GEORGE WALKER SMITH EDUCATION CENTER PROJECT

Draft Environmental Impact Report

SCH No. 2023100817

March 2024

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Table of Contents

Table of Contents (cont.)

Table of Contents (cont.)

Table of Contents (cont.)

Table of Contents (cont.)

List of Appendices

List of Figures

Table of Contents (cont.)

List of Tables

Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ACM	asbestos-containing material
ADT	average daily trips
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
AMSL	above mean sea level
APS	Alternative Planning Strategy
AR	Administrative Regulation
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Commission
CFR	Code of Federal Regulations
CH_4	methane
CIP	capital improvement program
City	City of San Diego
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent

Acronyms and Abbreviations (cont.)

County	County of San Diego
CPIOZ	Community Plan Implementation Overlay Zone
CPUC	California Public Utilities Commission
CTC	California Transportation Commission
CWA	Clean Water Act
CY	cubic yard
dB	decibel
dBA	A-weighted decibel
District	San Diego Unified School District
DPM	diesel particulate matter
DSA	Office of the Division of the State Architect
EIR	Environmental Impact Report
EPIC	University of San Diego School of Law Energy Policy Initiative Center
EO	Executive Order
ESA	environmentally sensitive area
ESL	Environmentally Sensitive Lands
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	floor area ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FPC	Facilities Planning and Construction
FTA	Federal Transit Administration
g/L	grams per liter
GHG	greenhouse gas
GWP	global warming potential
G.W.	George Walker
H&SC	California Health and Safety Code
HFC	hydrofluorocarbon
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I-	Interstate
IA	Implementing Agreement
in/sec	inches per second
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ITE	Institute of Transportation Engineers

Acronyms and Abbreviations (cont.)

kHz	kilohertz
KMCP	Kearny Mesa Community Plan
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LDC	Land Development Code
LDM	Land Development Manual
L_{DN}	day night sound level
L_{EQ}	time-averaged noise level
LMA	Local Mobility Assessment
LOS	level of service
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MHPA	Multi-Habitat Planning Area
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MT	metric tons
MTS	Metropolitan Transit System
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NE	Narrow Endemic
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
NO	nitrogen oxide
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NSLU	noise sensitive land use
O_3	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
PEIR	Program Environmental Impact Report
PFC	perfluorocarbon

Acronyms and Abbreviations (cont.)

PM_{10}	respirable particulate matter 10 microns or less in diameter
$PM_{2.5}$	fine particulate matter 2.5 microns or less in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PV	photovoltaic
RAQS	Regional Air Quality Strategy
RCNM	Roadway Construction Noise Model
RMS	root mean square
ROG	reactive organic gas
RRP Rule	Lead Renovation, Repair and Painting Rule
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SAP	subarea plan
SB	Senate Bill
SCH	State Clearinghouse
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDCRAA	San Diego County Regional Airport Authority
SDMC	San Diego Municipal Code
SF	square feet
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SO_2	sulfur dioxide
SPL	sound pressure level
SR	State Route
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
TAC	toxic air contaminants
TCM	Transportation Control Measure
UNFCCC	United Nations Framework Convention on Climate Change
U.S.C.	U.S. Code
U.S. Census Bureau	U.S. Department of Commerce Bureau of the Census
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

Acronyms and Abbreviations (cont.)

VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
VPHCP	Vernal Pool Habitat Conservation Plan

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EXECUTIVE SUMMARY

ES.1 Introduction

This chapter includes a summary of the Draft Environmental Impact Report (EIR) prepared for the George Walker (G.W.) Smith Education Center Project (project) in compliance with the California Environmental Quality Act (CEQA). The San Diego Unified School District (District) is the CEQA Lead Agency for the EIR and, as such, has the primary responsibility for evaluating environmental effects of the proposed project and considering whether to approve the proposed project in consideration of these effects. The City of San Diego (City), the Office of the Division of the State Architect (DSA), Regional Water Quality Control Board (RWQCB), and Federal Aviation Administration (FAA) also have approval authority of the project and are thereby considered CEQA Responsible Agencies, which means that they must consider the environmental effects of the proposed project when considering their project-related actions.

