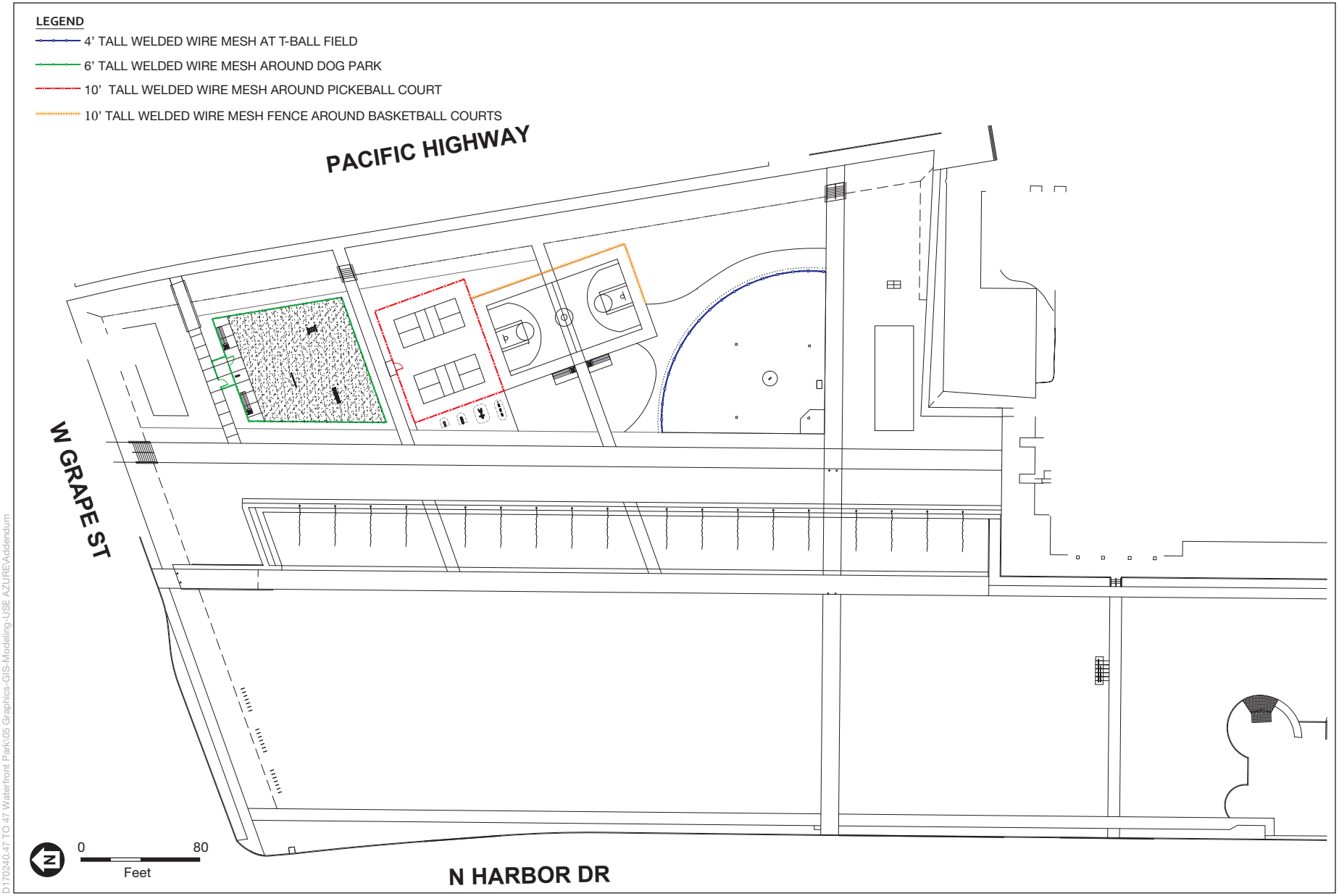
SOURCE: Michael Baker International, 2021

Waterfront Park Active Recreation Project

Figure 2
Conceptual Site Plan

ESA



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SOURCE: Michael Baker International, 2021

Waterfront Park Active Recreation Project

Figure 3
Fencing Plan

ESA

Proposed Active Recreation Components

Off-leash Dog Zone

The proposed project would construct an off-leash dog zone (dog zone) on the northern portion of the project site. The dog zone would consist of a concrete entrance with bench seating and a permeable open space with canine agility equipment scattered throughout. Trash receptacles would be provided within the dog zone. As shown on Figure 3, the dog zone would be surrounded by six-foot tall welded wire mesh fencing and include a double lockable gate entrance. Two ornamental trees would be planted in the dog zone to provide shade for both pets and owners alike. Access would be provided by a new concrete walkway and an American with Disabilities Act (ADA)-compliant ramp that connects to the sidewalk along Pacific Highway. Shrubs and groundcover would be planted along the perimeter of the dog zone. Use of the dog zone would be limited to 6:00 a.m. to 10 p.m. daily.

Basketball and Pickleball Courts

In the center of the project site, two pickleball courts and a basketball court would be constructed. The pickleball courts would be surrounded by a maximum of 10-foot welded wire mesh fencing with a lockable gate. Shrubs and groundcover would be planted along the outside perimeter of the pickleball courts on the north and east boundaries. Access to the pickleball courts would be provided by an existing concrete walkway that traverses the project site from east to west and connects to the sidewalk along Pacific Coast Highway as well as to an existing walkway along the western boundary of the project site.

The basketball court would be located adjacent to and south of the pickleball courts. The basketball court would be oriented in a north-to-south configuration and would be fenced with a maximum of 10-foot welded wire mesh fence on the southern and eastern boundaries. Shrubs and groundcover would be planted along the eastern boundary of the basketball court, which would connect with the vegetation planted along the boundaries of the pickleball courts. Along the western boundary, the existing garden area, including ornamental trees and existing walkway, would be preserved and two benches would be installed. Access to the basketball court would be provided by an existing walkway east and west of the court, and by a new walkway south of the court. Use of the basketball court and pickleball courts would be limited to 6:00 a.m. to 10 p.m. daily.

Outdoor Fitness Area

The outdoor fitness area would be located adjacent to and west of the proposed pickleball courts. The outdoor fitness area would be constructed with semi-permeable ground cover. While the specific type of fitness equipment to be installed is unknown at this time, examples of such equipment could include but not be limited to pull-up bars, cardio walkers, parallel bars, and sit-up stations. Access to the outdoor fitness area would be provided by an existing perimeter walkway to the west of the outdoor fitness area.

T-Ball Field and Table Tennis

The project proposes the construction of a T-ball field with 100-foot foul lines in the southwest portion of the project site. The T-ball field would be surrounded by 4-foot tall welded wire mesh fencing and would be constructed with natural turf. The T-ball field would be available for pick-up games and would not be reservable by local teams.

A new table tennis area would be constructed south of the proposed T-ball field. The table tennis area would continue to have permeable ground cover, similar to existing conditions. Access to the T-ball field and table tennis area would be provided by the same new walkway as the basketball court, as well as existing walkways in the southern portion of the project site.

Proposed Landscaping and Lighting

While the proposed project would retain 22 shade trees on the project site, the project would require the removal of existing landscaping (including 11 shade trees) to construct the proposed recreation components. The majority of the ornamental trees that run along the perimeter of the project site would remain with development of the project. Additionally, as shown in Figure 2, the project proposes to retain and preserve the existing gardens located along Pacific Highway on the southeastern boundary of the project site, as well as retain the existing gardens located between the outdoor fitness area and T-ball field. All new landscaping proposed as part of the project would include drought-resistance species. An approximately 900 square foot bio-swale would be constructed within the preserved existing garden area located north of the proposed T-ball field, which would treat water runoff from the park. A drainage flow line would be constructed from the proposed bio-swale to an existing onsite stormwater system located to the northwest of the proposed off-leash dog zone.

The project would also preserve some existing lighting on the project site, but would construct additional lighting fixtures for security purposes within the off-leash dog zone and the active recreation areas. The proposed project would construct top-mounted light emitting diode (LED) light poles of 14-feet high located along the walkways and throughout the vicinity of the site. In addition, the project would install 20-foot tall, top-mounted LED fixtures within the dog zone, pickleball courts, and basketball courts. The table tennis area, T-ball field, and outdoor fitness area would only be available during the daylight hours and would not include security lighting. The proposed light fixtures would tie into existing utility lines located within the project site and would not require additional utility connections.

Circulation

The project proposes to construct new pedestrian walkways that would provide access internally throughout the site. One pedestrian walkway would be ADA-accessible and would be located near the north of the project site at the dog zone entrance. An additional walkway would be constructed around the north eastern portion of the T-ball field. An existing walkway

between the proposed dog zone and pickleball courts would remain in place. Additionally, an existing walkway that currently bisects the proposed basketball court would remain in place.

There are currently no parking spaces within the project site. The project does not propose to construct any additional parking spaces or remove any exiting parking spaces and would continue to utilize existing on-street public parking spaces adjacent to and near the project site, as well as the existing public parking garage accessed from West Ash Street for park users.

Construction

Construction of the project is anticipated to occur over an 8-month period, beginning in May 2022 and ending in December 2022**.** Construction activities would occur Monday through Friday between 7:00 a.m. and 7:00 p.m., with occasional weekend work, in accordance with San Diego County Code Section 36.408. Typical construction equipment would be utilized throughout the construction period, which could include, but is not necessarily limited to, aerial lifts, tractors, loaders, backhoes, and plate compactors. It is conservatively assumed that ground-disturbing activities would be limited to a maximum of 10-feet in depth, but it is likely that certain areas would only be subject to surficial shallow ground disturbance. It is anticipated that all soils would be balanced on-site during construction, with a total of approximately 2,000 cubic yards (cy) of hauling for the removal of vegetation material, including the 11 ornamental trees that would be removed. One water truck and three other construction trucks are anticipated per day. The water truck would be used to reduce generation of dust during construction. Approximately 10 worker trips and 4 vendor truck trips are anticipated per day and approximately 125 haul trips are anticipated for the whole construction period.

The County has developed standard operating procedures for construction, including for biological resources. The following project design feature (PDF) is considered part of the proposed project.

PDF-1: Nesting Season Avoidance or Pre-Construction Survey. If construction initiation occurs between January 15 and September 15, a pre-construction nesting bird and raptor survey of the project area shall be completed by a qualified biologist prior to vegetation removal. The pre-construction survey shall be conducted within three calendar days prior to the start of construction activities (including removal of vegetation). If any active nests are detected, a qualified biologist will determine an appropriate buffer of up to 500 feet, and the area shall be flagged and mapped on construction plans, along with the buffer. The buffer area(s) established by the qualified biologist shall be avoided until the nesting cycle is complete or it is determined that the nest is no longer active. The qualified biologist shall be a person familiar with bird breeding behavior and capable of identifying the bird species of San Diego County by sight and sound and determining alterations of behavior as a result of human interaction. Buffers shall be based local topography and line of sight, species behavior and tolerance to disturbance, and existing disturbance levels, as determined appropriate by the qualified biologist.

Management and Operations

The proposed project, including the lighted off-leash dog zone, basketball court, and pickleball courts, would operate from 6:00 a.m. to 10 p.m. seven days per week consistent with County policies. The project is anticipated to serve the surrounding local neighborhood and is not anticipated to draw a substantial number of park users from outside of the nearby area. It is not anticipated that any spectator events drawing large crowds would occur at the project site and no amplified sound systems would be included at the project site. The proposed project would include lockable, gated pedestrian entrances to the dog zone, and pickleball courts to restrict entry after hours of operation. County staff would be on site daily to open and close the facility and perform daily park maintenance to ensure that all recreational amenities are safe and usable for the public.

5. Does the project for which a subsequent discretionary action is now proposed differ in any way from the previously approved project?

YES	NO
☒	☐

As detailed above, the Waterfront Master Plan was adopted by the Board of Supervisors on May 6, 2003. Subsequent addenda to the Waterfront Master Plan have also been adopted, most recently prepared in September 2011; however, these subsequent addenda were not related to the current project site itself (rather, other portions of the larger Waterfront Master Plan). The Waterfront Master Plan project was opened on May 10, 2014. The park included a passive recreational garden area on the proposed project site, along with associated walkways. The current project proposes to demolish the majority of these garden areas and construct in its place active recreational components, including a dog zone, basketball court, pickleball courts, T-ball field, table tennis, and associated walkways. The current project's change in use to active recreational components is in response to community feedback regarding the lack of recreational options in the downtown metropolitan area.

6. **SUBJECT AREAS DETERMINED TO HAVE NEW OR SUBSTANTIALLY MORE SEVERE SIGNIFICANT ENVIRONMENTAL EFFECTS COMPARED TO THOSE IDENTIFIED IN THE PREVIOUS ND OR EIR**. The subject areas checked below were determined to be new significant environmental effects or to be previously identified effects that have a substantial increase in severity either due to a change in project, change in circumstances or new information of substantial importance, as indicated by the checklist and discussion on the following pages.

☒ NONE

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

DETERMINATION:

On the basis of this analysis, Planning & Development Services has determined that:

☒ No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous EIR or MND due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, the previously certified EIR is adequate upon completion of an ADDENDUM.

☐ No substantial changes are proposed in the project and there are no substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous EIR or ND due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Also, there is no "new information of substantial importance" as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, because the project is a residential project in conformance with, and pursuant to, a Specific Plan with an EIR completed after January 1, 1980, the project is exempt pursuant to CEQA Guidelines Section 15182.

☐ Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous ND due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in CEQA Guidelines Section 15162(a)(3). However, all new significant environmental effects or a substantial increase in severity of previously identified significant effects are clearly avoidable through the incorporation of mitigation measures agreed to by the project applicant. Therefore, a SUBSEQUENT ND is required.

☐ Substantial changes are proposed in the project or there are substantial changes in the circumstances under which the project will be undertaken that will require major revisions to the previous ND or EIR due to the involvement of significant new environmental effects or a substantial increase in the severity of previously identified significant effects. Or, there is "new information of substantial importance," as that term is used in CEQA Guidelines Section 15162(a)(3). Therefore, a SUBSEQUENT or SUPPLEMENTAL EIR is required.

Signature	Date
Printed Name	Title

INTRODUCTION

CEQA Guidelines Sections 15162 through 15164 set forth the criteria for determining the appropriate additional environmental documentation, if any, to be completed when there is a previously adopted ND or a previously certified EIR for the project.

CEQA Guidelines, Section 15162(a) and 15163 state that when an EIR has been certified or a ND has been adopted for a project, no Subsequent or Supplemental EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
   a. The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;
   b. Significant effects previously examined will be substantially more severe than shown in the previously certified EIR;
   c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
   d. Mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines, Section 15164(a) states that the lead agency or responsible agency shall prepare an Addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a Subsequent EIR have occurred.

If the factors listed in CEQA Guidelines Sections 15162, 15163, or 15164 have not occurred or are not met, no changes to the previously certified EIR or previously adopted ND are necessary.

The following responses detail any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that may cause one or more effects to environmental resources. The responses support the

"Determination," above, as to the type of environmental documentation required, if any. The following Environmental Review Update Checklist uses the same thresholds as the 2003 FEIR.

ENVIRONMENTAL REVIEW UPDATE CHECKLIST

I. AESTHETICS – Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to aesthetic resources including: scenic vistas; scenic resources including, but not limited to, trees, rock outcroppings, or historic buildings within a state scenic highway; existing visual character or quality of the site and its surroundings; or day or nighttime views in the area?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, development of the Waterfront Master Plan would not result in significant impacts related to aesthetics or visual resources. The 2003 FEIR determined that replacement of the previously existing surface parking lots with public greenspace would enhance the scenic quality of the site and would not introduce features or contrast with the existing visual character or quality of the area and would not result in a substantial change to existing visual resources such as a landmark, historic resource, trees, or rock outcrops. In addition, the 2003 FEIR also determined that development of the Waterfront Park Master Plan would have a less than significant impact on scenic vistas and lighting.

Potential Impacts from the Proposed Project

The project site is designated as Park, Open Space, and Recreation in the San Diego General Plan.[1] The proposed project would include the demolition of the existing passive garden area within the northeastern portion of Waterfront Park. In its place, the project would construct various components dedicated to active recreational activities, which is consistent with permitted uses for Park, Open Space, and Recreation land use designations. Specifically, development of the project would construct a dog zone, pickleball and basketball courts, a T-ball field, an outdoor fitness area, table tennis, and associated bench seating. Fencing of various heights would be installed throughout the project site to surround the dog zone, pickleball courts, and T-ball field. The maximum height of the proposed fencing would be ten feet at the pickleball and basketball courts with the minimum height of fencing being four feet at the T-Ball field. All fencing would consist of welded wire mesh fencing material.

Implementation of the proposed project would amend the Waterfront Park Master Plan to change the northeastern portion of the overall park area from existing passive recreational ornamental gardens to an active recreation park. Since the project site is located within the California Coastal Zone, any changes to the Waterfront Park Master Plan would also be under the jurisdiction of

[1] City of San Diego, 1992. General Plan Land Use and Street System Map. Last updated June 29, 2015.

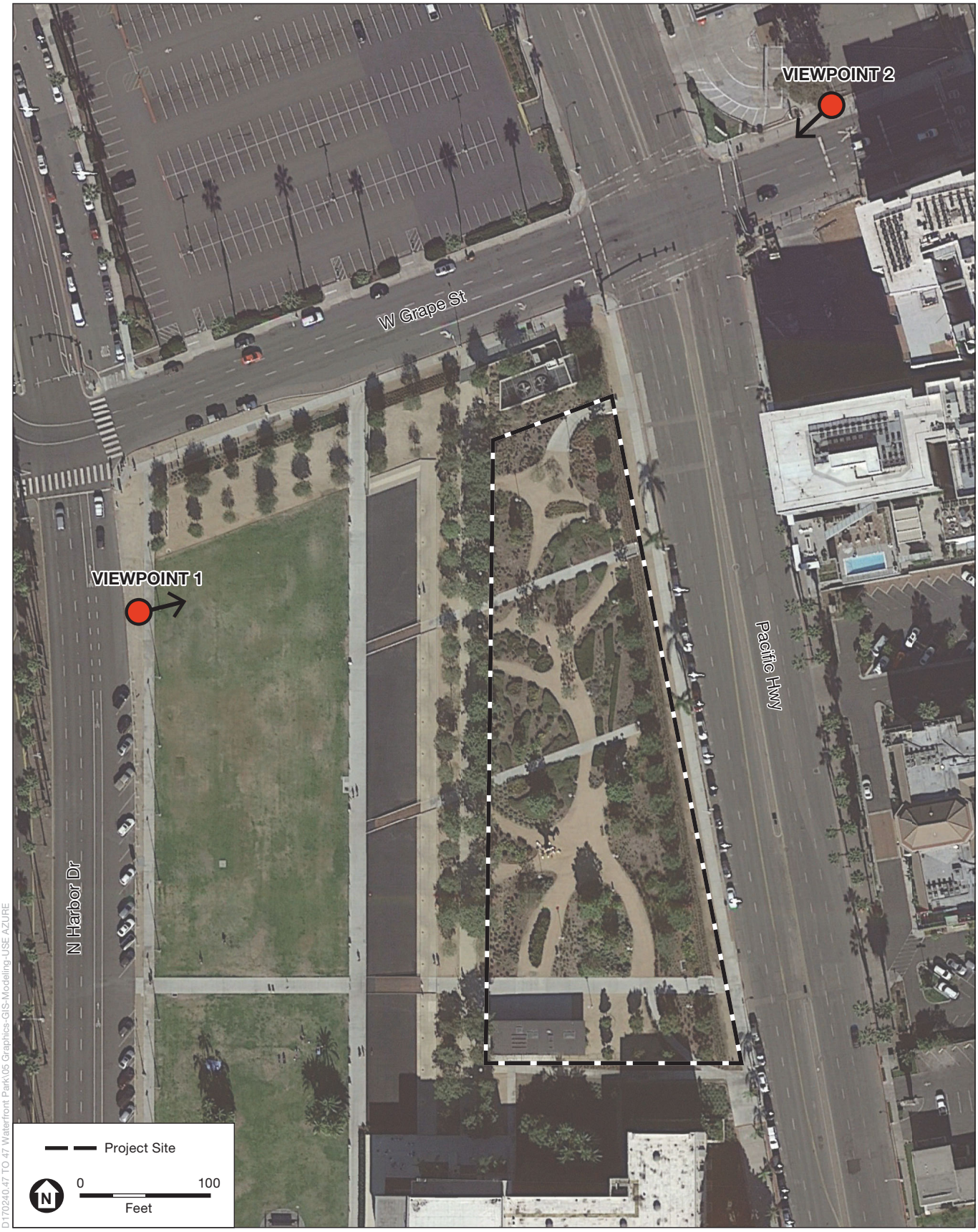
the California Coastal Commission (CCC). To support amending the existing Coastal Development Permit (CDP) for the Waterfront Park area to allow for the development of the proposed project, visual simulations were prepared to illustrate any visual changes to the environment as a result of the project. Figure 4 shows the locations where the pictures of the existing project site were taken. Viewpoint 1 captures the view from the western side of the project site, from Harbor Boulevard looking east as shown in Figure 5. Viewpoint 2 captures the view from the intersection of Grape Street and Pacific Highway looking west across the project site as shown in Figure 5.

As shown in Figure 5, the visual simulation of the project demonstrates that there would be a barely discernable change in the viewshed, as the only components that would be visible is the proposed fencing, which are partially transparent due to the welded wire mesh nature of the material (in Figure 5, this fencing is visible surrounding the off-leash dog zone and pickleball courts). The existing perimeter trees would remain with implementation of the project and would screen the project's proposed changes onsite. Compared to the existing view of the project site, the visual changes in the viewshed from Viewpoint 1 would not be substantial and would not significantly impact the visual character of the viewshed.