As required by CEQA, this Draft EIR includes the following information: (1) a description of the proposed project, including its location, objectives, and features; (2) a description of the existing conditions at the project site and surrounding areas; (3) an analysis of the direct, indirect, temporary, permanent, and cumulative adverse physical effects that would occur to existing conditions should the proposed project be approved and implemented; (4) an identification of feasible means of avoiding or substantially lessening the significant adverse effects; (5) a determination of significance for each impact after mitigation is incorporated; and (6) an evaluation of a reasonable range of alternatives to the proposed project that would meet the basic project objectives and reduce a project-related significant environmental impact.

This chapter covers the following topics: (1) Project Description; (2) Areas of Controversy/Issues Raised by Agencies and the Public; and (3) Issues to be Resolved, including significant environmental effects and the consideration of alternatives to the proposed project.

ES.2 Project Description

The proposed project evaluated in this EIR involves the adoption of the proposed project by the District and implementation of the proposed project improvements. The project improvements would consist of building renovations and construction of a new administrative campus including construction of a parking garage, renovation and expansion of the existing building on-site with a new two-story addition, and other site infrastructure improvements. The project also includes moving the District administrative services presently located at the Central Office at 4100 Normal Street in the City of San Diego to this new administrative campus. The redevelopment of the 4100 Normal Street site would be the focus of future environmental review when those plans are developed.

ES.2.1 Project Location

The project site is a 7.8-acre parcel located at 9330 Balboa Avenue in the City's Kearny Mesa community. The site is located at the northwest corner of the Balboa Avenue/Ruffin Road intersection on a developed site that contains an existing two-story building encompassing approximately 150,000 square feet (SF) and associated surface parking and landscaping. Land uses surrounding the project site

include open space within the City's Multi-Habitat Planning Area (MHPA) to the north followed by an office building, offices to the east and south across Ruffin Road and Balboa Avenue, respectively, and a military office facility to the west.

ES.2.2 Project Objectives

The District has identified the following objectives for the proposed project:

1. Use Voter Approved Measures YY and U funds for the design and construction of a new District administrative center;

2. Provide a new, modern administrative center to serve as the main District office to replace the outdated buildings at the existing education center campus at 4100 Normal Street, repair and replace associated aging infrastructure, and support anticipated increases in administrative staff;

3. Consolidate District staff and facilities into a single and more central location with convenient access to freeways and transit services; and

4. Provide for the construction of additional employment uses in Kearny Mesa consistent with the Kearny Mesa Community Plan (KMCP), as well as applicable land use designations and underlying zoning.

ES.2.3 Project Components

The District proposes building renovations, the construction of a new administrative campus, and the relocation of the existing District administrative services and staff presently located at the Central Office at 4100 Normal Street in the City of San Diego to this new administrative campus. Implementation of the proposed project would occur in two phases. The first phase would entail construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements.

The proposed parking garage would be constructed in the northwestern portion of the site and would include five levels with a total area of approximately 180,000 SF and approximately 500 parking spaces. The parking garage would be a maximum height of 61 feet. Surface parking lots would also be constructed in the southern and eastern portions of the site and would provide approximately 175 parking spaces.

The proposed administration building would consist of the renovated existing 150,000-SF building with a new approximately 60,000-SF two-story addition on the north side of the existing building and a new entrance on the northeast side of the building. The proposed addition would include an entry foyer with a one-story wing extending from the foyer to the southwest and northeast. The entry foyer would consist of two stories consistent with the remainder of the two-story addition and existing building. The administration building would be a maximum height of approximately 30 feet. A plaza would be constructed in the northwest portion of the site between the building and parking garage that would include walkways and outdoor gathering spaces.