The visual simulation shown in Figure 6 illustrates views of the project site from the intersection of Grape Street and Pacific Highway. As shown in Figure 6, visual changes from the proposed project would result in a barely discernable change in the existing urban environment, where the welded wire mesh fencing (surrounding the off-leash dog zone, pickleball courts, and the eastern boundary of the basketball court) and the proposed ADA ramp are the only components visible. However, the perimeter trees and other features of the urban environment would largely screen these components, particularly in relation to other tall features (i.e., trees, street lights, etc.). Compared to the existing view of the project site, the visual changes in the viewshed from Viewpoint 2 would not be substantial and would not significantly impact the visual character of the viewshed.

Although the project would include the removal of existing landscaping to construct the recreational amenities, the project would preserve gardens along the frontage of Pacific Highway and north of the T-ball field. In addition, street trees present along the interior and perimeter walkways would remain. Similar to the 2003 FEIR, all amenities and landscaping would be designed to complement the existing historic CAC building in an aesthetically pleasing manner, consistent with County Policy G-15, *Design Standards for County Facilities and Property*. Therefore, conversion of the project site from a passive recreational area to an active recreational area would not significantly alter the visual character of the site, nor would there be any new or increased adverse aesthetic impacts to onsite visual resources.

All new and existing exterior lighting for the proposed project would be consistent with the San Diego County Light Pollution Code and Section 6322 of the San Diego County Zoning Ordinance, which requires all lighting to be pointed downward and shielded to prevent light trespass and glare. Compliance with this ordinance would ensure that offsite light pollution would be minimized. Furthermore, due to the nature of the proposed project, no highly reflective materials would be used, which would eliminate any potential for glare impacts. Therefore, impacts related to light and glare would be less than significant.



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SOURCE: ESA, 2021

Waterfront Park Active Recreation Project

Figure 4
Viewpoint Locations Map

ESA

Existing

Proposed

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SOURCE: ESA, 2021

Waterfront Park Active Recreation Project

Figure 5
Existing View and Visual Simulation from Viewpoint 1

ESA

Existing

Proposed

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SOURCE: ESA, 2021

Waterfront Park Active Recreation Project

Figure 6
Existing View and Visual Simulation from Viewpoint 2

ESA

The proposed project would be consistent with the findings of the 2003 FEIR with respect to visual resources. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to aesthetics. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to aesthetic resources.

II. AGRICULTURE AND FORESTRY RESOURCES -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to agriculture or forestry resources including: conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, conflicts with existing zoning for agricultural use or Williamson Act contract, or conversion 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))?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, development of the Waterfront Park Master Plan would not result in any impacts to agricultural or forestry resources as the project site does not contain any such resources. In addition, the project site is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance, as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program. Furthermore, the project site is located in an urban environment and is not zoned for agricultural use or as a Williamson Act Contract. For these reasons, the 2003 FEIR determined that no impact to agricultural or forestry resources would occur with implementation of the Waterfront Park Master Plan.

Potential Impacts from the Proposed Project

As stated in the 2003 FEIR for the Waterfront Park Master Plan, the project site's land use and zoning is governed by the Waterfront Master Plan, which does not include an agricultural or forestry component. In addition, the project site is not under a Williamson Act Contract and is not designated for agriculture or forestry activities. Implementation of the project would not destroy or convert existing or potential agricultural or forestry resources or conflict with existing zoning for agricultural use, forest, or timberland.

The proposed project would be consistent with the 2003 FEIR findings with respect to agricultural resources. The proposed project would not cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to agricultural or forestry resources. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to agricultural and forestry resources.

III. AIR QUALITY -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to air quality including: conflicts with or obstruction of implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP); violation of any air quality standard or substantial contribution to an existing or projected air quality violation; exceed quantitative thresholds for 03 precursors, NOx, and ROCs; or creation of objectionable odors affecting a substantial number of people?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.4, *Air Quality,* of the 2003 FEIR, development of the Waterfront Park Master Plan would result in potentially significant impacts to air quality. Impacts are associated with the demolition of the Askew Building resulting in a potential release of hazardous or toxic air contaminants (TACs), such as asbestos (the Askew Building has since been demolished and is no longer part of the project area). With the incorporation of mitigation measure MM 2.4, which requires an Asbestos Notification of Demolition and Renovation, Air Pollution Control District (APCD) permits, as applicable, and a pre-demolition survey of the Askew Building for asbestos, lead-based paint, and other toxic materials, and compliance with all related APCD regulations and requirements, impacts to air quality were determined to be less than significant. All air pollutant emissions from construction would be below APCD/City standards and impacts to sensitive receptors would not be significant.

Potential Impacts from the Proposed Project

Compliance with Plans

The San Diego Air Pollution Control District (SDAPCD) Regional Air Quality Standards (RAQS) is the regional air quality plan that is applicable to the area surrounding the project site. The RAQS contains rules and regulations that are implemented by the SDAPCD to help the San Diego Air Basin meet the clean air standards required by federal and state law. The RAQS relies on projected growth in the County, as well as information on mobile, area, and other sources of emissions obtained from the California Air Resources Board (CARB) and the San Diego Association of Governments (SANDAG) to project future emissions within the County. Based on these emissions, reduction strategies are determined to reduce emissions in order to achieve or maintain attainment with State and federal standards.

The proposed project would convert an existing passive recreational garden to an active recreational area. The proposed project would not cause population growth and, therefore, would not conflict with the SANDAG growth projections or the SDAPCD RAQS. Additionally, as required by law, the proposed project would comply with California Air Resource Board (CARB) regulations to minimize short-term emissions from on-road and off-road diesel construction equipment (i.e., 13 CCR Section 2485 – anti-idling regulation; 13 CCR Section 2025 – Truck and Bus regulation to reduce NO_X, PM10, and PM2.5 emissions; and 13 CCR Section 2449 – In-Use Off-Road Diesel

Fueled Fleets regulation to reduce NO_X, PM10, and PM2.5 emissions). The proposed project would also comply with all current SDAPCD regulations for controlling fugitive dust pursuant to SDAPCD Rule 55 Fugitive Dust. Compliance with these requirements is consistent with and meets the RAQS requirements for control measures intended to reduce emissions from construction equipment and activities. Therefore, the proposed project would not result in new or substantially more severe environmental impacts associated with obstruction of implementation of the RAQS.

Construction Emissions

Construction activities would temporarily generate emissions from equipment exhaust and mobile trips. The amount of air emissions generated on a daily basis would vary depending on the intensity and types of construction activities occurring simultaneously. The San Diego Basin is currently classified as a federal non-attainment area for the 2008 8-hour standard for ozone and a State nonattainment area for PM10, PM2.5, and ozone. Maximum daily construction emissions are shown in Table 1, *Regional Construction Emissions (Pounds per Day)*. As demonstrated in Table 1**,** the proposed project's construction emissions would fit within the 2003 FEIR buildout for the park. As the proposed project is only a portion of the 2003 project, construction emissions for the proposed project would be less than the 2003 project. The combined 2003 project and proposed project emissions would not exceed the SDAPCD significance thresholds for PM10, PM2.5, VOC, or NO_x. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with construction-related air quality emissions.

TABLE 1
REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY)

Phase	VOC	NO_X	CO	SO_2	PM10	PM2.5
Proposed Project						
Site Preparation - 2022	<1	5	7	<1	<1	<1
SDAPCD Regional Significance Threshold	137	250	550	250	100	55
Exceeds Thresholds?	No	No	No	No	No	No
2003 Project						
Construction	2.4	34.4	7.6	2.4	1.2	N/A
Soil Disturbance	N/A	N/A	N/A	N/A	55	N/A
SDAPCD/City Regional Significance Threshold	100	100	550	100	100	N/A
County Regional Significance Threshold	55	250	550	250	100	N/A
Exceeds Thresholds?	No	No	No	No	No	N/A
2003 Project + Proposed Project						
Combined 2003 Project + Proposed Project Emissions	2.4	39.4	14.6	2.4	1.2	<1
SDAPCD Regional Significance Threshold	137	250	550	250	100	55
Exceeds Thresholds?	No	No	No	No	No	No

NOTE: Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Attachment A, Air Quality Calculations.

SOURCE: ESA, Attachment A, Air Quality Calculations, 2021.

Operational Air Quality Emissions

Operational emissions for the proposed project were assessed for area, energy, and mobile sources for the 2023 operational year. Area emissions include consumer products and landscaping. Mobile source emissions were based upon City Park trip rates from CalEEMod, version 2020.4.0, and an average trip distance of 20 miles. As shown in Table 2, *Regional Operational Emissions (Pounds per Day)*, the operational emissions would not exceed the SDAPCD significance thresholds for PM10, PM2.5, VOC, or NO_X.

TABLE 2
REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY)

Phase	VOC	NO_X	CO	SO_2	PM10	PM2.5
Proposed Project						
Area[a]	<1	<1	<1	<1	<1	<1
Energy[a]	<1	<1	<1	<1	<1	<1
Mobile	<1	<1	<1	<1	<1	<1
Total Regional Emissions	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**
SDAPCD Regional Significance Threshold	75	250	550	100	55	55
Exceeds Thresholds?	No	No	No	No	No	No
2003 Project						
Operations of future park-related vehicular emissions	2.2	6.8	20.6	<1	3.6	N/A
Total Regional Emissions	**2.2**	**6.8**	**20.6**	**<1**	**3.6**	**N/A**
SDAPCD/City Regional Significance Threshold	100	100	550	100	100	N/A
County Regional Significance Threshold	55	250	550	250	100	N/A
Exceeds Thresholds?	No	No	No	No	No	N/A
2003 Project + Proposed Project						
Combined 2003 Project + Proposed Project Emissions	2.2	6.8	20.6	<1	3.6	<1
SDAPCD Regional Significance Threshold	75	250	550	100	55	55
Exceeds Thresholds?	No	No	No	No	No	No

NOTES:

Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Attachment A, Air Quality Calculations.

SOURCE: ESA, Attachment A, Air Quality Calculations, 2021.

As demonstrated, the operational air pollutant emissions associated with the proposed project would be negligible and well below the operational air pollutant emissions from the 2003 FEIR. As the proposed project is only a portion of the 2003 project, the combined proposed project and 2003 project operational emissions would be well below the SDAPCD significance thresholds. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with operational air pollutant emissions.

Impacts to Sensitive Receptors

As quantified in Attachment A, *Air Quality Calculations*, the proposed project would result in less than 110 daily trips and, therefore, qualify as a small project[2] with a less than significant impact to VMT. Based on the proposed project being identified as a small project, it is anticipated that any TACs generated during construction or operation would be less than significant. Construction emissions would also be intermittent and temporary as construction activities are anticipated to last for approximately six months. Project-related trucks associated with construction activities would be required to comply with the applicable provisions of the CARB Truck and Bus regulation (13 CCR Section 2025) and the CARB anti-idling regulation (13 CCR Section 2485), which would minimize PM and NO_X emissions from diesel trucks. Operational activities associated with the proposed project would involve periodic maintenance of the dog zone, pickleball and basketball courts, T-ball field, and landscaping and limited use of architectural coatings or solvents, as similarly assumed for the 2003 FEIR.

The offsite sensitive land uses include multi-family residential uses, located approximately 50 feet to the east of the project site. Although the regional emissions analysis (presented in Table 1 and Table 2, above) does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The very low level of PM2.5 emissions coupled with the short-term duration of construction activity (8 months) results in an overall low level of diesel particulate matter (DPM) concentrations in the project site. Furthermore, compliance with the CARB Airborne Toxic Control Measures anti-idling measure, which restricts heavy duty diesel vehicles from idling more than 5 minutes, further minimizes DPM emissions in the proposed project site. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with DPM emissions.

With respect to carbon monoxide (CO) hotspots, and as required by the current County of San Diego Guidelines for Determining Significance, CO hotspots may occur at signalized intersections that operate at or below Level of Service (LOS) E with peak-hour trips for that intersection exceeding 3,000 trips. The proposed project would contribute less than 110 daily trips and, therefore, would not contribute considerably to a CO hotspot. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with CO hotspots.

Construction Odors

Potential sources that may emit odors during construction activities include the combustion of diesel fuel in on- and off-road equipment and limited use of coatings (to paint the basketball and pickleball courts) as controlled by SDAPCD Rule 67.0.1. The proposed project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks. Through mandatory compliance with SDAPCD rules, no construction activities or materials are expected to result in other emissions, such as those leading to objectionable odors, affecting a substantial number of people. Since compliance with SDAPCD

[2] County of San Diego Transportation Study Guidelines, Section 2.2, Transportation Study Screening Criteria, defines a project as “small” if it has fewer than 110 daily vehicle trips. Available at: https://www.sandiegocounty.gov/content/dam/sdc/pds/SB743/COSD%20TSG%20FINAL.pdf

Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Furthermore, with respect to other emissions, criteria air pollutant emissions from those pollutants that are in attainment (CO and SO_2) would not exceed standards of significance as shown in Table 1. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with construction-related odors.

Operational Odors

The County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality* identifies potential odor impacts from geothermal power plants, petroleum production and refining, sewers, and sewage treatment plants.[3] According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SDAPCD or the neighboring SCAQMD as being typically associated with objectionable or nuisance odors. Therefore, the proposed project would not result in new or substantially more severe significant environmental impacts associated with operational odors.

Conclusion

The proposed project would be consistent with the findings of the 2003 FEIR with respect to air quality. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to air quality.

IV. BIOLOGICAL RESOURCES -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to biological resources including: adverse effects on any sensitive natural community (including riparian habitat) or species identified as a candidate, sensitive, or special status species in a local or regional plan, policy, or regulation, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; adverse effects to federally protected wetlands as defined by Section 404 of the Clean Water Act; interference with the movement of any native resident or migratory fish or wildlife species or with wildlife corridors, or impeding the use of native wildlife nursery sites; and/or conflicts with the provisions of any adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional or state habitat conservation plan, policies or ordinances?

YES	NO
☐	☒

[3] County of San Diego, 2007. *Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality*. https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf Accessed September 2021.

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.1.3, *Biological Resources,* of the 2003 FEIR, development of the Waterfront Park Master Plan would not result in significant impacts to biological resources because the project site was completely disturbed and did not contain any native vegetation or habitats. Additionally, there are no endangered, threatened, or rare plant or animal species protected by the County of San Diego or by State or Federal wildlife agencies on the project site. Furthermore, the project site does not contain any wetlands, rivers, streams, lakes, waters of the U.S., or any linear features that connect native vegetation or natural open space. The project site is not located in an area under the jurisdiction of a Habitat Conservation Plan, Natural Communities Conservation Plan, or any other approved local, regional or State habitat conservation plan, policies or ordinances. For these reasons, the 2003 FEIR determined that development of the Waterfront Park Master Plan would not result in impacts to biological resources.

Potential Impacts from the Proposed Project

The project site is currently landscaped with ornamental gardens and does not contain any endangered, threatened, or rare plant or animal species protected by the County of San Diego or by State or Federal wildlife agencies; any wetlands, rivers, streams, lakes, waters of the U.S., or any linear features that connect native vegetation or natural open space; and is not located in an area under the jurisdiction of a Habitat Conservation Plan, Natural Communities Conservation Plan, or any other approved local, regional or State habitat conservation plan, policies or ordinances. However, in order to develop the proposed project, the existing garden areas on the project site, which includes ornamental trees and shrubs, would be removed. While it is unknown at this time if the ornamental trees within the existing garden areas serve as habitat of nesting migratory birds, removal of the 11 ornamental trees could result in the loss of potential nesting habitat within the project site. However, the County would be required to comply with the Migratory Bird Treaty Act (MBTA). Additionally, the project would include the implementation of PDF-1, which would require that a preconstruction survey would be conducted to ensure that no nesting birds are present in the ornamental trees before removal. If nesting birds are identified, construction activities would be altered until safety of the birds is determined by a qualified biologist. Compliance with the MBTA and implementation of PDF-1 would ensure that impacts to nesting birds and associated nesting bird habitats would not occur. Therefore, development of the project would not result in impacts to biological resources, which is similar to the findings in the 2003 FEIR.

The proposed project would be consistent with the 2003 FEIR findings with respect to biological resources. The proposed project would not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to biological resources. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to biological resources.

V. CULTURAL RESOURCES -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to cultural resources including: causing a change in the significance of a historical or archaeological resource as defined in State CEQA Guidelines Section 15064.5; destroying a unique paleontological resource or site or unique geologic feature; and/or disturbing any human remains, including those interred outside of formal cemeteries?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.8, *Cultural and Paleontological Resources,* of the 2003 FEIR, development of the Waterfront Park Master Plan would result in potentially significant impacts to cultural and paleontological resources. The 2003 FEIR determined that potentially significant impacts to unknown cultural and paleontological resources could occur during ground disturbing activities and excavation for the parking garage. In addition, a portion of the western and southern facing landscaping of the historically significant CAC would be altered as a result of the Waterfront Park Master Plan. However, with incorporation of Mitigation Measures 2.8a through 2.8c identified in the 2003 FEIR (which would require archaeological monitoring, compliance with the Secretary of the Interior's Standards, and a Historic American Building Survey), impacts to cultural and paleontological resources were determined to be reduced to a less than significant level.

Potential Impacts from the Proposed Project

Since the certification of the 2003 FEIR, the project site has undergone mass grading and has been developed according to the Waterfront Park Master Plan. The mass grading was completed in accordance with the 2003 FEIR mitigation measures M.M. 2.8a through M.M. 2.8c. Construction of the proposed project would include ground-disturbing activities, such as surficial grading, where the depth of ground disturbance would be limited to a maximum depth of 10 feet and, therefore, would not encounter native soils due to the previous mass grading of the project site. Therefore, construction activities associated with the proposed project would not have the potential to encounter or inadvertently destroy an unknown cultural or paleontological resource. Furthermore, the existing ornamental gardens are not considered to be a historical feature of the CAC building, where removal would affect its historic designation. For these reasons, development of the project would result in less than significant impacts to cultural, historic, or paleontological resources.

The proposed project would be consistent with the 2003 FEIR findings with respect to cultural resources. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to cultural resources. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to cultural resources.

VI. GEOLOGY AND SOILS -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in one or more effects from geology and soils including: exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides; result in substantial soil erosion or the loss of topsoil; produce unstable geological conditions that will result in adverse impacts resulting from landslides, lateral spreading, subsidence, liquefaction or collapse; being located on expansive soil creating substantial risks to life or property; and/or having 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?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.2, *Geology and Soils,* of the 2003 FEIR, development of the Waterfront Park Master Plan would result in potentially significant impacts to geology and soils. Impacts are associated with unstable soils, soil settlement, lateral spreading, and dewatering that could occur during excavation, construction and use of the underground parking structure. With the incorporation of Mitigation Measure 2.2, which requires compliance with all geotechnical consultant recommendations for soil preparation, construction grading and compaction, foundation design, and onsite construction monitoring from the Updated Geotechnical Investigation (Geocon, Inc., 2002), impacts to geology and soils were determined to be less than significant.

Potential Impacts from the Proposed Project

Construction of the proposed project would require limited surficial grading and excavation to a maximum depth of 10 feet, where soils would be balanced onsite. The project site is relatively flat and, therefore, there would be minimal surficial grading and excavation associated with the proposed project. Construction activities would be regulated by a project-specific Stormwater Pollution Prevention Plan (SWPPP) required during construction in compliance with the National Pollutant Discharge Elimination System (NPDES) general construction permit (Construction General Permit Order 2009-0009-DWQ). The SWPPP would address erosion control and sedimentation issues related to grading activities during construction. Additionally, the design and construction of the project would be required to comply with the California Building Code and the County Building Code. While the project itself does not include structures, these regulations are applicable in terms of the structural design of fences and light poles. These applicable regulations would ensure all proposed facilities are developed to withstand seismic and geological events. Therefore, impacts related to geology and soils would be less than significant, similar to the findings of the 2003 FEIR.

The proposed project would be consistent with the 2003 FEIR findings with respect to geology and soils. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to geologic resources. There are no changes in circumstances under which the project

is undertaken and/or new information of substantial importance that cause one or more effects to geologic resources.

VII. HAZARDS AND HAZARDOUS MATERIALS -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in one or more effects from hazards and hazardous materials including: creation of a significant hazard to the public or the environment through the routine transport, storage, use, or disposal of hazardous materials or wastes; creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; production of hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; location on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 creating a hazard to the public or the environment; location 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; within the vicinity of a private airstrip resulting in a safety hazard for people residing or working in the project area; impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; exposure of 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; result in a significant risk of accidental explosion or release of hazardous substances; interfere with applicable emergency response plans; and/or increase potential for fires in areas with flammable vegetation or expose people or the property to fire hazards, flooding, or any other significant health of safety hazard?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in the 2003 FEIR Section 2.6, *Hazards and Hazardous Materials,* development of the Waterfront Park Master Plan would result in potentially significant impacts to hazards and hazardous materials. Impacts are associated with the potential for disposal of hazardous materials, such as soils excavated from the site and imported that could potentially be contaminated, location on or near known contamination sources such as leakage from underground storage tanks (LUSTs) proximate to the site or other contaminants known to impact the groundwater beneath the site, dewatering of contaminated groundwater, and the potential release of hazardous materials such as asbestos during demolition of the Askew Building. However, with incorporation of Mitigation Measures 2.6a, 2.6b, 2.6c, and 2.6d, which require sampling of soils for contamination, proper disposal of such materials, adherence to discharge requirements from contaminated locations and dewatering per the City and NPDES, and a pre-demolition asbestos survey and associated removal consistent with applicable regulations, impacts associated with hazards and hazardous materials would be reduced to a less than significant level.

Potential Impacts from the Proposed Project

Construction of the proposed project would require limited surficial grading and excavation to a maximum depth of 10 feet, where soils would be balanced onsite. As detailed within the 2003 FEIR (page 2.3-2), groundwater in the project vicinity is located at a depth of approximately 6 to 20 feet below the ground surface. Fluctuations in groundwater elevations may occur due to irrigation, precipitation, tidal fluctuations, and other factors. As the project would include excavation to a maximum of 10 feet, there is the possibility of construction workers coming into contact with groundwater, which could require dewatering activities. As detailed within the 2003 FEIR, groundwater beneath the project site is impacted with gasoline, diesel and fuel oil, and methyl tertiary-butyl ether (MTBE). The proposed project would be required to comply with all applicable federal, State, and local laws and regulations pertaining to the handling, storage, transport, disposal, and use of hazardous materials, including but not limited to the Resource Conservation and Recovery Act (RCRA), the California Division Occupational Safety and Health Administration (Cal/OSHA), and the California Fire Code. Additionally, due to the potential for construction workers to be in contact with potentially contaminated groundwater and soil, the project would incorporate and comply with Mitigation Measure 2.6a from the 2003 FEIR to reduce impacts related to hazards and hazardous materials by sampling excavated soils. As dewatering activities could be required, dewatering at the site may potentially draw contaminants in groundwater from off-site sources towards the site. Therefore, the project would be required to implement Mitigation Measures 2.6b and 2.6c from the 2003 FEIR, which would ensure dewatering activities meet discharge requirements. The proposed project would not involve demolition of any buildings that could contain hazardous (or contaminated) substances; therefore, Mitigation Measure 2.6d would not be applicable. The proposed project would not create a significant hazard to the public or the environment due to implementation of these mitigation measures.

While the project site is located within the Lindbergh Field Master Runway 13/31 Approach Overlay Zone, the project site is not within the runway protection zone or obstruction control criteria. Since the project components are relatively low-laying, the proposed project would not have any impact on airport operations nor would the airport cause any hazards to people using the park. Therefore, development of the project would not result in impacts related to safety hazards for people in the project area.

The proposed project is within the jurisdiction of the San Diego County Operational Area Emergency Plan, City of San Diego Emergency Operations Plan, and City of San Diego Major Incident Response Plans. Implementation of the project would not conflict or obstruct the effectiveness of any of these emergency plans. In addition, due to the proposed project's location in an urban area, the potential to expose people or property to a significant risk of loss, injury, or death involving wildland fires is considered to be less than significant. Similarly, because the project site is in an urban environment and is not within any mapped dam inundation area, there would be no risk of flooding caused by dam failure. For these reasons, less than significant impacts related to emergency plans and risks of wildfires and dam failures would occur with implementation of the project.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to hazards and hazardous materials. The project does not propose any changes that cause any

new significant environmental effects or a substantial increase in the severity of previously identified significant effects from hazard and hazardous materials. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects from hazards and hazardous materials.

Applicable 2003 FEIR Mitigation Measure for the proposed project:

MM 2.6a: Disposal of Hazardous Materials. The appropriate sampling of excavated and imported soil to determine the presence of contamination shall be completed prior to the disposal of such materials. Should excavated or imported materials be found to be contaminated, appropriate measures shall be undertaken to ensure the proper disposal of such materials.

MM 2.6b: Location on or Near Known Contamination Sources. To mitigate for contaminated location and dewatering impacts, effluent derived from dewatering activities shall meet discharge requirements for National Pollution Discharge Elimination System (NPDES) permitting and/or City of San Diego sewer system discharge. Treatment shall be implemented during dewatering and the discharge must be directed to the City of San Diego sewer system.

MM 2.6c: Dewatering. See Mitigation Measure 2.6b.

VIII. HYDROLOGY AND WATER QUALITY -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to hydrology and water quality including: violation of any waste discharge requirements; 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; substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion, siltation or flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems; provide substantial additional sources of polluted runoff; otherwise degrade water quality; 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; place within a 100-year floodplain area structures which would impede or redirect flood flows; 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/or inundation by seiche, tsunami, or mudflow?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.3, *Hydrology and Water Quality,* of the 2003 FEIR, development of the Waterfront Park Master Plan would result in less than significant impacts with mitigation measures incorporated. Implementation of standard construction measures and regulatory conformance would avoid or reduce potential hydrology and water quality impacts during construction, with the exception of the potential for discharging contaminated groundwater. The 2003 FEIR identified that potential direct impacts would occur associated with the dewatering of

the groundwater beneath the site during construction as the groundwater was determined to be contaminated with gasoline, diesel and fuel oil, MTBE, and other pollutants at levels above that allowed for discharge to the San Diego Bay. However, with incorporation of Mitigation Measure 2.3 and compliance with City procedures and regulations for such discharges to the satisfaction of the Director of the Metropolitan Wastewater Department, impacts associated with hydrology and water quality were determined to be less than significant.

Potential Impacts from the Proposed Project

Since certification of the 2003 FEIR, there has been a change in circumstances regarding municipal stormwater regulations. The San Diego Regional Water Quality Control Board issued a new Municipal Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) on discharges from municipal separate storm water sewer systems (MS4). The new MS4 Permit was adopted by the Regional Board on May 8, 2013, was amended on November 18, 2015, and took effect on February 26, 2016. The MS4 Permit expired on June 27, 2018 but remains in effect under an administrative extension until its reissued by the San Diego Regional Water Quality Control Board. In order to comply with all applicable stormwater regulations, the activities proposed under this project would be subject to enforcement under permits from the San Diego Regional Water Quality Control Board and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance No. 10410 and all other applicable ordinances and standards for the life of this permit.

The project proposes development of an active recreational park on a previously mass graded passive recreational project site. Light surficial grading of the site would be required; however, ground disturbance would be limited to 10 feet in depth. As detailed within the 2003 FEIR (page 2.3-2) and as discussed above in Section VII, groundwater in the project vicinity is located at a depth of approximately 6 to 20 feet below the ground surface. Fluctuations in groundwater elevations may occur due to irrigation, precipitation, tidal fluctuations, and other factors. As the project would include excavation to a maximum of 10 feet, there is the possibility of construction workers coming into contact with groundwater, which could require dewatering activities. Groundwater beneath the site has been found to contain levels of arsenic, copper, lead, nickel, and zinc above allowable concentrations for discharge into the San Diego Bay. Although dewatering during construction would be completed in accordance with the requirements of the Regional Water Quality Control Board, dewatering effluent could degrade water quality discharged without treatment directly into the San Diego Bay. Therefore, implementation of Mitigation Measure 2.3 would be required, which would ensure that dewatering discharge meets applicable requirements, similar to the 2003 FEIR.

As part of the project, an approximately 900 square foot bio-swale would be constructed within the preserved existing garden area located north of the proposed T-ball field. A drainage flow line would be constructed along the northern boundary of the site, extending from the proposed bio-swale to the existing stormwater system located to the northwest of the proposed off-leash dog zone. After completion of construction, the proposed bio-swale and drainage flow line would treat water runoff from the park prior to any runoff entering the San Diego Bay through the existing stormwater system. Additionally, since the proposed project would include ground disturbance on a project site greater than one acre, a SWPPP would be required under the NPDES MS4 Permit. The SWPPP would include Best Management Practices (BMPs), which

would reduce the alteration of drainage patterns and minimize runoff, erosion, and flooding. Therefore, with implementation of Mitigation Measure 2.3, construction of the proposed bio-swale and drainage flow line, and with implementation of a project-specific SWPPP, impacts related to hydrology and water quality would be less than significant, similar to the findings of the 2003 FEIR.

The proposed project would be consistent with the 2003 FEIR findings with respect to hydrology and water quality. The project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to hydrology and water quality. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to hydrology and water quality.

Applicable 2003 FEIR Mitigation Measure for the proposed project:

MM 2.3: Dewatering Water Quality. Dewatering discharges from the site excavations shall be discharged into the San Diego sewer system, in accordance with City procedures and regulations for such discharges, to the satisfaction of the Director of the Metropolitan Wastewater Department. Pretreatment of the discharges shall be completed if required by the Department.

IX. LAND USE AND PLANNING -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to land use and planning including: conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect; disruption or division of the physical arrangement of an established community; substantial or extreme land/water use incompatibility with adjacent or nearby existing and proposed land uses; substantial reduction in the amount of Commercial Recreation or Park land uses; conflict with established recreational, educational, religious, or scientific uses of the area; contain structures exceeding the limits identified in the City of San Diego Approach Overlay Zone; and/or conflict with any applicable habitat conservation plan?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Master Plan 2003 FEIR

As discussed in Section 2.1, *Land Use and Planning,* of the 2003 FEIR, impacts related to land use and planning would be less than significant with development of the Waterfront Park Master Plan. The Waterfront Park Master Plan was designed to be consistent with all applicable land use plans and regulations including the County's Resource Protection Ordinance, the County's General Plan, the City of San Diego General Plan and Progress Guide, the City of San Diego Redevelopment Plan, the City of San Diego Centre City Community Plan and Planned District Ordinance, the City of San Diego Little Italy Focus Plan, the California Coastal Act, the San Diego Unified Port District Port Master Plan, the Lindbergh Field Land Use Plan, and the City of San Diego Airport Approach Overlay Zone.

Potential Impacts from the Proposed Project

The project site is designated for Park, Open Space, and Recreation uses in the San Diego General Plan.[4] The project site is located within the Downtown Community Plan, formerly referred to as the Centre City Community Plan and is designated as Park/Open Space. Areas designated as Park/Open Space are intended primarily for public parks and open spaces. Below-ground parking facilities and small cafes are also permitted, subject to performance standards.[5] The proposed project falls entirely within the boundaries of the North Embarcadero Alliance Visionary Plan (NEAVP) and is designated for the creation of a pedestrian-oriented public precinct. The proposed project falls within the Coastal Zone, and the site has been included in both the City of San Diego's Downtown Community Plan, certified Local Coastal Program (LCP), and the Coastal Commission certified SDUPD Port Master Plan. Coastal Development Permit (CDP) approval authority is divided along jurisdictional boundaries, running approximately parallel to Harbor Drive, just to the east of California Street. The proposed project also falls within the Centre City Planned District Park/Open Space base zone.

The project would change the use of the site from a passive recreational park to an active recreational park. As no structures would be built, the bulk, scale and lot coverage of the proposed project would be similar to existing conditions, which is compatible with other Park, Open Space, and Recreation uses in the San Diego General Plan, Downtown Community Plan, and Centre City Planned District base zone areas. The proposed project is consistent with General Plan, Community Plan, and Centre City Planned District base zone's goals, policies, and actions. The project would contribute to the establishment of the Downtown Community Plan area and would not physically divide an established community. The proposed T-ball field, pickleball courts, and dog zone would include fencing; however, the fencing would be a maximum of 10 feet in height and would be well below the airport operational height limitations of 200 feet. In addition, the project would be consistent with the Waterfront Park Master Plan as the overall use of the project site as a park would not change from its existing use as designated by the Waterfront Park Master Plan. For these reasons, impacts related to land use and planning would be less than significant, similar to the findings of the 2003 FEIR.

The proposed project would be consistent with the 2003 FEIR findings with respect to land use and planning. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to land use and planning. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to land use and planning.

X. MINERAL RESOURCES -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to mineral resources including: the loss of availability of a known mineral resource that would be of value to the region

[4] City of San Diego, 1992. General Plan Land Use and Street System Map. Last updated June 29, 2015.
[5] Centre City Development Corporation, 2006. San Diego Downtown Community Plan. Adopted April 2006.

and the residents of the state; and/or loss of locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, development of the Waterfront Park Master Plan would not result in any impacts to mineral resources as the project site is not located within a significant mineral resource area. In addition, there are no known past or present mining activities at the site. There would be no loss of availability of a known mineral resource that would be of value to the region with implementation of the Waterfront Park Master Plan. Therefore, the 2003 FEIR determined that no impact to mineral resources would occur from implementation of the Waterfront Park Master Plan.

Potential Impacts from the Proposed Project

According to the Department of Conservation, the project site is designated as MRZ-1, which means the project site has no significant mineral deposits, or there is little likelihood that mineral deposits are present.[6] For this reason, implementation of the proposed project would not have the potential to impact an existing or potential mineral resource in San Diego County. Similar to the findings of the 2003 FEIR, development of the proposed project would not cause the loss of availability of known mineral resources and no impact would occur.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to mineral resources. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to mineral resources. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to mineral resources.

XI. NOISE -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in one or more effects from noise including: 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; exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels; a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; for projects 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, or for projects within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

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6 Department of Conservation (DOC), Division of Mines and Geology, 1996. Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region, 1996.

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.7, *Noise*, of the 2003 FEIR, development of the Waterfront Park Master Plan would create a potentially significant noise impacts related to traffic noise. Due to existing traffic noise levels in the project area, the existing environment was determined to not be compatible with the proposed park use. Mitigation Measure 2.7 included the installation of a 7-foot sound barrier along Pacific Highway, North Harbor Drive, and Grape Street to reduce traffic noise levels reaching the park. It was determined that mitigation would not be feasible because it would 1) conflict with the goals of the Master Plan; 2) cost of the mitigation; and 3) the wall would inhibit pedestrians from accessing the public park and open space, and impacts to the park use would be significant and unavoidable. While the 2003 FEIR did not discuss the effects of the Waterfront Park Master Plan related to vibration, this analysis has been included below for informational purposes.

Potential Impacts from the Proposed Project

Existing Conditions

The project site is bounded by Grape Street to the north, Pacific Highway to the east, the CAC building to the south, and open space to the west. Hotel and residential uses are located on the east of Pacific Highway. To quantify the existing noise environment of the project site, short-term (20-minute) noise measurements were conducted at locations M1 through M3, as shown on Figure 7. Ambient sound measurements were conducted on September 2, 2021, to characterize the existing noise environment in the project site vicinity.

The ambient noise measurements were conducted using a Larson-Davis Model LxT Sound Level Meter (SLM). The Larson-Davis LxT SLM is a Type 1 standard instrument, as defined in the American National Standard Institute (ANSI) S1.4. The SLMs were calibrated and operated according to manufacturer specifications. The SLM microphone was placed at a height of 5 feet above ground level.

These monitoring locations provide a representative characterization of the existing noise conditions within the vicinity of the project site. The results of the ambient noise measurement data are summarized in Table 3.

Path: U:\GIS\GIS\Projects\17xxxx\D170240_47_TO 47 Waterfront Park\03_MXDs_Projects\Noise.aprx, dkaneshiro 11/9/2021

SOURCE: ESRI, 2018. ESA, 2021.

Waterfront Park Active Recreation Project

Figure 7
Noise Measurement Locations and Sensitive Receptors

ESA

TABLE 3
SUMMARY OF AMBIENT NOISE MEASUREMENTS

Measurement Location	Monitoring Date(s)	Start Time	End Time	L_{eq}
M1	9/2/2021	7:06 AM	7:27 AM	64.5
M2	9/2/2021	7:31 AM	7:52 AM	63.9
M3	9/2/2021	7:59 AM	8:20 AM	62.6

SOURCE: ESA, 2021.

Construction Noise

On-Site Construction Noise

Construction of the project is anticipated to occur over a duration of 8 months. Project construction activities would be subject to San Diego County Code Section 36.408, which limits noise-generating construction activity to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday. Construction of the project would require the use of heavy equipment at the project site. To characterize construction-period noise levels, the average (hourly Leq) noise level associated with construction is estimated based on the quantity, type, and usage factors for each type of equipment expected to be used and are typically attributable to multiple pieces of equipment operating simultaneously.

Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. The project's estimated construction noise levels were calculated for a scenario in which all pieces of construction equipment were assumed to be operating simultaneously. This is considered a worst-case evaluation as the project would typically use fewer overall equipment simultaneously at any given time, and as such would likely generate lower noise levels than reported herein. Table 4 presents the estimated total combined noise level for the project construction equipment at each sensitive receptor. As shown, project construction would not result in noticeable increases in ambient noise levels and would not exceed the threshold of 75 dBA Leq over a period of 12 hours established in the 2003 FEIR. Additionally, best practices would be employed by the construction contractor during all active construction periods to ensure that construction noise is minimized. Best management practices would include: properly maintaining all construction equipment, including mufflers and ancillary noise abatement equipment; ensuring that all mobile and stationary noise-producing construction equipment used on the project site is regulated for noise output by local, state, or federal agency compliance; schedule high noise-producing activities during periods that are least sensitive; switching off construction equipment when not in use; and positioning stationary construction equipment, such as generators, as far away as practical from noise-sensitive receptors. Therefore, on-site construction noise impacts would be less than significant.

TABLE 4
ESTIMATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

Sensitive Receptor[2]	Ambient Noise Level (dBA Leq)	Estimated Construction Noise Level (dBA Leq)	Threshold[1]	Exceeds Threshold?
R1 – Marina Inn and Suites	64.5	65	69.5	No
R2 – Multi-Family Residential	64.5	65	69.5	No
R3 – Residence Inn	63.9	62	68.9	No
R4 – Pacific Inn Hotel & Suites	62.6	61	67.6	No

SOURCE: ESA, 2021

1 Threshold is 3 dBA over adjusted ambient noise level

2 R1 and R2 represented by ambient measurement M1.
R3 represented by ambient measurement M2.
R4 represented by ambient measurement M3.

Off-Site Construction Noise

Under worst case conditions, there would be approximately 2 one-way haul truck trips (1 haul truck), 4 one-way vendor truck trips (2 vendor trucks), and 10 one-way workers' trips (5 passenger vehicles) per day between the hours of 7:00 a.m. and 7:00 p.m. from Monday through Friday. Due to the location of the project site, construction traffic may travel by sensitive uses to access the project site. Noise associated with construction truck trips were estimated using the FHWA Traffic Noise Model (TNM) Version 2.5 method described in FHWA Traffic Noise Model Technical Manual (FHWA 1998) and based on the maximum number of truck and passenger trips in a day. The results of the analysis indicate that the Project construction trips would generate noise levels of approximately 53.4 dBA Leq (53.7 dBA CNEL) along adjacent roadways. This noise level is below the ambient conditions in the project area, which range from 62.6 to 64.5 dBA Leq. Additionally, the construction trips are temporary in nature. Therefore, off-site construction traffic noise impacts would be less than significant.

Operational Noise

On-Site Operational Noise

The proposed project would convert an existing passive recreational area to an active recreational area. The project site would be separated into various components associated with different recreational activities, including a dog zone with agility equipment, basketball court, pickleball courts, T-ball field, table tennis area, and an outdoor fitness area. All proposed recreational facilities would be available for pick-up games/use and would not be able to be reserved. It is not anticipated that any spectator events drawing large crowds would occur at the project site and no amplified sound systems would be included at the project site. All personal amplified sound equipment would be subject to San Diego County Code Section 36.414, which prohibits the use of loudspeakers and sound amplifiers in any park or public property in a manner

that would violate the provisions of the noise ordinance. In addition, given the distance between the project site and noise-sensitive uses located across Pacific Highway of approximately 100 feet and the masking effect of traffic noise on Pacific Highway, noise levels from operation of the proposed project, including, but not necessarily limited to, conversation, bouncing balls, and dogs barking would sufficiently attenuate to levels that would not exceed ambient conditions that is dominated by traffic noise. Therefore, impacts related to on-site operational noise would be less than significant.

Traffic Noise

The trip generation analysis in the previously certified 2003 FEIR used a trip generation rate of 60 average daily trips per acre, which was determined based on the City of San Diego's *Trip Generation Manual* (September 1998).[7] The City last updated the *Trip Generation Manual* in May 2003, and the trip generation rate for a park use by the Bay remains at 60 average daily trips per acre. The *Trip Generation Manual* does not distinguish between active and passive park uses and, further, the project would not expand the size of the project site evaluated in the previously certified 2003 FEIR; therefore, the proposed active park uses would not result in additional vehicle trips, and impacts related to traffic noise would be less than significant.

The 2003 FEIR determined that traffic noise levels along adjacent roadways would expose the project (park use) to noise levels exceeding 65 dBA CNEL, which would not be in conformance with the County's Noise Compatibility Guidelines.[8] Traffic noise levels have not decreased since certification of the 2003 FEIR, and the project site is still subject to noise levels that are not compatible with park use. As discussed in the 2003 FEIR, sound walls would not be feasible because sound walls would block access to the park. Therefore, the existing environment's impact on the project site would, consistent with the 2003 FEIR, be significant and unavoidable

Aircraft Noise

As discussed in the 2003 FEIR, the project site is located within the Airport Influence Area of the Lindbergh Field and within the 60 dBA CNEL portion of the noise contour. A noise level of 60 dBA CNEL is compatible with the park used anticipated in the 2003 FEIR and the proposed active park use, according to the County's Noise Compatibility Guidelines.[9] Impacts would be less than significant.

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7 While not used to calculate trip generation in the previously certified EIR, the San Diego Association of Governments (SANDAG) also provides trip generation rates for land uses at the County-level in the *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002). The SANDAG trip generation rate for a City Park is 50 average daily trips per acre, or 10 trips less than the City's trip generation rate. Therefore, the analysis of transportation impacts using the City's trip generation rate represents a more conservative estimate of project impacts.

8 County of San Diego. 2011. General Plan Noise Element. Table N-1 Noise Compatibility Guidelines.

9 County of San Diego. 2011. General Plan Noise Element. Table N-1 Noise Compatibility Guidelines.

Vibration

Groundborne vibration from development is primarily generated from the operation of construction equipment and from vehicle traffic. The project would be constructed using typical construction techniques.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction/demolition activities, such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. If traffic, typically heavy trucks, does induce perceptible building vibration, it is most likely an effect of low-frequency airborne noise or ground characteristics.[10] Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Heavy trucks would generate 0.076 in/sec PPV at 25 feet. The vibration velocity of 0.076 in/sec PPV at 25 feet attenuates to 0.027 in/sec PPV at 50 feet.[11]

Groundborne vibration propagates from the source through the ground to adjacent off-site buildings by surface waves. Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source (project construction activities). Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. The vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Vibration levels for potential structural damage is described in terms of the peak particle velocity (PPV) measured in inches per second (in/sec).[12]

Construction activities on the project site could generate ground-borne vibration from the operation of a plate compactor. The nearest hotel and residential structures are located approximately 100 feet to the east of the Project boundary, and the nearest historic structure (the CAC Building) is located approximately 100 feet to the south of the Project boundary. Vibration levels generated by typical heavy equipment, measured at 100 feet and 25 feet, are identified in Table 5, *Vibration Source Levels for Construction* Equipment, in terms of peak particle velocity (PPV), and expressed in inches per second (in/sec).