Other project components include access, sidewalk, utility, and landscape/hardscape improvements. Access would be provided via two driveways along Balboa Avenue and two driveways along Ruffin Road. An access road to the proposed parking garage would be provided along the northern and western portions of the site. Along Balboa Avenue and Ruffin Road existing sidewalks would be removed and a new 5-foot-wide sidewalk would be constructed partially within the existing road right-of-way. Utility improvements, including water, sewer, electrical, and telecommunications infrastructure, would include laterals and connections to existing utility infrastructure in Balboa Avenue and Ruffin Road. An on-site stormwater system is proposed that would include a subsurface stormwater detention vault consisting of 60 modules and a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue.

Landscaping would be installed along the roadway frontages of Balboa Avenue and Ruffin Road, within the surface parking lots, and around the new administrative building and parking garage. Hardscape improvements would be provided at building entrances, along pedestrian walkways, and at outdoor gathering spaces. A new monument sign would be installed in the southeast corner of the site adjacent to the roadway. Retaining walls would also be constructed along portions of the southern and western perimeters of the site.

Project construction would occur over approximately 32 months, beginning in May 2024 and concluding in December 2026. Grading would require an import of 11,987 cubic yards of fill material. During construction, the District would implement standard operating procedures or contractor specifications to comply with federal and state environmental regulations, including the California Building Code, the Construction General Permit, San Diego County Air Pollution Control District (SDAPCD) rules, and City monitoring requirements. Construction would also be limited to the hours of 7 a.m. to 7 p.m. and the District would be required to notify the FAA due to the project's location near the Montgomery Gibbs Executive Airport.

ES.3 Areas of Known Controversy

Section 15123 of the CEQA Guidelines requires that an executive summary of an EIR include areas of controversy known to the Lead Agency, including issues raised by other public agencies and/or the public. The District circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and content of the environmental analysis between October 27 and November 27, 2023.

The District received one NOP response letter from the Native American Heritage Commission during the review period regarding compliance with Assembly Bill 52 and Senate Bill 18 relative to cultural resources, as well as recommendations for cultural resources assessments. A copy of the NOP and comments received during the NOP review period are contained in Appendix A of the EIR.

ES.4 Issues to be Resolved

This Draft EIR examines the potential environmental effects of the proposed project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. Prior to the preparation of this Draft EIR, an Initial Study (IS) checklist was

prepared to briefly evaluate the environmental topics included in Appendix G of the CEQA Guidelines and the following were identified as having the potential to result in a significant environmental effect:

- Aesthetics
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Noise and Vibration
- Transportation

Table ES-1, *Project Environmental Impacts and Mitigation Measures*, presented at the end of this chapter, provides a summary of the environmental impacts that could result from implementation of the proposed project and feasible mitigation measures that would reduce or avoid the potential impacts. For each impact, Table ES-1 identifies the significance of the impact before mitigation, applicable mitigation measures, and the level of significance of the impact after the implementation of mitigation measures. The end of Table ES-1 also includes the standard construction measures and regulatory compliance measures that protect environmental resources during construction. Impacts related to agricultural and forestry resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire were determined to not present a potential environmental impact and are considered to be effects found not to be significant, in accordance with CEQA Guidelines Section 15128. These issues are discussed further in Chapter 6, *Effects Found Not to be Significant*.

ES.5 Project Alternatives

The following alternatives are analyzed in detail in Chapter 8, *Project Alternatives*, of this EIR. The objective of the alternatives analysis is to consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation in the environmental review process. The considered alternatives to the proposed project are summarized below followed by a discussion of the environmentally superior alternative.

ES.5.1 Alternatives Evaluated in Detail

No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that the "no project" alternative be evaluated along with its impacts to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. Under this alternative, the physical conditions of the project site would remain as they are as the date of the NOP and District services would continue operating at 4100 Normal Street. The project site is currently completely developed with an existing vacant office building, surface parking, and landscaping.