TABLE 5
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Approximate PPV (in/sec) at 25 feet	Approximate PPV (in/sec) at 100 feet
Plate Compactor	0.210	0.026

NOTE: Reference noise level for vibratory roller has been utilized to estimate vibration impacts from use of a plate compactor.

SOURCE: FTA 2018.

[10] Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. 2018
[11] Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. 2018
[12] Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment Manual*. 2018

Caltrans' vibration threshold for potential structural damage for off-site residential buildings is 0.5 in/sec PPV and 0.12 in/sec PPV for structures extremely susceptible to vibration (such as historic buildings).[13] At 100 feet from the project construction area, the operation of a plate compactor would generate vibration levels of up to 0.026 in/sec PPV, which is less than the Caltrans threshold for structural damage for both residential and historic uses. Furthermore, construction would only occur during permitted construction hours and would be temporary. Therefore, construction impacts would be less than significant.

Project operation would not include equipment or activities that would generate perceptible operational vibration levels. Therefore, there would be no impact during project operation.

Conclusion

The proposed project would be consistent with the 2003 FEIR with respect to noise. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to noise and vibration. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to noise and vibration.

XII. POPULATION AND HOUSING -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in one or more effects to population and housing including displacing substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, impacts related to population and housing would not occur with implementation of the Waterfront Park Master Plan. The 2003 FEIR found that there would be no extension of utilities or roads into previously underserved areas and is consistent with the adopted Centre City Community Plan and NEAVP. The project would not result in any substantial growth and would serve as a recreational area for the local community.

Potential Impacts from the Proposed Project

Development of the proposed project would replace the existing passive recreational park with an active recreational park within the larger Waterfront Park area. Since there is currently no housing onsite, implementation of the project would not displace any existing housing or substantial numbers of people nor cause the need for new housing to be constructed elsewhere. In addition, the project would serve the current residents of the area and would not attract a

[13] California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013

substantial amount of new residents to the surrounding area; therefore, the project would not directly or indirectly induce population growth. No impact to population and housing would occur.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to population and housing. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to population and housing. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to population and housing.

XIII. PUBLIC SERVICES -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in one or more substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: fire protection, police protection, schools, parks, or other public facilities?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, impacts related to public services would not occur with implementation of the Waterfront Park Master Plan. The project site would be adequately served by City Police Department and City Fire Department and would not adversely impact emergency call response times. As a recreational land use, there would be no impact to schools and would not contribute to school enrollment. The project site is an infill location covered by existing public services including solid waste disposal and a hazardous materials plan.

Potential Impacts from the Proposed Project

While the project site may have more visitors compared to existing conditions due to the proposed active recreational components, all public service providers would continue to serve the project site, as well as the larger Waterfront Park, with development of the project. Implementation of the project would not result in increased response times for police or fire services. Furthermore, the proposed project would not contribute to an increase in school enrollment or contribute adverse impacts to landfill capacity since the use of the project site would not change from existing conditions. Therefore, no impact to public services would occur.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to public services. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to public services. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to public services.

XIV. RECREATION -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in an increase in 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; or that include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.2, *Effects Found Not to be Significant During Initial Study,* of the 2003 FEIR, impacts related to recreation would not occur with implementation of the Waterfront Park Master Plan. The 2003 FEIR found that the provision of additional recreational facilities, including public greenspace, gardens, a playground, and a promenade, as part of the Waterfront Park Master Plan would provide additional recreational facilities in the area and would not require construction or expansion of other recreational facilities that may adversely impact the environment.

Potential Impacts from the Proposed Project

The proposed project would include a dog zone, pickleball and basketball courts, a T-ball field, outdoor fitness equipment, table tennis, and would preserve the existing garden space along Pacific Highway. While the project itself consists of new recreational components, impacts are analyzed throughout this Addendum for adverse physical effects on the environment. With implementation of mitigation measures mentioned throughout this document, the project's proposed recreational facilities would not have adverse effects on the environment greater than analyzed under the FEIR. While the project would change the type of recreational facilities located on the project site, the project site would continue to serve as a recreational use in the area as it does under existing conditions. Therefore, development of the project would provide additional recreational facilities and would not cause the need for new or expanded recreational facilities elsewhere in the area. No impact to recreational resources would occur.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to recreation. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to recreation. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to recreation.

XV. TRANSPORTATION/TRAFFIC -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause effects to transportation/traffic including: an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; exceedance, either individually or cumulatively, of a level of service standard established by the county congestion management agency for designated roads or highways; a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; substantial increase in hazards due to a design feature (e.g.,

sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); inadequate emergency access; inadequate parking capacity; and/or a conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 2.5, *Transportation/Circulation,* of the 2003 FEIR, potentially significant impacts associated with transportation and circulation would occur with implementation of the Waterfront Park Master Plan. A potentially significant impact was identified with respect to parking for County employees who work at the CAC because the parking replacement program for County employees who continue to work at the CAC was not committed at the time the 2003 FEIR was certified. With the incorporation of mitigation measures including preparation and implementation of a Parking Plan for the CAC that conforms to the parking demand analysis prepared by LLG Engineers (2002), impacts associated with transportation and circulation were determined to be less than significant.

Potential Impacts from the Proposed Project

Project Trip Generation

The trip generation analysis in the previously certified EIR used a trip generation rate of 60 average daily trips per acre, which was determined based on the City of San Diego's *Trip Generation Manual* (September 1998).[14] The City last updated the *Trip Generation Manual* in May 2003, and the trip generation rate for a park use by the Bay remains at 60 average daily trips per acre. The *Trip Generation Manual* does not distinguish between active and passive park uses. Since the project would not expand the size of the project site evaluated in the previously certified 2003 FEIR, and the proposed active park uses are consistent with the park uses evaluated in the previously certified 2003 FEIR from a trip generation perspective, no additional vehicle trips compared to existing levels would be generated by the proposed project.

Site Access Analysis

The project proposes to construct new pedestrian walkways that would provide access internally throughout the site. One pedestrian walkway would be ADA-accessible and would be located near the north of the project site at the dog zone entrance. An additional walkway would be constructed around the north eastern portion of the T-ball field. An existing walkway between the proposed dog zone and pickleball courts would remain in place. Additionally, an existing walkway that currently bisects the proposed basketball court would remain in place.

[14] While not used to calculate trip generation in the previously certified EIR, the San Diego Association of Governments (SANDAG) also provides trip generation rates for land uses at the County-level in the *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002). The SANDAG trip generation rate for a City Park is 50 average daily trips per acre, or 10 trips less than the City's trip generation rate. Therefore, the analysis of transportation impacts using the City's trip generation rate represents a more conservative estimate of project impacts.

There are currently no parking spaces within the project site. The project does not propose to construct any additional parking spaces or remove any exiting parking spaces and would continue to utilize existing on-street public parking spaces adjacent to and near the project site, as well as the existing public parking garage accessed from West Ash Street for park users. Furthermore, since the project would not generate any additional vehicle trips, it would not increase the demand for vehicular parking as compared to the previously certified EIR.

The project does not propose any new vehicular access. Because no new driveways to/from the public roadway network would be constructed as part of the project, the project would not introduce any potentially hazardous conditions for vehicles, pedestrians, or bicyclists accessing the project site.

CEQA Guidelines Section 15064.3, Subdivision (b)

The previously certified EIR did not evaluate consistency with CEQA Guidelines Section 15064.3, Subdivision (b), as that criterion was introduced as part of the December 2018 update to the CEQA Guidelines, which occurred after the Final Supplemental EIR was certified. While the County has not adopted its own VMT thresholds or VMT screening criteria, the City of San Diego, where the proposed project is located, has adopted VMT thresholds, which are presented here for informational purposes. The City published its Transportation Study Manual (TSM) in June 2020, which updated transportation significance thresholds and transportation impact analysis procedures in compliance with this new statewide guidance (City of San Diego, 2020).

According to the TSM, a detailed transportation VMT analysis is required for all land development projects, except those that meet one of eight designated screening criteria. A project that meets at least one of the screening criteria would be presumed to result in a less-than-significant VMT impact due to the project characteristics and/or location. The proposed project would meet Criterion 1 – Small Project and Criterion 4 – Locally Serving Public Facility. Criterion 1 states that a project generating less than 300 daily vehicle trips would result in a less-than-significant VMT impact. As discussed above, the proposed project would not generate any new vehicle trips as compared to the project evaluated in the previously certified 2003 FEIR. Criterion 4 states that public facilities that serve the surrounding community including transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices would result in a less-than-significant VMT impact. Since the proposed project meets screening Criteria 1 and 4, the proposed project would result in a less-than-significant impact related to CEQA Guidelines Section 15064.3.

In addition to the analysis of VMT impacts based on the City's TSM, described above, an analysis of VMT impacts based on the State's guidance was also conducted. The Technical Advisory on Evaluating Transportation Impacts in CEQA (Office of Planning and Research, 2018) is the State's guiding document with respect to VMT thresholds and VMT screening criteria. While the locally serving public facilities land use category is not specifically identified in the Technical Advisory, it does state the following for local-serving land uses, such as local-serving retail:

> "Because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's

> transportation impacts. By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact."

Similar to local-serving retail, local serving public facilities would redistribute trips and would not create new trips. Thus, longer trips that would have been made to/from a park with active uses further from the project site would be shortened as those uses would now be available close by. As such, it is anticipated that the proposed project would redistribute existing trips made to other parks in the region with active uses and thus would reduce VMT at both the local and regional level. Therefore, the less-than-significant impact determination related to CEQA Guidelines Section 15064.3 using the State's guidance would be the same as the previously described impact determination using the City's TSM.

Summary

The proposed project would be consistent with the findings of the 2003 FEIR with respect to transportation. The proposed project does not propose any changes that would cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to transportation. There are no changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause one or more effects to transportation.

XVI. UTILITIES AND SERVICE SYSTEMS -- Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that cause effects to utilities and service systems including: exceedance of wastewater treatment requirements of the applicable Regional Water Quality Control Board; require or result in the construction of new water or wastewater treatment facilities, new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; require new or expanded entitlements to water supplies or new water resources to serve the project; result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or noncompliance with federal, state, and local statutes and regulations related to solid waste?

YES	NO
☐	☒

Summary of Conclusions in the Waterfront Park Master Plan 2003 FEIR

As discussed in Section 6.1, *Effects Found Not to be Significant as Part of the EIR Process,* of the 2003 FEIR, development of the Waterfront Park Master Plan was determined to result in less than significant impacts related to utilities and service systems. Since the project site is already served by existing utilities and service systems, implementation of the Waterfront Park Master Plan would not substantially increase demand on these existing utilities and service systems,

including domestic potable water, wastewater and sewer systems, and solid waste and hazardous materials disposal.

Potential Impacts from the Proposed Project

The project site for the proposed project is currently served by existing utilities that also serve the larger Waterfront Park area and would continue to serve the project site with development of the proposed project. The project would replace the existing passive recreational area with an active recreational park, where the overall use of the project site would continue to be a public recreational use. Development of the project would not greatly increase the amount of potable water, irrigation water, or electricity generated on the project site as the use of the site would remain similar. Similar to existing conditions, the proposed project would not include restrooms, thus wastewater would not be generated at the site. Therefore, implementation of the proposed project would result in less than significant impacts to utilities and service systems, similar to the findings of the 2003 FEIR for the Waterfront Park Master Plan.

The proposed project would be consistent with the findings of the 2003 FEIR with respect to utilities and service systems. The proposed project does not propose any changes that cause any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to utilities and service systems. There are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that cause one or more effects to utilities and service systems.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE: Since the previous EIR was certified, are there any changes in the project, changes in circumstances under which the project is undertaken and/or "new information of substantial importance" that result in any mandatory finding of significance listed below?

Does the project 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?

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)?

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

YES	NO
☐	☒

As described in this Addendum, while the proposed project would develop an active recreational park rather than maintain the existing passive recreational ornamental gardens as analyzed under

the 2003 FEIR, there are no changes in circumstances under which the project is undertaken and/or new information of substantial importance that result in any of the mandatory findings of significance. Section IV of this Addendum discusses biological resources and Section V discusses cultural resources. The proposed project would not have environmental effects which would cause substantial adverse effects on human beings.

XVIII. ATTACHMENTS

A Waterfront Park Active Recreation Project Air Quality Calculations
B Waterfront Park Active Recreation Project Noise Analysis

XIV. REFERENCES USED IN THE COMPLETION OF THE ENVIRONMENTAL REVIEW UPDATE CHECKLIST FORM

BRG Consulting, Inc., 2003. Final Environmental Impact Report for the San Diego County Administration Center Waterfront Park Development and Master Plan. April.

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Attachment A – Waterfront Park Active Recreation Project Air Quality Calculations

Location
San Diego County
Climate Zone 13

Project Land Uses

Land Use Type	CalEEMod LandUse Type	CalEEMod LandUse Subtype	Amount	Unit	Building SF
Dog Park, T-ball field, Basketball Court, Pickleball Court	Recreational	City Park	2.1	acre	0

Construction Data

Start	End	Total Duration
Jul-22	Dec-22	6 months

Total Construction Site Area (acres)	2.14

Construction Phase	CalEEMod Phase Type	Start Date	End Date	Total Calendar Days	Workdays (5 days/week)	Worker Trips/Day (In/Out)	Vendor Trips/Day (In/Out)	Total Haul Trips (In/Out)	Total Haul Trucks/Day	Haul Trips/Day (In/Out)
Site Preparation	Site Preparation	7/1/2022	12/31/2022	183	131	10	4	125	1	2

Assumptions:

- Assume all soil is balanced on site.
- No demolition of any structures.
- Vendor truck trips include 1 water truck and 3 miscellanous trucks per day.
- Estimate of 2000 CY of hauling for removal of garden and new ground materials/concrete
- Use standard mitigation for 2x/day watering to reduce dust.

Operational Data

- Solid waste and water consumption defaults from CalEEMod
- Trip rates from CalEEMod for a City Park land use. (0.78 for weekday, 1.96 for Saturday, 2.19 for Sunday). Estimated trip length ~20 miles. (will use EMFAC2021 for emissions calculations)

Assumptions:

- No stationary sources.
- Energy use from lighting and mobile sources (diesel and gasoline fuel).
- Use water efficient irrigation for a 6.1% standard reduction in water.

Construction Equipment

Phase	CalEEMod Phase Type	Equipment Type	# of Equipment	Hours/day	HP	Load Factor
Site Preparation	Site Preparation	Aerial Lifts	1	8	63	0.31
Site Preparation	Site Preparation	Tractors/Loaders/Backhoes	2	7	97	0.37
Site Preparation	Site Preparation	Plate Compactors	1	8	8	0.43

Lighting Schedule

Source: Waterfront Park - Lighting Concept, Michael Baker International, March 2021

Type of Bulb	Watt	Quantity	Sum of Wattage
A	431	2	862
A2	862	6	5172
B	25.4	27	685.8

Total kW lighting	6.7	
Est. hours per day	8	
Total energy (kWh/year)	19622	
Total energy (MWh/day)	0.1	
Total GHG emissions (lb CO2e/day)	32	
Total GHG emissions (lb CO2e/year)	11596	
Total GHG emissions (MTCO2e/year)	5	

Utility:	San Diego Gas & Electric	
CO2 Intensity	588.98	lb/MWh
CH4 Intensity	0.033	lb/MWh
N2O Intensity	0.004	lb/MWh
CO2e Intensity	590.997	lb/MWh

Waterfront Park Addendum

Air Quality Construction Analysis

Unmitigated Construction Scenario

Regional Emissions Summary	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Source	lb/day					
3.2 Site Preparation - 2022	<1	5	7	<1	<1	<1
Project Daily Maximum Emissions	<1	5	7	<1	<1	<1
SDAPCD Regional Significance Threholds	137	250	550	250	100	55
Exceeds Thresholds?	No	No	No	No	No	No

Waterfront Park Addendum

Air Quality Construction Analysis

Regional Maximums Source	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5
					lb/day					
3.2 Site Preparation - 2022	0.4	4.9	6.5	0.013	0.2	0.2	0.4	0.1	0.2	0.2
Project Daily Maximum Emissions	**0.4**	**4.9**	**6.5**	**0.0**	**0.2**	**0.2**	**0.4**	**0.1**	**0.2**	**0.2**

Waterfront Park Addendum

Air Quality Construction Analysis

Summer	Onsite Emissions										Offsite Emissions									
Source	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5
	lb/day										lb/day									
3.2 Site Preparation - 2022	0.36	3.74	5.21	0.01	0.00	0.18	0.18	0.00	0.16	0.16	0.02	1.15	1.33	0.006	0.24	0.01	0.24	0.06	0.01	0.07

Regional Emissions	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5
3.2 Site Preparation - 2022	0.4	4.9	6.5	0.0	0.2	0.2	0.4	0.1	0.2	0.2
Project Daily Maximum Emissions	**0.3875**	**4.8863**	**6.5434**	**0.0134**	**0.2373**	**0.1846**	**0.4220**	**0.0603**	**0.1709**	**0.2312**

Note: Offsite emissions pasted over from EMFAC2021

Waterfront Park Addendum

Air Quality Construction Analysis

Winter	Onsite Emissions										Offsite Emissions									
Source	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5
	lb/day										lb/day									
3.2 Site Preparation - 2022	0.36	3.74	5.21	0.01	0.00	0.18	0.18	0.00	0.16	0.16	0.02	1.15	1.33	0.006	0.24	0.01	0.24	0.06	0.01	0.07

Regional Emissions	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	Total PM10	Fugitive PM2.5	Exhaust PM2.5	Total PM2.5
3.2 Site Preparation - 2022	0.4	4.9	6.5	0.0	0.2	0.2	0.4	0.1	0.2	0.2
Project Daily Maximum Emissions	**0.3875**	**4.8863**	**6.5434**	**0.0134**	**0.2373**	**0.1846**	**0.4220**	**0.0603**	**0.1709**	**0.2312**

Note: Offsite emissions pasted over from EMFAC2021

Waterfront Park Addendum

Total On-Road Emissions

Waterfront Park Addendum

Total On-Road Emissions

260 Max construction days per year

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (pounds/day) ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	(MT/yr) Total CO2e
Demolition	2022															
Total Haul Trips	250															
Hauling	2	131	8	20	15	0.00	0.40	0.25	0.00	0.04	0.00	0.04	0.01	0.00	0.01	11.38
Vendor	8	131	8	7.3	15	0.01	0.70	0.53	0.00	0.05	0.00	0.05	0.01	0.00	0.02	16.89
Worker	20	131	8	10.8	0	0.01	0.05	0.55	0.00	0.15	0.00	0.15	0.04	0.00	0.04	9.56
					Total:	0.02	1.15	1.33	0.01	0.24	0.01	0.24	0.06	0.01	0.07	37.83

Waterfront Park Addendum
Construction Energy Consumption Calculations

Trips and VMT

PhaseName	WorkerTripNumber	VendorTripNumber	HaulingTripNumber	WorkerTripLength	VendorTripLength	HaulingTripLength	WorkerVehicleClass	VendorVehicleClass	HaulingVehicleClass
Site Preparation	20	8	250	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT

OffRoad Equipment

PhaseName	OffRoadEquipmentType	OffRoadEquipmentUn	UsageHours	HorsePower	LoadFactor
Site Preparation	Aerial Lifts	1	8	63	0.3082
Site Preparation	Tractors/Loaders/Backhoes	2	7	97	0.37
Site Preparation	Plate Compactors	1	8	8	0.43

MT CO2 per Gallon of Diesel (applicable to Vendor and Haul Trips and Offroad Equipment)	MT CO2 per Gallon of Gasoline (applicable to Worker Trips)
0.01018	0.008887

Source: https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references#diesel

On-site Offroad Construction Equipment Fuel Usage

	Onsite GHG (MTCO2e/year)	Onsite Construction Equipment Diesel Use (gal/year)
Site Preparation	43	4,255
Total:		**4,255**

Off-site Vehicular Fuel Usage

	Hauling (MTCO2e/year)	Vendor (MTCO2e/year)	Worker (MTCO2e/year)	Offsite GHG (MTCO2e/year)	Total Diesel (gal/year)	Total Gasoline (gal/year)
Site Preparation	11	17	10	38	2,777	1,076
					2,777	**1,076**

Energy Summary

Total Diesel (gal)	7,032	
Total Gasoline (gal)	1,076	
Project Length	0.5	
Annual Average Diesel Use (gal/year)	14,064	
Annual Average Gasoline Use (gal/year)	2,151	
2019 San Diego County Diesel Consumption (gal)	233,050,847	Source: CEC, 2010-2019 CEC-A15 Results and Analysis, https://www.energy.ca.gov/media/3874 (Note: Non-retail sales, which comprise 52.8% of all diesel sales, are not reported in this chart.)
2019 San Diego County Gas Consumption (gal)	1,325,000,000	Source: CEC, 2010-2019 CEC-A15 Results and Analysis, https://www.energy.ca.gov/media/3874
% of County Diesel	0.003%	
% County Gasoline	0.00008%	

Estimated Fuel Savings from Anti-Regulation (64 percent based on estimated CARB emissions reductions): [1]

Vendor Fuel Savings:

Phase	Days	Trips/Day	Idle Hours	miles/gallon
Site Preparation	131	8	87	6.3

EMFAC2021 Diesel Fuel Consumption Factor:[2]	0.7983	gallons/hour
Total Vendor Truck Idle-Hours per Year:	87	hours
Total Idling diesel gallons (on-road vendor trucks):	**70**	

Haul Truck Fuel Savings:

Phase	Days	Total One-Way Trips	Idle Hours	miles/gallon
Site Preparation	131	250	21	5.7

EMFAC2017 Diesel Fuel Consumption Factor:[2]	0.8796	gallons/hour
Total Haul Truck Idle-Hours per Year:	21	hours
Total Idling diesel gallons (on-road haul trucks):	**18**	

Total Idling diesel gallons (vendor and haul trucks)	**88**

1. Source: California Air Resources Board (CARB), 2004. Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, Appendix F, July 2004, https://www.arb.ca.gov/regact/idling/idling.htm, accessed December 2020.

2. California Air Resources Board, EMFAC2021 (San DiegoCounty; HHDT and MHDT; Annual; CY 2022; Aggregate MY; 5 miles per hour converted to hourly rate)

Construction GHG Summary

	GHG (MTCO2e/year)
Site Preparation	81
Total	**81**
Amoritized GHG Emission	3

Waterfront Park Addendum
Construction Energy Analysis

Construction Water Energy Estimates

Project Acres	2.14
Construction Duration	0.50

Source	Construction Water Use per Day (Mgal)	Total Construction Water Use (Mgal)	Total Electricity Demand from water Demand (kWh)	Annual Electricity Demand from water Demand (kWh)
Project	0.006	1.014	13,208	26,416
CalEEMod Water Electricity Factors	**Electricity Intensity Factor To Supply (kWh/Mgal)**	**Electricity Intensity Factor To Treat (kWh/Mgal)**	**Electricity Intensity Factor To Distribute (kWh/Mgal)**	**Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)**
Project	9727	111	1272	1911

Sources:

Electricity Intensity Factors - California Emissions Estimator Model (CalEEMod).

Estimated construction water use assumed to be generally equivalent to landscape irrigation, based on a factor of 20.94 gallons per year per square foot of landscaped area within the Los Angeles area (Mediterranean climate), which assumes high water demand landscaping materials and an irrigation system efficiency of 85%. Factor is therefore (20.94 GAL/SF/year) x (43,560 SF/acre) / (365 days/year) / (0.85) = 2,940 gallons/acre/day, rounded up to 3,000 gallons/acre/day. (U.S. Department of Energy, Energy Efficiency & Renewable Energy, Federal Energy Management Program. “Guidelines for Estimating Unmetered Landscaping Water Use." July 2010. Page 12, Table 4 - Annual Irrigation Factor – Landscaped Areas with High Water Requirements).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Diego
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Vendor:

VMT	Fuel Consumption (gal/day)
2547842	406814
gal/mi	
0.16	

Haul:

VMT	Fuel Consumption (gal/day)
1811813	318719
gal/mi	
0.18	

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consur	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_TO
San Diego	2022	HHDT	Aggregate	Aggregate	Diesel	14038.01	1811813.427	1811813	0	208687.5	0	5.06184829	1.125893	0.58511	6.772850896	0.05611	0.00062	0	0.05673
San Diego	2022	MHDT	Aggregate	Aggregate	Diesel	17130.89	736028.0774	736028.1	0	197942.2	0	1.450609507	0.304159	0.32105	2.075818289	0.015014	0.000725	0	0.015739

PM2.5_PM	PM2.5_PM	PM2.5_TO	PM10_RUN	PM10_IDLI	PM10_STR	PM10_TOT	PM10_PM	PM10_PMI	PM10_TOT	CO2_RUNE	CO2_IDLEX	CO2_STRE)	CO2_TOTE	CH4_RUNE	CH4_IDLEX	CH4_STRE)	CH4_TOTE	N2O_RUNI	N2O_IDLE)	N2O_STRE	N2O_TOTE	ROG_RUNI	ROG_IDLE)	ROG_STRE	ROG_TOTE	ROG_DIUR
0.017627	0.056258	0.130615	0.058647	0.000648	0	0.059295	0.070507	0.160737	0.290539	3358.147	209.7515	0	3567.899	0.002821	0.003931	0	0.006752	0.529077	0.033046	0	0.562124	0.060734	0.084637	0	0.145371	0
0.002434	0.012912	0.031084	0.015692	0.000758	0	0.01645	0.009736	0.036891	0.063077	941.2941	44.88129	0	986.1754	0.001866	0.000244	0	0.00211	0.148301	0.007071	0	0.155372	0.040183	0.005249	0	0.045432	0

ROG_HOTS	ROG_RUNI	ROG_TOTA	TOG_RUNE	TOG_IDLE	TOG_STRE	TOG_TOTE	TOG_DIUR	TOG_HOTS	TOG_RUNI	TOG_TOTA	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	SOx_RUNE	SOx_IDLEX	SOx_STREX	SOx_TOTEX	NH3_RUNE	Fuel Consumption
0	0	0.145371	0.069141	0.096352	0	0.165494	0	0	0	0.165494	0.241457	1.171882	0	1.413339	0.0318	0.001986	0	0.033785866	0.405453	318.719
0	0	0.045432	0.045745	0.005975	0	0.051721	0	0	0	0.051721	0.129067	0.134921	0	0.263988	0.008913	0.000425	0	0.009338491	0.157267	88.09466

Waterfront Park Addendum
Air Quality and Greenhouse Gas Assessment

Regional Operational Emissions

Maximum Unmitigated Regional Operational Emissions (pounds per day) [a]

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area (Consumer Products, Landscaping)	0.0048	0.0000	0.0002	0.0000	0.0000	0.0000
Energy (Natural Gas)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Motor Vehicles	0.0118	0.0159	0.1004	0.0003	0.0105	0.0020
Total Project On-Site and Off-Site Emissions	**0.017**	**0.016**	**0.101**	**0.000**	**0.010**	**0.002**
SDAPCD Numeric Indicators	**75.0**	**250.0**	**550.0**	**100.0**	**55.0**	**55.0**
Over/(Under)	(75)	(250)	(549.9)	(100.0)	(55)	(55)
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Project

Summer

	VOC	NO_x	CO	SO2	Fugitive PM10	Exhaust PM 10	PM 10 Total	Fugitive PM 2.5	Exhaust PM 2.5	PM 2.5 Total
Area	4.82E-03	0.00E+00	2.20E-04	0.00E+00		0.00E+00	0.00E+00		0.00E+00	0.00E+00
Energy	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00		0.00E+00	0.00E+00
Mobile	1.18E-02	1.59E-02	1.00E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03
Total	1.67E-02	1.59E-02	1.01E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03

Max

	VOC	NO_x	CO	SO2	Fugitive PM10	Exhaust PM 10	PM 10 Total	Fugitive PM 2.5	Exhaust PM 2.5	PM 2.5 Total
Area	4.82E-03	0.00E+00	2.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Energy	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mobile	1.18E-02	1.59E-02	1.00E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03
Total	1.67E-02	1.59E-02	1.01E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03

Winter

	VOC	NO_x	CO	SO2	Fugitive PM10	Exhaust PM 10	PM 10 Total	Fugitive PM 2.5	Exhaust PM 2.5	PM 2.5 Total
Area	4.82E-03	0.00E+00	2.20E-04	0.00E+00		0.00E+00	0.00E+00		0.00E+00	0.00E+00
Energy	0.00E+00	0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00		0.00E+00	0.00E+00
Mobile	1.18E-02	1.59E-02	1.00E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03
Total	1.67E-02	1.59E-02	1.01E-01	2.78E-04	8.75E-03	1.74E-03	1.05E-02	1.31E-03	6.92E-04	2.01E-03

Waterfront Park Addendum
Air Quality and GHG Assessment
Operational Mobile Emissions

			Criteria Pollutant Emission Factors (lb/mile)									GHG Emissions (metric tons/mile)				Criteria Pollutant Emissions (pounds/day)									GHG Emissions (metric tons/year)			
	Year	Peak Daily VMT	ROG	NOx	CO	SOx	PM10 Road Dust	PM10	PM10 Total	PM2_5 Road Dust	PM2_5	PM2.5 Tota	CO2	CH4	N2O	CO2e	ROG	NOx	CO	SOx	PM10 Road Dust	PM10	PM10 Total	PM2_5 Road Dust	PM2_5	PM2.5 Total	CO2	CH4	N2O	CO2e
																											1	*25*	*298*	
Project	2023	32	3.70E-04	4.98E-04	3.14E-03	8.70E-06	2.74E-04	5.45E-05	3.28E-04	4.10E-05	2.16E-05	6.27E-05	4.05E-04	1.92E-08	1.99E-08	4.11E-04	0.012	0.016	0.100	0.000	0.009	0.002	0.010	0.001	0.001	0.002	4.723	0.000	0.000	4.798

Emissions Factors

	lbs/mile						MT/mile			
	ROG	NOx	CO	SOx	PM10	PM2_5	CO2	CH4	N2O	CO2e
2023	0.000370118	0.000498397	0.003139531	8.70049E-06	5.44799E-05	2.16464E-05	0.000404533	1.92484E-08	1.98567E-08	0.000410932

Waterfront Park Addendum
Road Dust Emission Factors

Paved Road Dust Emission Factors

Formula: $EF_{Dust,P} = (k\ (sL)^{0.91} \times (W)^{1.02}) \times (1\text{-}P/4N)$

Where:

$EF_{Dust,P}$ = Paved Road Dust Emission Factor (having the same units as k)
k = particle size multiplier
sL = road surface silt loading (g/m^2)
W = average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)
P = number of "wet" days, when at least one site per county received at least 0.01 inch of precipitation during the
N = the number of days in the annual averaging period (default = 365)

	Emission Factor (grams per VMT)		
	PM10	PM2.5	
k	1.0000	0.1500	
sL	0.0394	0.0394	weighted average silt loading factor used
W	2.4	2.4	
P	53	53	Table 5 of CARB Miscellaneous Process Methodology 7.9 for Sa
N	365	365	
$EF_{Dust,P}$	0.1241	0.0186	

Unpaved Road Dust Emission Factors (Assumes No Precipitation)

Formula: $EF_{Dust,U} = (k\ (\ s / 12)^{1} \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C)$

Where:

$EF_{Dust,U}$ = Unpaved Road Dust Emission Factor (having the same units as k)
k = particle size multiplier
s = surface material silt content (%)
Sp = mean vehicle speed (mph)
M = surface material moisture content (%)
C = Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	816.47	81.65
s	4.3%	4.3%
Sp	15	15
M	0.5%	0.5%
C	0.00047	0.00036
$EF_{Dust,U}$	5.20E+00	5.19E-01

Sources:

CalEEMod User Guide, November 2017.
California Air Resources Board (CARB), Miscellaneous Process Methodology 7.9 — Entrained Road Travel, Paved Road Dust. Revised and update
USEPA, *AP-42* , Fifth Edition, Volume I, Chapter 13.2.1 - Paved Roads, (2011).
USEPA, *AP-42* , Fifth Edition, Volume I, Chapter 13.2.2 - Unpaved Roads, (2011).

Waterfront Park Addendum
Air Quality and GHG Assessment
Operational Mobile Emissions - VMT Calculation from Trip Rates

Project

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.78	1.96	2.19	180,748	180,748

Source: Project CalEEMod

	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	20	20	20	33%	48%	19%	66%	28%	6%

Source: Project CalEEMod; Assume 20 miles for trip distance.

	Average Daily Trip Rate	Peak Daily Trip Rate	Average Primary Trip Length	Average Overall Trip Length	Average Daily VMT	Peak Daily VMT
City Park	1.2	2.2	20.0	14.6	16.8	32.0

Tons to
Metric Tons

0.907185

Waterfront Park Addendum

Greenhouse Gas Emissions Summary

Project Operations Summary (Full Buildout Year 2023)	
Category	**$MTCO_2e/yr$**
Mobile	5
Area	<1
Energy (lighting)	5
Water	7
Waste	<1
Amoritized Construction	3
Project Total	**20**

$MTCO_2e$=Metric Tons Carbon Dioxide equivalents

Waterfront Park Addendum
Project Operational Energy Demand

Electricity	kWh/yr	GWh/yr
City Park lighting	19,622	0.020
Total (including water, see below)	**50,797**	**0.051**

Source: Waterfront Park - Lighting Concept, Michael Baker International, March 2021

Electricity	GWh/yr
SDG&E 2019 Total Energy Sales	17,946
Project Annual	0.051
Project % of SDG&E	0.0003%

Source: Sempra Energy 2019 Annual Report, https://www.sempra.com/sites/default/files/content/files/node-page/file-list/2020/sempra_energy_2019_annual_report.pdf

Water	Mgal/yr
City Park	2.39
Total	**2.394**

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	9,727
Electricity Factor - Treat	111
Electricity Factor - Distribute	1,272
Electricity Factor - Wastewater Treatment	1,911

Electricity from Water Demand	kWh/yr	GWh/yr
Total	**31,175.27**	**0.031**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0

Water Demand based on Project CalEEMod

Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, 2012.

Natural Gas

No natural gas usage expected during operations.

Waterfront Park Addendum
Operational Energy Analysis
Fuel Usage from VMT

Annual VMT: 6,131 miles/year

Fuel Type:[1]	GAS	DSL	ELEC	NG	PH
Percent:	92.5%	3.7%	2.3%	0.1%	1.4%
Miles per Gallon Fuel:	22.7	8.8	N/A	5.24	54.26
Annual VMT by Fuel Type (miles):	5,672	227	143	6	84
Annual Fuel Usage (gallons):	250	26	-	0	2
Annual Fuel Savings from Electric Vehicles:[2]	-	-	6	-	4

	San Diego County Fuel Consumption [3]	
	Gasoline	Diesel
San Diego County:	1,325,000,000	233,050,847
Project Annual:	250	26
Percent Net Project of San Diego County:	0.00002%	0.00001%

Notes:

1. California Air Resources Board, EMFAC2021 (San Diego County; Annual; 2023, Aggregate Fleet).
2. Assumes electric vehicles and plug-in hybrids would replace traditional gasoline-fueled vehicles.
3. California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2019. Available at: https://www.energy.ca.gov/media/3874. Accessed September 2021. Diesel is adjusted to account for retail (48%) and non-retail (52%) diesel sales.

Region	San Diego

Row Labels	Sum of Population	Sum of Total VMT	Sum of Fuel Consumption
2023	**2539739.502**	**98868115.1**	**4552.782047**
Diesel	93953.15615	4875014.534	551.1392828
Gasoline	2349466.523	89364727.61	3933.563295
Electricity	59225.46081	2761091.716	0
Natural Gas	2317.849549	195282.3715	37.26523184
Plug-in Hybrid	34776.51194	1671998.87	30.81423698
Grand Total	**2539739.502**	**98868115.1**	**4552.782047**

2023	2539739.502	98868115.1	4552.782047	**Fuel Type**	**gal/mile**	**mile/gal**
Diesel	93953.15615	4875014.534	551.1392828	3.7%	0.113054	8.84534
Gasoline	2349466.523	89364727.61	3933.563295	92.5%	0.044017	22.71852
Electricity	59225.46081	2761091.716	0	2.3%	N/A	N/A
Natural Gas	2317.849549	195282.3715	37.26523184	0.1%	0.190827	5.240337
Plug-in Hybrid	34776.51194	1671998.87	30.81423698	1.4%	0.01843	54.2606

Waterfront Park Addendum - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Waterfront Park Addendum

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.14	Acre	2.14	93,218.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	588.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - assume 1 phase for construction activities

Off-road Equipment - approximate equipment needed

Trips and VMT - 2000 CY estimated for hauling debris/ground materials/concrete

Grading -

Construction Off-road Equipment Mitigation - water 2x day

Water Mitigation -

Vehicle Trips - mobile calculated outside CalEEMod

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	131.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	GreenSpaceAllowEdit	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Scrapers	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	125.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

Waterfront Park Addendum - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0266	0.2713	0.3648	6.4000e-004	8.0600e-003	0.0119	0.0200	2.1900e-003	0.0110	0.0132	0.0000	56.6536	56.6536	0.0139	1.5400e-003	57.4612
Maximum	**0.0266**	**0.2713**	**0.3648**	**6.4000e-004**	**8.0600e-003**	**0.0119**	**0.0200**	**2.1900e-003**	**0.0110**	**0.0132**	**0.0000**	**56.6536**	**56.6536**	**0.0139**	**1.5400e-003**	**57.4612**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0266	0.2713	0.3648	6.4000e-004	8.0600e-003	0.0119	0.0200	2.1900e-003	0.0110	0.0132	0.0000	56.6535	56.6535	0.0139	1.5400e-003	57.4612
Maximum	**0.0266**	**0.2713**	**0.3648**	**6.4000e-004**	**8.0600e-003**	**0.0119**	**0.0200**	**2.1900e-003**	**0.0110**	**0.0132**	**0.0000**	**56.6535**	**56.6535**	**0.0139**	**1.5400e-003**	**57.4612**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2022	9-30-2022	0.1490	0.1490
		Highest	0.1490	0.1490

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.8000e-004	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0365	0.0000	0.0365	2.1600e-003	0.0000	0.0905
Water						0.0000	0.0000		0.0000	0.0000	0.0000	7.5680	7.5680	4.2000e-004	5.0000e-005	7.5939
Total	**8.8000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0365**	**7.5680**	**7.6046**	**2.5800e-003**	**5.0000e-005**	**7.6845**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.8000e-004	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0365	0.0000	0.0365	2.1600e-003	0.0000	0.0905
Water						0.0000	0.0000		0.0000	0.0000	0.0000	7.1064	7.1064	4.0000e-004	5.0000e-005	7.1307
Total	**8.8000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0365**	**7.1064**	**7.1429**	**2.5600e-003**	**5.0000e-005**	**7.2213**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6.10**	**6.07**	**0.78**	**0.00**	**6.03**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	12/30/2022	5	131	

Acres of Grading (Site Preparation Phase): 0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Aerial Lifts	1	8.00	63	0.31
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	4.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Waterfront Park Addendum - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2450	0.3416	5.0000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	42.9803	42.9803	0.0135	0.0000	43.3166
Total	**0.0239**	**0.2450**	**0.3416**	**5.0000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**42.9803**	**42.9803**	**0.0135**	**0.0000**	**43.3166**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0105	2.4800e-003	4.0000e-005	1.0700e-003	1.0000e-004	1.1700e-003	2.9000e-004	9.0000e-005	3.9000e-004	0.0000	3.9176	3.9176	1.9000e-004	6.2000e-004	4.1077
Vendor	5.8000e-004	0.0144	4.7200e-003	6.0000e-005	1.7400e-003	1.5000e-004	1.8900e-003	5.0000e-004	1.5000e-004	6.5000e-004	0.0000	5.4637	5.4637	1.7000e-004	7.9000e-004	5.7044
Worker	1.8900e-003	1.3700e-003	0.0161	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.2920	4.2920	1.4000e-004	1.2000e-004	4.3325
Total	**2.7500e-003**	**0.0263**	**0.0233**	**1.5000e-004**	**8.0600e-003**	**2.8000e-004**	**8.3400e-003**	**2.1900e-003**	**2.7000e-004**	**2.4600e-003**	**0.0000**	**13.6733**	**13.6733**	**5.0000e-004**	**1.5300e-003**	**14.1447**

Waterfront Park Addendum - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0239	0.2450	0.3416	5.0000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	42.9802	42.9802	0.0135	0.0000	43.3165
Total	**0.0239**	**0.2450**	**0.3416**	**5.0000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**42.9802**	**42.9802**	**0.0135**	**0.0000**	**43.3165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	0.0105	2.4800e-003	4.0000e-005	1.0700e-003	1.0000e-004	1.1700e-003	2.9000e-004	9.0000e-005	3.9000e-004	0.0000	3.9176	3.9176	1.9000e-004	6.2000e-004	4.1077
Vendor	5.8000e-004	0.0144	4.7200e-003	6.0000e-005	1.7400e-003	1.5000e-004	1.8900e-003	5.0000e-004	1.5000e-004	6.5000e-004	0.0000	5.4637	5.4637	1.7000e-004	7.9000e-004	5.7044
Worker	1.8900e-003	1.3700e-003	0.0161	5.0000e-005	5.2500e-003	3.0000e-005	5.2800e-003	1.4000e-003	3.0000e-005	1.4200e-003	0.0000	4.2920	4.2920	1.4000e-004	1.2000e-004	4.3325
Total	**2.7500e-003**	**0.0263**	**0.0233**	**1.5000e-004**	**8.0600e-003**	**2.8000e-004**	**8.3400e-003**	**2.1900e-003**	**2.7000e-004**	**2.4600e-003**	**0.0000**	**13.6733**	**13.6733**	**5.0000e-004**	**1.5300e-003**	**14.1447**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Waterfront Park Addendum - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.8000e-004	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	8.8000e-004	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.8000e-004**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	**8.8000e-004**	**0.0000**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0000**	**4.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	7.1064	4.0000e-004	5.0000e-005	7.1307
Unmitigated	7.5680	4.2000e-004	5.0000e-005	7.5939

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.54977	7.5680	4.2000e-004	5.0000e-005	7.5939
Total		**7.5680**	**4.2000e-004**	**5.0000e-005**	**7.5939**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.39423	7.1064	4.0000e-004	5.0000e-005	7.1307
Total		**7.1064**	**4.0000e-004**	**5.0000e-005**	**7.1307**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0365	2.1600e-003	0.0000	0.0905
Unmitigated	0.0365	2.1600e-003	0.0000	0.0905

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.18	0.0365	2.1600e-003	0.0000	0.0905
Total		**0.0365**	**2.1600e-003**	**0.0000**	**0.0905**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.18	0.0365	2.1600e-003	0.0000	0.0905
Total		**0.0365**	**2.1600e-003**	**0.0000**	**0.0905**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Waterfront Park Addendum

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.14	Acre	2.14	93,218.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	588.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - assume 1 phase for construction activities

Off-road Equipment - approximate equipment needed

Trips and VMT - 2000 CY estimated for hauling debris/ground materials/concrete

Grading -

Construction Off-road Equipment Mitigation - water 2x day

Water Mitigation -

Vehicle Trips - mobile calculated outside CalEEMod

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	131.00

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	GreenSpaceAllowEdit	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Scrapers	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	125.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.4066	4.1274	5.5823	9.8000e-003	0.1259	0.1821	0.3080	0.0342	0.1684	0.2026	0.0000	956.9421	956.9421	0.2345	0.0258	970.4879
Maximum	**0.4066**	**4.1274**	**5.5823**	**9.8000e-003**	**0.1259**	**0.1821**	**0.3080**	**0.0342**	**0.1684**	**0.2026**	**0.0000**	**956.9421**	**956.9421**	**0.2345**	**0.0258**	**970.4879**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.4066	4.1274	5.5823	9.8000e-003	0.1259	0.1821	0.3080	0.0342	0.1684	0.2026	0.0000	956.9421	956.9421	0.2345	0.0258	970.4879
Maximum	**0.4066**	**4.1274**	**5.5823**	**9.8000e-003**	**0.1259**	**0.1821**	**0.3080**	**0.0342**	**0.1684**	**0.2026**	**0.0000**	**956.9421**	**956.9421**	**0.2345**	**0.0258**	**970.4879**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**0.0000**	**5.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**0.0000**	**5.0000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	12/30/2022	5	131	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Aerial Lifts	1	8.00	63	0.31
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	4.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Exposed Area

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3642	3.7407	5.2145	7.6000e-003		0.1778	0.1778		0.1644	0.1644		723.3232	723.3232	0.2264		728.9823
Total	**0.3642**	**3.7407**	**5.2145**	**7.6000e-003**		**0.1778**	**0.1778**		**0.1644**	**0.1644**		**723.3232**	**723.3232**	**0.2264**		**728.9823**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.2800e-003	0.1550	0.0377	6.0000e-004	0.0167	1.4900e-003	0.0182	4.5700e-003	1.4300e-003	6.0000e-003		65.9179	65.9179	3.1700e-003	0.0105	69.1176
Vendor	8.9100e-003	0.2127	0.0712	8.5000e-004	0.0271	2.3100e-003	0.0294	7.8000e-003	2.2100e-003	0.0100		91.9303	91.9303	2.8000e-003	0.0133	95.9766
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0424**	**0.3867**	**0.3678**	**2.2000e-003**	**0.1259**	**4.2600e-003**	**0.1302**	**0.0342**	**4.0700e-003**	**0.0382**		**233.6189**	**233.6189**	**8.1600e-003**	**0.0258**	**241.5056**

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3642	3.7407	5.2145	7.6000e-003		0.1778	0.1778		0.1644	0.1644	0.0000	723.3232	723.3232	0.2264		728.9823
Total	**0.3642**	**3.7407**	**5.2145**	**7.6000e-003**		**0.1778**	**0.1778**		**0.1644**	**0.1644**	**0.0000**	**723.3232**	**723.3232**	**0.2264**		**728.9823**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.2800e-003	0.1550	0.0377	6.0000e-004	0.0167	1.4900e-003	0.0182	4.5700e-003	1.4300e-003	6.0000e-003		65.9179	65.9179	3.1700e-003	0.0105	69.1176
Vendor	8.9100e-003	0.2127	0.0712	8.5000e-004	0.0271	2.3100e-003	0.0294	7.8000e-003	2.2100e-003	0.0100		91.9303	91.9303	2.8000e-003	0.0133	95.9766
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0424**	**0.3867**	**0.3678**	**2.2000e-003**	**0.1259**	**4.2600e-003**	**0.1302**	**0.0342**	**4.0700e-003**	**0.0382**		**233.6189**	**233.6189**	**8.1600e-003**	**0.0258**	**241.5056**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Unmitigated	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004

Waterfront Park Addendum - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**		**5.0000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**		**5.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Waterfront Park Addendum

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.14	Acre	2.14	93,218.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	588.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - assume 1 phase for construction activities

Off-road Equipment - approximate equipment needed

Trips and VMT - 2000 CY estimated for hauling debris/ground materials/concrete

Grading -

Construction Off-road Equipment Mitigation - water 2x day

Water Mitigation -

Vehicle Trips - mobile calculated outside CalEEMod

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	131.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	GreenSpaceAllowEdit	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Scrapers	Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	125.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.4088	4.1436	5.5716	9.7600e-003	0.1259	0.1821	0.3080	0.0342	0.1685	0.2026	0.0000	952.8410	952.8410	0.2346	0.0260	966.4448
Maximum	**0.4088**	**4.1436**	**5.5716**	**9.7600e-003**	**0.1259**	**0.1821**	**0.3080**	**0.0342**	**0.1685**	**0.2026**	**0.0000**	**952.8410**	**952.8410**	**0.2346**	**0.0260**	**966.4448**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.4088	4.1436	5.5716	9.7600e-003	0.1259	0.1821	0.3080	0.0342	0.1685	0.2026	0.0000	952.8410	952.8410	0.2346	0.0260	966.4448
Maximum	**0.4088**	**4.1436**	**5.5716**	**9.7600e-003**	**0.1259**	**0.1821**	**0.3080**	**0.0342**	**0.1685**	**0.2026**	**0.0000**	**952.8410**	**952.8410**	**0.2346**	**0.0260**	**966.4448**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**0.0000**	**5.0000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**0.0000**	**5.0000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2022	12/30/2022	5	131	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Aerial Lifts	1	8.00	63	0.31
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	10.00	4.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water Exposed Area

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3642	3.7407	5.2145	7.6000e-003		0.1778	0.1778		0.1644	0.1644		723.3232	723.3232	0.2264		728.9823
Total	**0.3642**	**3.7407**	**5.2145**	**7.6000e-003**		**0.1778**	**0.1778**		**0.1644**	**0.1644**		**723.3232**	**723.3232**	**0.2264**		**728.9823**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1700e-003	0.1608	0.0382	6.0000e-004	0.0167	1.5000e-003	0.0182	4.5700e-003	1.4300e-003	6.0000e-003		65.9458	65.9458	3.1600e-003	0.0105	69.1468
Vendor	8.8300e-003	0.2208	0.0734	8.5000e-004	0.0271	2.3200e-003	0.0294	7.8000e-003	2.2200e-003	0.0100		91.9774	91.9774	2.7800e-003	0.0134	96.0291
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0446**	**0.4029**	**0.3571**	**2.1600e-003**	**0.1259**	**4.2800e-003**	**0.1302**	**0.0342**	**4.0800e-003**	**0.0382**		**229.5179**	**229.5179**	**8.2700e-003**	**0.0260**	**237.4625**

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3642	3.7407	5.2145	7.6000e-003		0.1778	0.1778		0.1644	0.1644	0.0000	723.3232	723.3232	0.2264		728.9823
Total	**0.3642**	**3.7407**	**5.2145**	**7.6000e-003**		**0.1778**	**0.1778**		**0.1644**	**0.1644**	**0.0000**	**723.3232**	**723.3232**	**0.2264**		**728.9823**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1700e-003	0.1608	0.0382	6.0000e-004	0.0167	1.5000e-003	0.0182	4.5700e-003	1.4300e-003	6.0000e-003		65.9458	65.9458	3.1600e-003	0.0105	69.1468
Vendor	8.8300e-003	0.2208	0.0734	8.5000e-004	0.0271	2.3200e-003	0.0294	7.8000e-003	2.2200e-003	0.0100		91.9774	91.9774	2.7800e-003	0.0134	96.0291
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0446**	**0.4029**	**0.3571**	**2.1600e-003**	**0.1259**	**4.2800e-003**	**0.1302**	**0.0342**	**4.0800e-003**	**0.0382**		**229.5179**	**229.5179**	**8.2700e-003**	**0.0260**	**237.4625**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Unmitigated	4.8200e-003	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004

Waterfront Park Addendum - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**		**5.0000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.7000e-004	4.7000e-004	0.0000		5.0000e-004
Total	**4.8200e-003**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.7000e-004**	**4.7000e-004**	**0.0000**		**5.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment B – Waterfront Park Active Recreation Project Noise and Vibration Impact Study

WATERFRONT PARK ACTIVE RECREATION PROJECT
COUNTY OF SAN DIEGO, CALIFORNIA

Noise and Vibration Impact Study

Prepared for

County of San Diego, Department of Parks and Recreation
5500 Overland Avenue, Suite 410 (MS029)
San Diego, CA 92123

September 2021

ESA

WATERFRONT PARK ACTIVE RECREATION PROJECT
COUNTY OF SAN DIEGO, CALIFORNIA

Noise and Vibration Impact Study

Prepared for
County of San Diego, Department of Parks and Recreation
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San Diego, CA 92123

September 2021

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WATERFRONT PARK
Noise and Vibration Impact Study

1. Introduction

The project-specific analysis provided in this report assesses whether the implementation of the proposed Project would have potentially significant noise or vibration impacts on existing noise- and vibration sensitive receptors in the Project vicinity.

1.1 Project Location

The project site is located between the San Diego Bay and Harbor Drive to the west, Grape Street to the north, Ash Street to the South and Pacific Highway to the East. The site can be easily accessed from the nearby Interstate Highway 5 (I-5) and State Route 94 (SR-94), as well as major arterial roadways and public transportation services. The nearest Trolley stop is located less than 1,000 feet east of the project site, and the nearest bus stop is located on the project site. Water, electricity, sewer and other necessary utility needs will continue to be provided to the site by the applicable utilities, including the City of San Diego and San Diego Gas & Electric (SDG&E).

The general vicinity and relationship of the Project Site to surrounding streets is illustrated in **Figure 1**, *Regional and Local Location*.

1.2 Background

A Final EIR (FEIR) for the San Diego County Administration Center Waterfront Park Development and Master Plan (Waterfront Park Master Plan) project (Project No. KK3421, SCH No. 2002081089) was certified by the County of San Diego Board of Supervisors on May 6, 2003. The project consisted of a Master Plan for the development of the Waterfront Park Master Plan, which included the conversion of the project site into a civic greenspace surrounding the historic County Administration Center Building. Specifically, the project provided three tiers of public use areas: 1) a series of "garden rooms" along Pacific Highway on either side of the County Administration Center Building; 2) a fountain, promenade and terrace area forming a strip to the west of the County Administration Center Building and extending from Grape Street on the north to Ash Street on the south, respectively; and, 3) a civic greenspace (lawn area) between the promenade and Harbor Drive, along the western portion of the project site.

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SOURCE: ESRI, 2018. ESA, 2021.

Waterfront Park

Figure 1
Regional and Local Location

ESA

The approved project as detailed in the FEIR and subsequent addenda consists of the development of an up to 18.47 acre master-planned area including a large civic greenspace, underground parking structure, and the construction of an additional off-site parking structure to replace on-site parking to be replaced with greenspace. The civic greenspace would be constructed on existing surface parking lots and on the site of a County office building, both surrounding the historically significant County Administration Center (CAC) located at 1600 Pacific Highway in San Diego, California.

The project included demolition of the existing County office building ("Askew Building") of approximately 110,000 square feet, and relocation of the County employees who currently work in this building. The 1,100 eliminated surface parking spaces on-site and along the Harbor Drive right-of-way would be replaced by; construction of an underground parking structure on-site, development of an off-site parking structure at Cedar Street and Kettner Boulevard, and use of existing nearby facilities (i.e., Trolley Towers parking garage). In addition, the project includes removal and relocation of several service accessways to the CAC.

1.3 Project Description

The Waterfront Park Active Recreation Project (proposed project) consists of the construction and operation of a new active recreation area on a 2.1-acre portion of the larger Waterfront Park, located at 1600 Pacific Highway in Downtown San Diego in San Diego County. Specifically, the project site comprises the northeastern corner of the Waterfront Park and is bound by Grape Street to the north, Pacific Highway to the east, the CAC Building to the south, and a water feature and open green space areas within Waterfront Park to the west. Figure 1 shows the location of the project site, located in the northeastern corner of Waterfront Park in Downtown San Diego. The project site is currently developed with the existing Grass Garden, Mediterranean Garden, and Diversity Garden areas, which would be demolished as part of the project.

The proposed project would expand recreation resources within Waterfront Park and in Downtown San Diego, and would be operated and maintained by the County of San Diego Department of Parks and Resources (DPR), who will serve as the lead agency for this project. As shown in **Figure 2**, *Conceptual Site Plan*, the project site is separated into various components associated with different recreational activities, including a dog park with agility equipment, basketball court, pickleball courts, t-ball field with 100-foot foul lines, table tennis area, and an outdoor fitness area equipment. All proposed recreational facilities would be available for pick-up games/use and would not be able to be reserved. The proposed project would also construct walkways, an Americans with Disabilities (ADA) accessible ramp, and benches, as well as preserve the existing garden located along the eastern boundary of the project site.

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SOURCE: Michael Baker International, 2021

Waterfront Park

Figure 2
Conceptual Site Plan

ESA

2. Noise

2.1 Noise Principles and Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions, or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound.[1]

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of feeling and pain, respectively. Pressure waves traveling through air exert a force registered by the human ear as sound.[2]

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude, with audible frequencies of the sound spectrum ranging from 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.[3] The typical human ear is not equally sensitive to this frequency range. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to these extremely low and extremely high frequencies. This method of frequency filtering, or weighting, is referred to as A-weighting, expressed in units of A-weighted decibels (dBA), which is typically applied to community noise measurements.[4]

2.2 Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time; a noise level is a measure of noise at a given instant in time. However, noise levels rarely persist at one level over a long period of time. Rather, community noise varies continuously over a period of time with respect to the sound sources contributing to the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with many of 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 changes in traffic volume.

1 M. David Egan, *Architectural Acoustics*, 1988, Chapter 1.
2 M. David Egan, *Architectural Acoustics*, 1988, Chapter 1.
3 M. David Egan, *Architectural Acoustics*, 1988, Chapter 1.
4 M. David Egan, *Architectural Acoustics*, 1988, Chapter 1.

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.[5]

These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the noise exposure to be measured over periods of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. The following noise descriptors are used to characterize environmental noise levels over time, which are applicable to the project:[6]

L_{eq}: The equivalent sound level, is used to describe noise over a specified period of time in terms of a single numerical value; the L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.

L_{max}: The maximum, instantaneous noise level experienced during a given period of time.

L_{min}: The minimum, instantaneous noise level experienced during a given period of time.

L_x: The noise level exceeded a percentage of a specified time period. For instance, L_{50} and L_{90} represent the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

L_{dn}: The average A-weighted noise level during a 24-hour day, obtained after an addition of 10 dB to measured noise levels between the hours of 10 p.m. to 7 a.m. to account nighttime noise sensitivity. The L_{dn} is also termed the day-night average noise level (DNL).

CNEL: The Community Noise Equivalent Level (CNEL) is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dB to measured noise levels between the hours of 7 p.m. to 10 p.m. and after an addition of 10 dB to noise levels between the hours of 10 p.m. to 7 a.m. to account for noise sensitivity in the evening and nighttime, respectively. CNEL and L_{dn} are close to each other, with CNEL being more stringent and generally 1 dB higher than L_{dn}.

2.3 Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance, or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are

5 California Department of Transportation (Caltrans), *Technical Noise Supplement (TeNS)*, September 2013, Section 2.2.2.1.

6 Caltrans, *TeNS*, September 2013, Section 2.2.2.2.

related to subjective effects and interference with activities. Interference effects interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep.[7]

With regard to the subjective effects, the responses of individuals to similar noise events are diverse and influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity. Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur:[8]

- Except in carefully controlled laboratory experiments, a change of 1 dBA in ambient noise levels cannot be perceived;
- Outside of the laboratory, a 3 dBA change in ambient noise levels is considered to be a barely perceivable difference;
- A change in ambient noise levels of 5 dBA is considered to be a readily perceivable difference; and
- A change in ambient noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel scale. The human ear perceives sound in a non-linear fashion; therefore, the dBA scale was developed. Because the dBA scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. Under the dBA scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two sources are each producing sound of the same loudness, the resulting sound level at a given distance would be approximately 3 dBA higher than one of the sources under the same conditions. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. Three sources of equal loudness together produce a sound level of approximately 5 dBA louder than one source, and 10 sources of equal loudness together produce a sound level of approximately 10 dBA louder than the single source.[9]

7 Caltrans, *TeNS*, September 2013, Section 2.2.1.
8 Caltrans, *TeNS*, September 2013, Section 2.2.1.
9 Caltrans, *TeNS*, September 2013, Section 2.2.1.1.

2.4 Noise Attenuation

When noise propagates over a distance, the noise level reduces with distance depending on the type of noise source and the propagation path. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as "spherical spreading." Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically "hard" sites and 7.5 dBA for "soft" sites for each doubling of distance from the reference measurement, as their energy is continuously spread out over a spherical surface (e.g., for hard surfaces, 80 dBA at 50 feet attenuates to 74 at 100 feet, 68 dBA at 200 feet, etc.). Hard sites are those with a reflective surface between the source and the receiver, such as asphalt, or concrete, surfaces, or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the reduction in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, which in addition to geometric spreading, provides an excess ground attenuation value of 1.5 dBA (per doubling distance).[10]

Roadways and highways consist of several localized noise sources on a defined path, and hence are treated as "line" sources, which approximate the effect of several point sources. Noise from a line source propagates over a cylindrical surface, often referred to as "cylindrical spreading."[11] Line sources (e.g., traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.[12] Therefore, noise due to a line source attenuates less with distance than that of a point source with increased distance.

Additionally, receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Atmospheric temperature inversion (i.e., increasing temperature with elevation) can increase sound levels at long distances (e.g., more than 500 feet). Other factors such as air temperature, humidity, and turbulence can also have significant effects on noise levels.[13]

3. Vibration

3.1 Fundamentals of Vibration

Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. The motion may be discernible outdoors, but without the effects associated with the shaking of a building, there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by the occupants as the motion of building surfaces, the rattling of items moving on shelves or hanging

[10] Caltrans, *TeNS*, September 2013, Section 2.1.4.2.
[11] Caltrans, *TeNS*, September 2013, Section 2.1.4.1.
[12] Caltrans, *TeNS*, September 2013, Section 2.1.4.1.
[13] Caltrans, *TeNS*, September 2013, Section 2.1.4.3.

on walls, or as a low-frequency rumbling noise. The rumbling noise is caused by the vibrating walls, floors, and ceilings that are radiating sound waves. However, building damage is not a factor for normal transportation projects, except for occasional blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 VdB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earth-moving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with groundborne vibration and noise from these sources are usually localized to areas within approximately 100 feet of the vibration source, although there are examples of groundborne vibration causing interference out to distances greater than 200 feet (FTA 2018). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed, for most projects, that the roadway surface will be smooth enough that groundborne vibration from street traffic will not exceed the impact criteria; however, construction of the project could result in groundborne vibration that could be perceptible and annoying. Groundborne noise is not likely to be a problem as noise arriving via the normal airborne path usually will be greater than groundborne noise.

Groundborne vibration has the potential to disturb people as well as to damage buildings. Although it is very rare for mobile source-induced groundborne vibration to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and the pile driving to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Groundborne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). RMS is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the VdB, "V" is the RMS velocity amplitude, and "V_{ref}" is the reference velocity amplitude, or $1x10^{-6}$ inches per second (inch/sec) used in the United States.

Factors that influence groundborne vibration and noise include the following:

- **Vibration Source:** Vehicle/equipment suspension, wheel types and condition, track/roadway surface, track support system, speed, transit structure, and depth of vibration source
- **Vibration Path:** Soil type, rock layers, soil layering, depth to water table, and frost depth
- **Vibration Receiver:** Foundation type, building construction, and acoustical absorption

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Experience with groundborne vibration shows that vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface, resulting in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

4. Existing Conditions

Some land uses are considered more sensitive to ambient noise levels than others are, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residential areas are considered to be the most sensitive type of land use to noise and industrial/commercial areas are considered to be the least sensitive.

4.1 Ambient Noise Levels

Ambient noise measurements were taken at six locations, representing the nearby land uses in the vicinity of the Project Site to establish ambient noise levels. The measurement locations, along with existing development, are shown on **Figure 3**, *Noise Measurement Locations*. Short-term (15-minute) noise measurements were taken at locations M1 through M3 on September 2, 2021.

The ambient noise measurements were conducted using the Larson-Davis 820 Precision Integrated Sound Level Meter (SLM). The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute S1.4. All instruments were calibrated and operated according to the applicable manufacturer specification. The microphone was placed at a height of 5 feet above the local grade, at the following locations as shown in Figure 3:

- **Measurement Location M1:** This measurement location represents the existing noise environment at sensitive receptors R1 (Marina Inn and Suites) and R2 (multi-family residential).
- **Measurement Location M2:** This measurement location represents the existing noise environment at sensitive receptor R3 (Residence Inn).
- **Measurement Location M3:** This measurement location represents the existing noise environment at sensitive receptor R4 (Pacific Inn & Suites).

A summary of noise measurement data is provided in **Table 1**, *Summary of Ambient Noise Measurements*. Daytime noise levels ranged from 62.6 dBA to 64.5 dBA L_{eq}.

TABLE 1
SUMMARY OF AMBIENT NOISE MEASUREMENTS

Measurement Location	Monitoring Date(s)	Start Time	End Time	L_{eq}
M1	9/2/2021	7:06 AM	7:27 AM	64.5
M2	9/2/2021	7:31 AM	7:52 AM	63.9
M3	9/2/2021	7:59 AM	8:20 AM	62.6

SOURCE: ESA, 2021.

NOTES:

[a] Detailed measured noise data is included in Appendix A.

SOURCE: ESRI, 2018. ESA, 2021.

Waterfront Park

Figure 3
Noise Measurement Locations and Sensitive Receptors

ESA

5. Regulatory Setting

A number of statutes, regulations, plans, and policies that address noise concerns have been adopted. Below is a discussion of the relevant regulatory setting and noise regulations, plans, and policies.

5.1 Noise

Federal

Under the authority of the Noise Control Act of 1972, USEPA established noise emission criteria and testing methods published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations (CFR) that apply to some transportation equipment (e.g., interstate rail carriers, medium trucks, and heavy trucks) and construction equipment. In 1974, the USEPA issued guidance levels for the protection of public health and welfare in residential land use areas of an outdoor Ldn of 55 dBA and an indoor Ldn of 45 dBA. These guidance levels are not considered as standards or regulations, and were developed without consideration of technical or economic feasibility.

There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the project. Under the Occupational Safety and Health Act of 1970 (29 U.S.C. Section 1919 et seq.), the Occupational Safety and Health Administration (OSHA) has adopted regulations designed to protect workers against the effects of occupational noise exposure. These regulations list permissible noise level exposure as a function of the amount of time during which the worker is exposed. The regulations further specify a hearing conservation program that involves monitoring the noise to which workers are exposed, ensuring that workers are made aware of overexposure to noise, and periodically testing the workers' hearing to detect any degradation.

State

The State of California does not have statewide standards for environmental noise, but the California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The purpose of these guidelines is to maintain acceptable noise levels in a community setting for different land use types. Noise compatibility by different land uses types is categorized into four general levels: "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." For instance, a noise environment ranging from 50 dBA CNEL to 65 dBA CNEL is considered to be "normally acceptable" for multi-family residential uses, while a noise environment of 75 dBA CNEL or above for multi-family residential uses is considered to be "clearly unacceptable."

In addition, California Government Code Section 65302(f) requires each county and city in the State to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels. The state has also established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These

requirements are collectively known as the California Noise Insulation Standards (Title 24, California Code of Regulations). The noise insulation standards set forth an interior standard of 45 dBA CNEL in any habitable room. They require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA CNEL. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

Local

The proposed project is located within the County of San Diego. Applicable noise standards and policies are described below.

County of San Diego General Plan Noise Element

The California Government Code Section 65302(g) requires that a noise element be included in the General Plan of each county and city in the state. The Noise Element of the County of San Diego General Plan establishes noise/land use compatibility standards and outlines goals and policies which can be used to achieve those standards. Overall, the County's Noise Element describes the noise environment (including noise sources) in the County and describes the County's goals for achieving the standards and introduces policies designed to implement the goals.

The County has adopted guidelines based, in part, on the community noise compatibility guidelines. The County's noise/land use compatibility guidelines for land uses are shown in **Table 2**, *Noise Compatibility Guidelines*. These criteria are the basis for the development of specific Noise Standards, shown in **Table 3,** *General Plan Noise Standards*.

TABLE 2
NOISE COMPATIBILITY GUIDELINES

Land Use Category		Exterior Noise Level (CNEL)						
		55	60	65	70	75	80	
A	Residential—single family residences, mobile homes, senior housing, convalescent homes							
B	Residential—multi-family residences, mixed-use (commercial/residential)							
C	Transient lodging—motels, hotels, resorts							
D*	Schools, churches, hospitals, nursing homes, child care facilities							
E*	Passive recreational parks, nature preserves, contemplative spaces, cemeteries							
F*	Active parks, golf courses, athletic fields, outdoor spectator sports, water recreation							
G*	Office\professional, government, medical\dental, commercial, retail, laboratories							
H*	Industrial, manufacturing, utilities, agriculture, mining, stables, ranching, warehouse, maintenance/repair							
	ACCEPTABLE—Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insulation requirements.							
	CONDITIONALLY ACCEPTABLE—New construction or development should be undertaken only after a detailed noise analysis is conducted to determine if noise reduction measures are necessary to achieve acceptable levels for land use. Criteria for determining exterior and interior noise levels are listed in Table N-2, Noise Standards. If a project cannot mitigate noise to a level deemed Acceptable, the appropriate county decision-maker must determine that mitigation has been provided to the greatest extent practicable or that extraordinary circumstances exist.							
	UNACCEPTABLE—New construction or development shall not be undertaken.							

SOURCE: County of San Diego General Plan Noise Element, Table N-1

TABLE 3
GENERAL PLAN NOISE STANDARDS

1. The exterior noise level (as defined in Item 3) standard for Category A shall be 60 CNEL, and the interior noise level standard for indoor habitable rooms shall be 45 CNEL.
2. The exterior noise level standard for Categories B and C shall be 65 CNEL, and the interior noise level standard for indoor habitable rooms shall be 45 CNEL.
3. The exterior noise level standard for Categories D and G shall be 65 CNEL and the interior noise level standard shall be 50 dBA Leq (one hour average).
4. For single-family detached dwelling units, "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii(for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area, (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.
5. For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.
6. For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.
7. For noise sensitive land uses where people normally do not sleep at night, the exterior and interior noise standard may be measured using either CNEL or the one-hour average noise level determined at the loudest hour during the period when the facility is normally occupied.
8. The exterior noise standard does not apply for land uses where no exterior use area is proposed or necessary, such as a library.
9. For Categories E and F the exterior noise level standard shall not exceed the limit defined as "Acceptable" in this table, or an equivalent one-hour noise standard.

SOURCE: County of San Diego General Plan Noise Element, Table N-2

In addition, the following objectives and policies from the County's General Plan Noise Element are applicable to the proposed project:

Goal N-1
Land Use Compatibility. A noise environment throughout the unincorporated County that is compatible with the land uses.

Policies

N-1.1 ***Noise Compatibility Guidelines.*** Use the Noise Compatibility Guidelines and the Noise Standards as a guide in determining the acceptability of exterior and interior noise for proposed land uses.

N-1.2 ***Noise Management Strategies.*** Require the following strategies as higher priorities than construction of conventional noise barriers where noise abatement is necessary:

- Avoid placement of noise sensitive uses within noisy areas
- Increase setbacks between noise generators and noise sensitive uses
- Orient buildings such that the noise sensitive portions of a project are shielded from noise sources
- Use sound-attenuating architectural design and building features
- Employ technologies when appropriate that reduce noise generation (i.e. alternative pavement materials on roadways)

N-1.3 ***Sound Walls.*** Discourage the use of noise walls. In areas where the use of noise walls cannot be avoided, evaluate and require where feasible, a combination of walls and earthen berms and require the use of vegetation or other visual screening methods to soften the visual appearance of the wall.

N-1.4 ***Adjacent Jurisdiction Noise Standards.*** Incorporate the noise standards of an adjacent jurisdiction into the evaluation of a proposed project when it has the potential to impact the noise environment of that jurisdiction.

N-1.5 ***Regional Noise Impacts.*** Work with local and regional transit agencies and/or other jurisdictions, as appropriate, to provide services or facilities to minimize regional traffic noise and other sources of noise in the County.

Goal N-2

Protection of Noise Sensitive Uses. A noise environment that minimizes exposure of noise sensitive land uses to excessive, unsafe, or otherwise disruptive noise levels.

Policies

N-2.1 ***Development Impacts to Noise Sensitive Uses.*** Require an acoustical study to identify inappropriate noise level where development may directly result in any existing or future noise sensitive land uses being subject to noise level equal to or greater than 60 CNEL and require mitigation for sensitive uses in compliance with the noise standards.

N-2.2 ***Balconies and Patios.*** Assure that in developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use developments exceed 65 CNEL, a solid noise barrier is incorporated into the building design of the balconies and patios while still maintaining the openness of the patio or balcony.

Goal N-3

Groundborne Vibration. An environment that minimizes exposure of sensitive land uses to the harmful effects of excessive groundborne vibration.

Policies

N-3.1 ***Groundborne Vibration.*** Use the Federal Transit Administration and Federal Railroad Administration guidelines, where appropriate, to limit the extent of exposure that sensitive uses may have to groundborne vibration from trains, construction equipment, and other sources.

Goal N-4

Transportation-Related Noise Generators. A noise environment that reduces noise generated from traffic, railroads, and airports to the extent feasible.

Policies

N-4.1 ***Traffic Noise.*** Require that projects proposing General Plan amendments that increase the average daily traffic beyond what is anticipated in this General Plan do no increase cumulative traffic noise to off-site noise sensitive land uses beyond acceptable levels.

N-4.2 ***Traffic Calming.*** Include traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle noise in development that may impact noise sensitive land uses.

N-4.3 ***Jurisdictional Coordination.*** Coordinate with California Department of Transportation (Caltrans), the City of San Diego, and other adjacent jurisdictions, as appropriate, for early review of proposed new and expanded State freeways, highways, and road improvement projects within or affecting the unincorporated County to (1) locate facilities where the impacts to noise sensitive land uses would be minimized and to (2) develop and include noise abatement measures in the projects to minimize and/or avoid the impacts to noise sensitive land uses.

N-4.4 ***State Motor Vehicle Noise Standards.*** Promote the enforcement of State Motor Vehicle Noise Standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and local law enforcement as appropriate.

N-4.5 ***Roadway Location.*** Locate new or expanded roads designated in the Mobility Element in areas where the impact to noise sensitive land uses would be minimized.

N-4.6 ***Road Improvement Projects.*** For County road improvement projects, evaluate the proposed project against ambient noise levels to determine whether the project would increase ambient noise levels by more than three decibels. If so, apply the limits in the noise standards for noise sensitive land uses that may be affected by the increased noise levels. For federally-funded roadway construction projects, use the limits in the applicable Federal Highway Administration Standards.

N-4.7 ***Railway Jurisdictional Coordination.*** Work with the San Diego Association of Governments (SANDAG), Caltrans, Metropolitan Transit System (MTS), California High-Speed Rail Authority, and passenger and freight train operators as appropriate to install noise attenuation features to minimize impacts to adjacent residential or other noise sensitive uses from railroad operations.

N-4.8 ***Train Horn Noise.*** Establish train horn "quiet zones" with new rail projects consistent with federal regulations, where applicable. Promote community programs for existing at-grade crossings by working with rail operators.

N-4.9 ***Airport Compatibility.*** Assure the noise compatibility of any development projects that may be affected by noise from public or private airports and helipads during project review by coordinating, as appropriate, with appropriate agencies such as the San Diego County Regional Airport Authority (SDCRAA) and the Federal Aviation Administration (FAA).

Goal N-5

Non-Transportation-Related Noise Sources. A noise environment that provides minimal noise spillovers from industrial, commercial, agricultural, extractive, and similar facilities to adjacent residential neighborhoods.

Policies

N-5.1 ***Truck Access.*** Design development so that automobile and truck access to industrial and commercial properties abutting residential properties is located at the maximum practical distance from residential zones.

N-5.2 ***Noise-Generating Industrial Facilities.*** Locate noise-generating industrial facilities at the maximum practical distance from residential zones. Use setbacks between noise generating equipment and noise sensitive uses and limit the operation of noise generating activities to daytime hours as appropriate where such activities may affect residential uses.

Goal N-6

Temporary and/or Nuisance Noise. Minimal effects of intermittent, short-term, or other nuisance noise sources to noise sensitive land uses.

Policies

N-6.1 ***Noise Regulations.*** Develop and regularly update codes and ordinances as necessary to regulate impacts from point, intermittent, and other disruptive noise sources.

N-6.2 ***Recurring Intermittent Noise.*** Minimize impacts from noise in areas where recurring intermittent noise may not exceed the noise standards, but can have other adverse effects.

N-6.3 ***High-Noise Equipment.*** Require development to limit the frequency of use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment if their activity will result in noise that affects residential zones.

N-6.4 ***Hours of Construction.*** Require development to limit the hours of operation as appropriate for non-emergency construction and maintenance, trash collection, and parking lot sweeper activity near noise sensitive land uses.

N-6.5 ***Special Events.*** Schedule special events sponsored by the County that may generate excessive noise levels to daytime hours when feasible.

N-6.6 ***Code Enforcement.*** Provide sufficient resources within the County for effective enforcement of County codes and ordinances.

San Diego County Code

The County's noise standards found in Chapter 4 of the County Code, set forth sound measurement criteria, general sound level limits for different land use zoning classifications, sound emission levels for specific uses, hours of operation and sound level limits for construction equipment, general prohibitions, and legal remedies for violations. The County's general noise standards establish sound level limits for various land use zones during specified time periods as shown in **Table 4**, *Sound Level Limits*.

TABLE 4
SOUND LEVEL LIMITS

Zone	Time	One-Hour Average Sound Level Limits (dBA Leq)
RS, RD, RR, RMH, A70, A72, S80, S81, S90, S92, RV, and RU with a General Plan Land Use Designation density of less than 10.9 dwelling units per acre.	7 AM – 10 PM	50
	10 PM – 7 AM	45
RRO, RC, RM, S86, FB-V5, RV and RU with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre	7 AM – 10 PM	55
	10 PM – 7 AM	50
S94, FB-V4, AL-V2, AL-V1, AL-CD, RM-V5, RM-V4, RM-V3, RM-CD and all commercial zones	7 AM – 10 PM	60
	10 PM – 7 AM	55
FB-V1, FB-V2, RM-V1, RM-V2	7 AM – 7 PM	60
	7 AM – 10 PM	55
FB-V1, RM-V2	10 PM – 7 AM	55
FB-V2, RM-V1	10 PM – 7 AM	50
FB-V3	7 AM – 10 PM	70
	10 PM – 7 AM	65
M50, M52, and M54	Anytime	70
S82, M56, and M58	Anytime	75
S88	S88 zones are Specific Planning Areas which allow different uses.	

SOURCE: County of San Diego County Code, 2021. Online: https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-76028, accessed September 2021.

According to Section 36.409, it is unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 dBA for an eight-hour period, between 7 AM and 7 PM, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

5.2 Vibration

The FTA has published data on vibration levels in its 2018 Transit Noise and Vibration Impact Assessment that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in **Table 5**, *Construction Vibration Damage Criteria*.

TABLE 5
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (inch/sec)	Approximate L_V[a]
Reinforced-concrete, steel or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2018, Table 7-5.
NOTES:
PPV = peak particle velocity; inch/sec = inches per second; L_V = velocity in decibels; RMS = root-mean-square
[a] RMS velocity in decibels (VdB) re 1 µin/sec.

The vibration thresholds associated with human response to different levels of groundborne noise and vibration are shown in **Table 6**, *Human Response to Different Levels of Groundborne Noise and Vibration*.

TABLE 6
HUMAN RESPONSE TO DIFFERENT LEVELS OF GROUNDBORNE NOISE AND VIBRATION

Vibration Velocity Level (VdB)	Noise Level (dBA)		Human Response
	Low Frequency[a]	Mid Frequency[b]	
65	25	40	Approximate threshold of perception for many humans. Low-frequency sound usually inaudible, mid-frequency sound excessive for quiet sleeping areas.
75	35	50	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise acceptable for sleeping areas, mid-frequency noise annoying in most quiet occupied areas.
85	45	60	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise annoying for sleeping areas, mid-frequency noise annoying even for infrequent events with institutional land uses such as schools and churches.

SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006, Table 7-1.
NOTES:
VdB = vibration velocity decibels; dBA = A-weighted decibels
[a] Approximate noise level when vibration spectrum peak is near 30 Hz.
[b] Approximate noise level when vibration spectrum peak is near 60 Hz.

6. Significance Thresholds

Pursuant to CEQA Guidelines Appendix G, the project would result in a significant impact related to noise and vibration if it would expose people to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

For the purposes of this analysis and consistency with CEQA Guidelines Appendix G, applicable local plans, and agency and professional standards, the project would have a significant impact to noise and/or ground-borne vibration if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generate excessive ground-borne vibration or ground-borne noise levels; or
- Expose people residing or working in the project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport).

The proposed project would result in no impacts relevant to airport land use plans, airports, or private airstrips; therefore, these issues do not require further analysis in this study.

7. Methodology

7.1 On-Site Construction

On-site construction noise impacts were evaluated by determining the noise levels generated by the different types of construction activity anticipated, calculating the construction-related noise level generated by the mix of equipment assumed for all construction activities at nearby sensitive receptor locations, and comparing these construction-related noise levels to existing ambient noise levels (i.e., noise levels without construction noise) at those receptors. More specifically, the following steps were undertaken to assess construction-period noise impacts.

1. Ambient noise levels at surrounding sensitive receptor locations were determined based on field measurements (see Table 1, above). Ambient noise measurements were conducted using the Larson-Davis Model LxT Sound Level Meter (SLM). The Larson-Davis LxT SLM is a Type 1 standard instrument as defined in the American National Standard Institute S1.4. All instruments were calibrated and operated according to the applicable manufacturer specification. The microphone was placed at a height of 5 feet above the local grade.
2. Typical noise levels for each type of construction equipment expected were obtained from the FHWA Roadway Construction Noise Model (RCNM).
3. Distances the center of the project site and surrounding off-site noise-sensitive receptors were measured using Project architectural drawings, site plans, and Google Earth.
4. The construction noise level was then calculated, in terms of hourly L_{eq}, for sensitive receptor locations based on the standard point-source noise-distance attenuation factor of 6 dBA L_{eq} for each doubling of distance over a hard surface.

5. Construction noise levels were then compared to the construction noise significance threshold of 75 dBA Leq and ambient plus 3 dBA.

7.2 Off-Site Roadway Noise (Construction)

Roadway noise impacts were evaluated using the FHWA Traffic Noise Model (TNM) and the Caltrans TeNS method based on the construction traffic volume data. This method, considered an industry standard, allows for the definition of roadway configurations, barrier information (if any), and receiver locations.

7.3 Groundborne Vibration

Groundborne vibration impacts were evaluated by identifying potential vibration sources, measuring the distance between vibration sources and surrounding structure locations, and making a determination based on the significance criteria described in the Vibration Impacts section.

The FTA guidelines set forth in their 2018 Transit Noise and Vibration Assessment are used to evaluate potential impacts related to construction vibration for both potential building damage. The FTA guidelines regarding construction vibration are the most current guidelines and are commonly used in evaluating vibration impacts.

Based on the FTA guidance, groundborne vibration could result in building damage if any of the following were to occur:

- Project construction activities cause groundborne vibration levels to exceed 0.5 in/sec PPV at the nearest offsite reinforced-concrete, steel, or timber building.
- Project construction activities cause groundborne vibration levels to exceed 0.3 in/sec PPV at the nearest offsite engineered concrete and masonry building.
- Project construction activities cause groundborne vibration levels to exceed 0.2 in/sec PPV at the nearest offsite non-engineered timber building.
- Project construction activities cause groundborne vibration levels to exceed 0.12 in/sec PPV at buildings extremely susceptible to vibration damage, such as historic buildings.

Structural impacts from the Project were evaluated based on the standard attenuation formula, as follows:

$PPV_{equip} = PPV_{ref} \times (25/D)^n$

Where: PPV_{equip} is the PPV in in/sec of the equipment adjusted for distance

PPV_{ref} is the reference vibration level in in/sec at 25 feet

D is the distance from the equipment to the receiver

n is the soil type classification (typically ranging from 1 to 1.5; a factor of 1.5 was used for this analysis)

8. Environmental Impacts

8.1 Noise

Project Construction

On-Site Construction

Construction of the project is anticipated to occur over a duration of 6 months. Project construction activities would be subject to San Diego County Code Section 36.408, which limits noise-generating construction activity to between the hours of 7:00 AM and 7:00 PM Monday through Saturday. Construction of the Project would require the use of heavy equipment at the Project site. To characterize construction-period noise levels, the average (hourly Leq) noise level associated with construction is estimated based on the quantity, type, and usage factors for each type of equipment expected to be used and are typically attributable to multiple pieces of equipment operating simultaneously.

Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. The Project's estimated construction noise levels were calculated for a scenario in which all pieces of construction equipment were assumed to be operating simultaneously. This is considered a worst-case evaluation as the Project would typically use fewer overall equipment simultaneously at any given time, and as such would likely generate lower noise levels than reported herein. **Table 7,** *Estimated Construction Noise Levels at Sensitive Receptors,* presents the estimated total combined noise level for the combined project construction equipment at each sensitive receptor. As shown, project construction would not result in noticeable increases in ambient noise levels and would not exceed the threshold of 75 dBA Leq over a period of 12 hours established by the FEIR. Additionally, the following best practices would be employed by the construction contractor during all active construction periods to ensure that construction noise is minimized. Therefore, on-site construction noise impacts would be less than significant.

TABLE 7
ESTIMATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

Sensitive Receptor[2]	Ambient Noise Level (dBA Leq)	Estimated Construction Noise Level (dBA Leq)	Threshold[1]	Exceeds Threshold?
R1 – Marina Inn and Suites	64.5	65	69.5	No
R2 – Multi-Family Residential	64.5	65	69.5	No
R3 – Residence Inn	63.9	62	68.9	No
R4 – Pacific Inn Hotel & Suites	62.6	61	67.6	No

Source: ESA, 2021

1. Threshold is 3 dBA over adjusted ambient noise level
2. R1 and R2 represented by ambient measurement M1.
   R3 represented by ambient measurement M2.
   R4 represented by ambient measurement M3.

Best Management Practices

- Use low-noise-generating construction equipment, in lieu of large pieces of equipment;
- Properly maintain all construction equipment, including mufflers and ancillary noise abatement equipment;
- Ensure that all mobile and stationary noise-producing construction equipment used on the Project site that is regulated for noise output by a local, state, or federal agency complies with such regulation while in the course of Project activity;
- Schedule high noise-producing activities during periods that are least sensitive;
- Switch off construction equipment when not in use;
- Position stationary construction equipment, such as generators and compressors, as far away as practical from noise-sensitive receptors;
- Restrict the use of noise-producing signals, including horns, whistles, alarms, and bells, to safety warning purposes only;
- Route construction-related truck traffic away from noise-sensitive areas; and
- Reduce construction vehicle speeds.

Off-Site Construction

Under worst case conditions, there would be approximately 2 one-way haul truck trips (1 haul truck), 4 one-way vendor truck trips (2 vendor trucks), and 10 one-way workers' trips (5 passenger vehicles) per day between the hours of 7:00 a.m. and 7:00 p.m. from Monday through Friday. Due to the location of the project site, construction traffic may travel by sensitive uses to access the project site. Noise associated with construction truck trips were estimated using the FHWA Traffic Noise Model (TNM) Version 2.5 method described in FHWA Traffic Noise Model Technical Manual (FHWA 1998) and based on the maximum number of truck and passenger trips in a day. The results of the analysis indicate that the Project construction trips would generate noise levels of approximately 53.4 dBA Leq (53.7 dBA CNEL). This noise level is below consistent with the ambient conditions ranging from 62.6 to 64.5 dBA Leq. Additionally, the construction trips are temporary in nature. Therefore, off-site construction traffic noise impacts would be less than significant.

Project Operations

Traffic Noise Impacts

The trip generation analysis in the previously certified EIR used a trip generation rate of 60 average daily trips per acre, which was determined based on the City of San Diego's Trip Generation Manual (September 1998). The City last updated the Trip Generation Manual in May 2003, and the trip generation rate for a park use by the Bay remains at 60 average daily trips per acre. The Trip Generation Manual does not distinguish between active and passive park uses. Since the project would not expand the size of the project site evaluated in the previously certified FEIR, and the proposed active park uses are consistent with the park uses evaluated in the previously certified FEIR from a trip generation perspective, no additional vehicle trips would be

generated by the proposed project and as determined by the FEIR, impacts would be less than significant.

On-Site Operational Noise

The proposed project would convert an existing garden to an active recreational area. tThe project site is separated into various components associated with different recreational activities, including a dog park with agility equipment, basketball court, pickleball courts, t-ball field with 100-foot foul lines, table tennis area, and an outdoor fitness area. All proposed recreational facilities would be available for pick-up games/use and would not be able to be reserved. It is not anticipated that any spectator events drawing large crowds would occur at the project site and no amplified sounds systems would be included at the project site. All personal amplified sound equipment would be subject to San Diego County Code Section 36.414, which prohibits the use of loudspeakers and sound amplifiers in any park or public property in a manner that would violate the provisions of the noise ordinance. In addition, given the distance between the project site and noise-sensitive uses located across Pacific Highway of approximately 100 feet and the masking effect of traffic noise on Pacific Highway, noise levels from conversation, bouncing balls, and dogs barking, etc. would sufficiently attenuate to levels that would not exceed ambient conditions that is dominated by traffic noise. Therefore, impacts related to on-site operational noise would be less than significant.

8.2 Vibration

Construction

The project would be constructed using typical construction techniques. As such, it is anticipated that the equipment to be used during construction would not expose persons to or generate excessive groundborne vibration. Post-construction on-site activities would be limited to park uses that would not generate excessive groundborne vibration.

Construction activities on the Project site could generate ground-borne vibration from the operation of a plate compactor. The nearest hotel and residential structures are located approximately 100 feet to the east of the Project boundary. Vibration levels generated by typical heavy equipment, measured at 100 feet and 25 feet, are identified in **Table 8**, *Vibration Source Levels for Construction* Equipment, in terms of peak particle velocity (PPV), and expressed in inches per second (in/sec).

TABLE 8
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Approximate PPV (in/sec) at 25 feet	Approximate PPV (in/sec) at 100 feet
Plate Compactor	0.210	0.026

Note: Reference noise level for vibratory roller has been utilized to estimate vibration impacts from use of a plate compactor.

SOURCE: FTA 2018.

Caltrans' vibration threshold for potential structural damage for off-site residential buildings is 0.5 in/sec PPV and 0.12 in/sec PPV for structures extremely susceptible to vibration (such as historic buildings). At 100 feet from the project construction area, the operation of a plate compactor would generate vibration levels of up to 0.026 in/sec PPV, which is less than the Caltrans threshold for structural damage for both residential and historic uses. Furthermore, construction would only occur during permitted construction hours and would be temporary. Therefore, construction impacts would be less than significant.

Project operation would not include equipment or activities that would generate perceptible operational vibration levels. Therefore, there would be no impact during project operation.

8.3 Airport Noise

As discussed in the FEIR, the project site is located within the Airport Influence Area of the Lindbergh Field and within the 60 dBA CNEL portion of the noise contour. A noise level of 60 dBA CNEL is compatible with the park used anticipated in the FEIR and the proposed active park use, according to the County's Noise Compatibility Guidelines. Impacts would be less than significant.

8.4 Traffic Noise Impact on the Project

The FEIR determined that traffic noise levels along adjacent roadways would expose the project (park use) to noise levels exceeding 65 dBA CNEL, which would not be in conformance with the County's Noise Compatibility Guidelines.[14] Traffic noise levels have not decreased since certification of the FEIR, and the project site is still subject to noise levels that are not compatible with park use. As discussed in the FEIR, sound walls would not be feasible because sound walls would block access to the park. Therefore, the existing environment's impact on the project site would, consistent with the FEIR, be significant and unavoidable.

9. Mitigation Measures

Construction

Construction noise impacts would be less than significant. No mitigation measures are required.

Operations

Operational noise impacts would be less than significant. No mitigation measures are required.

9.2 Vibration

Construction

Construction vibration impacts would be less than significant. No mitigation measures are required.

[14] County of San Diego. 2011. General Plan Noise Element. Table N-1 Noise Compatibility Guidelines.

Operations

Vibration impacts would be less than significant. No mitigation measures are required.

10. References

California Code of Regulations, Title 14, Section 15168(c).

California Department of Transportation (Caltrans), *Technical Noise Supplement (TeNS)*, September 2013.

County of San Diego*, San Diego County Code*.

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Appendix A
Noise Report

Noise Measurements

ESA

Summary

File Name on Meter	LxT_Data.207.s
File Name on PC	LxT_0004285-20210902 070652-LxT_Data.207.ldbin
Serial Number	0004285
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	M1
Job Description	
Note	

Measurement

Description	
Start	2021-09-02 07:06:52
Stop	2021-09-02 07:27:18
Duration	00:20:26.6
Run Time	00:20:26.6
Pause	00:00:00.0
Pre-Calibration	2021-09-02 06:57:05
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRMLxT2B		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.5 dB		
	A	**C**	**Z**
Under Range Peak	**100.8**	97.8	102.8 dB
Under Range Limit	**39.0**	38.6	45.4 dB
Noise Floor	29.9	29.5	36.3 dB

Results

LA_{Seq}	64.5	
LASE	95.4	
EAS	387.957 µPa²h	
EAS8	9.109 mPa²h	
EAS40	45.545 mPa²h	
$LA_{Speak\ (max)}$	2021-09-02 07:25:22	98.4 dB
LAS_{max}	2021-09-02 07:26:15	79.7 dB
LAS_{min}	2021-09-02 07:07:28	29.4 dB
SEA	-99.9 dB	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s
LC_{Seq}	76.6 dB	
LA_{Seq}	64.5 dB	
LC_{Seq} - LA_{Seq}	12.1 dB	
LA_{Ieq}	66.2 dB	
LA_{eq}	64.5 dB	
LA_{Ieq} - LA_{eq}	1.7 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	64.5					
$L_{S(max)}$	79.7	2021/09/02 7:26:15				
$L_{S(min)}$	29.4	2021/09/02 7:07:28				
$L_{Peak(max)}$	98.4	2021/09/02 7:25:22				

Overload Count	0	
Overload Duration	0.0 s	

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	50.8	50.8 dB

Statistics	
LAS5.00	69.2 dB
LAS10.00	67.8 dB
LAS33.30	64.1 dB
LAS50.00	61.7 dB
LAS66.60	60.2 dB
LAS90.00	56.6 dB

Calibration History					
Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRMLxT1	2020-09-28 16:36:23	-50.78	90.63	89.75	81.81
PRMLxT1	2020-09-28 16:36:06	-50.69	87.19	84.36	90.35
PRMLxT1	2020-06-12 15:47:27	-51.07	61.99	59.00	60.27
PRMLxT1	2020-06-12 15:47:03	-51.44	25.69	24.66	24.04
PRMLxT1	2020-06-11 09:33:21	-51.47	50.08	54.40	42.95
PRMLxT1	2020-06-11 08:30:32	-50.12	54.11	61.47	56.81
PRMLxT1	2020-05-18 12:01:24	-49.94	44.01	49.82	52.79
PRMLxT1	2020-05-14 15:45:52	-51.33	45.88	49.23	45.64
PRMLxT1	2020-05-14 15:27:34	-51.37	54.67	61.41	59.84
PRMLxT1	2020-05-14 15:01:04	-51.18	58.14	47.69	56.01
PRMLxT1	2020-03-11 07:21:40	-50.80	70.24	67.74	69.35
PRMLxT2B	2021-09-02 06:57:02	-50.75	62.33	67.66	59.31
PRMLxT2B	2021-09-02 06:56:37	-50.74	71.22	65.67	66.10
PRMLxT2B	2021-08-26 12:57:18	-50.90	57.08	60.10	55.96
PRMLxT2B	2021-07-08 07:08:14	-50.68			
PRMLxT2B	2021-07-08 06:51:59	-50.84	27.94	49.86	136.80
PRMLxT2B	2021-07-08 05:23:53	-49.03			
PRMLxT2B	2020-02-07 09:30:51	-50.84	53.92	48.68	53.00
PRMLxT2B	2020-02-07 09:30:30	-50.83	51.45	59.18	52.42
PRMLxT2B	2020-01-30 10:22:09	-50.98	50.32	47.58	45.81
PRMLxT2B	2020-01-24 08:50:04	-50.86	61.04	65.94	60.13
PRMLxT2B	2020-01-24 08:49:37	-50.87	59.82	65.14	63.52

Summary

File Name on Meter	LxT_Data.208.s
File Name on PC	LxT_0004285-20210902 073147-LxT_Data.208.ldt
Serial Number	0004285
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	M2
Job Description	
Note	

Measurement

Description	
Start	2021-09-02 07:31:47
Stop	2021-09-02 07:52:08
Duration	00:20:20.4
Run Time	00:20:20.4
Pause	00:00:00.0
Pre-Calibration	2021-09-02 06:57:02
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamplifier	PRMLxT2B
Microphone Correction	Off
Integration Method	Exponential
Overload	144.5 dB

	A	C	Z
Under Range Peak	**100.8**	97.8	102.8 dB
Under Range Limit	**39.0**	38.6	45.4 dB
Noise Floor	29.9	29.5	36.3 dB

Results

LA_{Seq}	63.9		
LASE	94.8		
EAS	334.154 µPa²h		
EAS8	7.886 mPa²h		
EAS40	39.428 mPa²h		
$LA_{Speak\ (max)}$	2021-09-02 07:32:02	97.9 dB	
LAS_{max}	2021-09-02 07:38:49	76.4 dB	
LAS_{min}	2021-09-02 07:51:32	51.9 dB	
SEA	-99.9 dB		
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LA_{Speak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LA_{Speak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LA_{Speak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LC_{Seq}	76.5 dB		
LA_{Seq}	63.9 dB		
LC_{Seq} - LA_{Seq}	12.6 dB		
LAI_{eq}	67.3 dB		
LA_{eq}	63.9 dB		
LAI_{eq} - LA_{eq}	3.4 dB		

A		C		Z	
dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**

L_{eq}	63.9					
$L_{S(max)}$	76.4	2021/09/02 7:38:49				
$L_{S(min)}$	51.9	2021/09/02 7:51:32				
$L_{Peak(max)}$	97.9	2021/09/02 7:32:02				

Overload Count	0	
Overload Duration	0.0	s

Dose Settings

Dose Name	OSHA-1	OSHA-2	
Exchange Rate	5	5	dB
Threshold	90	80	dB
Criterion Level	90	90	dB
Criterion Duration	8	8	h

Results

Dose	-99.94	-99.94	%
Projected Dose	-99.94	-99.94	%
TWA (Projected)	-99.9	-99.9	dB
TWA (t)	-99.9	-99.9	dB
Lep (t)	50.2	50.2	dB

Statistics

LAS5.00	69.2	dB
LAS10.00	67.7	dB
LAS33.30	63.4	dB
LAS50.00	61.5	dB
LAS66.60	59.3	dB
LAS90.00	54.8	dB

Calibration History

Preamp	Date	dB re. 1V/Pa	6.3	8.0	10.0
PRMLxT1	2020-09-28 16:36:23	-50.78	90.63	89.75	81.81
PRMLxT1	2020-09-28 16:36:06	-50.69	87.19	84.36	90.35
PRMLxT1	2020-06-12 15:47:27	-51.07	61.99	59.00	60.27
PRMLxT1	2020-06-12 15:47:03	-51.44	25.69	24.66	24.04
PRMLxT1	2020-06-11 09:33:21	-51.47	50.08	54.40	42.95
PRMLxT1	2020-06-11 08:30:32	-50.12	54.11	61.47	56.81
PRMLxT1	2020-05-18 12:01:24	-49.94	44.01	49.82	52.79
PRMLxT1	2020-05-14 15:45:52	-51.33	45.88	49.23	45.64
PRMLxT1	2020-05-14 15:27:34	-51.37	54.67	61.41	59.84
PRMLxT1	2020-05-14 15:01:04	-51.18	58.14	47.69	56.01
PRMLxT1	2020-03-11 07:21:40	-50.80	70.24	67.74	69.35
PRMLxT2B	2021-09-02 06:57:02	-50.75	62.33	67.66	59.31
PRMLxT2B	2021-09-02 06:56:37	-50.74	71.22	65.67	66.10
PRMLxT2B	2021-08-26 12:57:18	-50.90	57.08	60.10	55.96
PRMLxT2B	2021-07-08 07:08:14	-50.68			
PRMLxT2B	2021-07-08 06:51:59	-50.84	27.94	49.86	136.80
PRMLxT2B	2021-07-08 05:23:53	-49.03			
PRMLxT2B	2020-02-07 09:30:51	-50.84	53.92	48.68	53.00
PRMLxT2B	2020-02-07 09:30:30	-50.83	51.45	59.18	52.42
PRMLxT2B	2020-01-30 10:22:09	-50.98	50.32	47.58	45.81
PRMLxT2B	2020-01-24 08:50:04	-50.86	61.04	65.94	60.13
PRMLxT2B	2020-01-24 08:49:37	-50.87	59.82	65.14	63.52

Summary

File Name on Meter	LxT_Data.209.s
File Name on PC	LxT_0004285-20210902 075914-LxT_Data.209.ldbin
Serial Number	0004285
Model	SoundTrack LxT®
Firmware Version	2.404
User	
Location	M3
Job Description	
Note	

Measurement

Description	
Start	2021-09-02 07:59:14
Stop	2021-09-02 08:20:22
Duration	00:21:08.9
Run Time	00:21:08.9
Pause	00:00:00.0
Pre-Calibration	2021-09-02 06:57:02
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRMLxT2B		
Microphone Correction	Off		
Integration Method	Exponential		
Overload	144.5 dB		
	A	**C**	**Z**
Under Range Peak	**100.8**	97.8	102.8 dB
Under Range Limit	**39.0**	38.6	45.4 dB
Noise Floor	29.9	29.5	36.3 dB

Results

LA_{Seq}	62.6	
LASE	93.7	
EAS	258.158 µPa²h	
EAS8	5.859 mPa²h	
EAS40	29.297 mPa²h	
$LA_{Speak\ (max)}$	2021-09-02 07:59:25	93.0 dB
LAS_{max}	2021-09-02 07:59:19	77.9 dB
LAS_{min}	2021-09-02 08:05:55	50.4 dB
SEA	-99.9 dB	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LAS > 115.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LA_{Speak} > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s
LC_{Seq}	76.2 dB	
LA_{Seq}	62.6 dB	
LC_{Seq} - LA_{Seq}	13.6 dB	
LAI_{eq}	63.8 dB	
LA_{eq}	62.6 dB	
LAI_{eq} - LA_{eq}	1.2 dB	

	A		C		Z	
	dB	**Time Stamp**	**dB**	**Time Stamp**	**dB**	**Time Stamp**
L_{eq}	62.6					
$L_{S(max)}$	77.9	2021/09/02 7:59:19				
$L_{S(min)}$	50.4	2021/09/02 8:05:55				
$L_{Peak(max)}$	93.0	2021/09/02 7:59:25				

Overload Count	0
Overload Duration	0.0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results		
Dose	-99.94	-99.94 %
Projected Dose	-99.94	-99.94 %
TWA (Projected)	-99.9	-99.9 dB
TWA (t)	-99.9	-99.9 dB
Lep (t)	49.1	49.1 dB

Statistics	
LAS5.00	67.8 dB
LAS10.00	66.2 dB
LAS33.30	61.9 dB
LAS50.00	59.3 dB
LAS66.60	56.2 dB
LAS90.00	53.1 dB

Calibration History

Preamp	Date	dB re. 1V/Pa	6.3	8.0	10.0
PRMLxT1	2020-09-28 16:36:23	-50.78	90.63	89.75	81.81
PRMLxT1	2020-09-28 16:36:06	-50.69	87.19	84.36	90.35
PRMLxT1	2020-06-12 15:47:27	-51.07	61.99	59.00	60.27
PRMLxT1	2020-06-12 15:47:03	-51.44	25.69	24.66	24.04
PRMLxT1	2020-06-11 09:33:21	-51.47	50.08	54.40	42.95
PRMLxT1	2020-06-11 08:30:32	-50.12	54.11	61.47	56.81
PRMLxT1	2020-05-18 12:01:24	-49.94	44.01	49.82	52.79
PRMLxT1	2020-05-14 15:45:52	-51.33	45.88	49.23	45.64
PRMLxT1	2020-05-14 15:27:34	-51.37	54.67	61.41	59.84
PRMLxT1	2020-05-14 15:01:04	-51.18	58.14	47.69	56.01
PRMLxT1	2020-03-11 07:21:40	-50.80	70.24	67.74	69.35
PRMLxT2B	2021-09-02 06:57:02	-50.75	62.33	67.66	59.31
PRMLxT2B	2021-09-02 06:56:37	-50.74	71.22	65.67	66.10
PRMLxT2B	2021-08-26 12:57:18	-50.90	57.08	60.10	55.96
PRMLxT2B	2021-07-08 07:08:14	-50.68			
PRMLxT2B	2021-07-08 06:51:59	-50.84	27.94	49.86	136.80
PRMLxT2B	2021-07-08 05:23:53	-49.03			
PRMLxT2B	2020-02-07 09:30:51	-50.84	53.92	48.68	53.00
PRMLxT2B	2020-02-07 09:30:30	-50.83	51.45	59.18	52.42
PRMLxT2B	2020-01-30 10:22:09	-50.98	50.32	47.58	45.81
PRMLxT2B	2020-01-24 08:50:04	-50.86	61.04	65.94	60.13
PRMLxT2B	2020-01-24 08:49:37	-50.87	59.82	65.14	63.52

Modeling Worksheets

ESA

Project: Waterfront Park

Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	8	Daytime hours (7 am to 7 pm)
	0	Evening hours (7 pm to 10 pm)
	0	Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3	

				1 - Marina Inn and Suites					2 - Multi-Family Residential				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**
Site Preparation					***71***	***65***				***68***	***62***		
Plate Compactors	1	82	20%	275	67	60	63	0	215	64	57	60	5
Tractors/Loaders/Backhoes	2	80	25%	275	68	62	65	0	215	65	59	62	5
Aerial Lifts	1	75	20%	275	60	53	56	0	215	57	50	53	5
Measured Ambient Noise Level						64.5					64.5		
						67.5					67.5		
						No					No		

Source for Ref. Noise Levels: FHWA RCNM, 2005

Project: Waterfront Park

Construction Noise Impact on Sensitive Receptors

Parameters

Construction Hours:	8	Daytime hours (7 am to 7 pm)
	0	Evening hours (7 pm to 10 pm)
	0	Nighttime hours (10 pm to 7 am)
Leq to L10 factor	3	

				3 - Marriott Residence Inn					4 - The Pacific Hotel				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**
Site Preparation					***68***	***62***				***68***	***61***		
Plate Compactors	1	82	20%	220	64	57	60	5	415	64	57	60	0
Tractors/Loaders/Backhoes	2	80	25%	220	65	59	62	5	415	65	59	62	0
Aerial Lifts	1	75	20%	220	57	50	53	5	415	57	50	53	0
Measured Ambient Noise Level						63.9					62.6		
						66.9					65.6		
						No					No		

Source for Ref. Noise Levels: FHWA RCNM, 2005

TRAFFIC NOISE ANALYSIS TOOL

Project Name: Waterfront Park
Analysis Scenario: Construction

Roadway Segment	Ground Type	Distance from Roadway to Receiver (feet)	Speed (mph)			Peak Hour Volume			Peak Hour Noise Level (Leq(h) dBA)	Noise Level dBA CNEL
			Auto	MT	HT	Auto	MT	HT		
Off-site Construction Noise	Hard	50	25	25	25	10	0	6	53.4	53.7

Model Notes:
The calculation is based on the methodology described in FHWA Traffic Noise Model Technical Manual (1998).
The peak hour noise level at 50 feet was validated with the results from FHWA Traffic Noise Model Version 2.5.
Accuracy of the calculation is within ±0.1 dB when comparing to TNM results.
Noise propagation greater than 50 feet is based on the following assumptions:
For hard ground, the propagation rate is 3 dB per doubling the distance.
For soft ground, the propagation rate is 4.5 dB per doubling the distance.
Vehicles are assumed to be on a long straight roadway with cruise speed.
Roadway grade is less than 1.5%.
CNEL levels were obtained based on Figure 2-19, on page 2-58 Caltran's TeNS 2013.

Waterfront Park

Vibration Level Calculations

Based on Federal Transit Administration, Office of Planning and Environment

N =	1.5

Construction Equipment	Project Equipment	Equipment Peak Particle Velocity @ 25 Feet* (inches/second)	Distance to Receptor for < 0.5 PPV (Feet)	Estimated Velocity Decibels @ Distance** (VdB)	Estimated Peak Particle Velocity @ Distance*** (inches/second)
Unmitigated Vibration Levels					
Plate Compactor	Yes	0.210	100	76.3	0.026

Source:

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual,* 2018.

Notes:

* Values taken from Table 7-4.

** Based on the formula VdB = 20 x LOG10 (v/v_{ref}), where v_{ref} is equal to 1×10^{-6} in/sec (see page 111).

The approximate rms vibration velocity level (v) is calculated from PPV using a crest factor of 4 (see page 184).

*** Based on the formula $PPV(D) = PPV(25\text{ ft}) \times (25/D)^N$, where D is equal to the distance (see page 185).

N = soil type classification factor (typically ranges from 1 to 1.5)