Modernize Existing Education Center Alternative

Under this alternative, the existing District Education Center located at 4100 Normal Street, would be redeveloped. The existing permanent and portable buildings, which encompass a total of approximately 200,000 SF, would undergo interior renovations and exterior improvements (e.g., repairs and painting) to provide offices and facilities for District administrative uses. Minor demolition to reconfigure and expand the office space to accommodate the proposed services would be required. The services

operating from the existing office would remain at the 4100 Normal Street property and no development on the proposed project site would occur. Therefore, conditions at the project site would remain as they were as of the date of the NOP.

Reuse Existing Building Alternative

Under this alternative, the existing building would be retained and used for the new District administration center. The existing vacant building, which encompasses a total of approximately 150,000 SF, would undergo interior renovations and minor exterior improvements (e.g., repairs and painting) to provide offices and facilities for District administrative uses. The physical conditions of the project site would generally remain as they are today with potentially some limited improvements to complement the renovated building, such as an outdoor courtyard. Parking would be provided by the existing surface lots and access would be provided via the existing driveways on Balboa Avenue and Ruffin Road.

Reduced Project Alternative

This alternative would develop an administrative center similar to the proposed project, but with a 50 percent reduction in building space for the proposed building addition. Instead of the approximately 210,000-SF renovated/expanded building (renovation of the existing 150,000-SF and 60,000-SF addition) that would be included under the proposed project, the Reduced Project Alternative would renovate/develop an approximately 180,000-SF building for District administrative uses, including renovation of the existing 150,000-SF building and a 30,000-SF addition). The parking garage would also be reduced compared to the proposed project. The footprint of the parking garage would be the same, but it would be three levels instead of five. The other components and improvements would be substantially the same as the proposed project, such as the proposed plaza, access driveways, internal access roads, landscaping, hardscape improvements, and utility improvements.

Project Location Alternative

Under this alternative, an alternative site of similar size, in a central location with respect to District boundaries, and close to freeway and transit access would be acquired by the District and the proposed project components would be constructed on this alternative site. The Project Location Alternative assumes the project would be constructed at a developed property within the KMCP area that is located adjacent to developed land and more than 120 feet from proposed trolley lines. To construct an administrative center building and provide parking similar to the proposed project, it is assumed that portions of an existing structure would be demolished, an addition would be constructed, interior renovations would occur, and a parking structure would be constructed on the site. Other components and improvements would be similar to the proposed project, including the provision of a plaza, reconfigured driveways, internal access roads, landscaping, hardscape improvements, and utility improvements.

ES.5.2 Environmentally Superior Alternative

The CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR, which is typically selected based on an ability to avoid or substantially reduce significant environmental effects associated with the project. CEQA Guidelines Section 15126.6(e)(2) also requires that if the No Project Alternative is identified as the environmentally

superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on a comparison of the overall environmental impacts for the described alternatives, the No Project Alternative is identified as the environmentally superior alternative. This alternative would not result in any contribution to significant and unmitigable cumulative impacts related to aesthetics or noise and vibration, which would occur with the proposed project. The significant but mitigable impacts to biological resources would also be avoided. The No Project Alternative, however, does not meet any of the project objectives.

Of the remaining alternatives, the environmentally superior alternative is the Reduced Project Alternative. This alternative would meet all of the project objectives, although to a lesser degree than the proposed project, would avoid the significant and unmitigable cumulative aesthetics impacts, and reduce the severity of the significant and unmitigable cumulative GHG emissions impact.

Table ES-1
PROJECT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Aesthetics						
Scenic Vistas	The proposed project would not have a substantial adverse effect on a scenic vista.	LTS	LTS	No mitigation is required.	--	--
Scenic Resources	The proposed project would not damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.	LTS	LTS	No mitigation is required.	--	--
Visual Character and Quality	Project construction could temporarily reduce the visual quality of the site. Once constructed, the project would not conflict with regulations governing scenic quality, nor would it substantially degrade the existing visual character or quality of public views of the site and its surroundings.	PS	PS	**AES-1: Install Construction Screening and Fencing**. In compliance with District Guide Specification Section 01-50-00, Temporary Facilities and Controls, the District shall install construction-screening fencing around the entire perimeter of the project site during construction that would shield construction activities from sight and, prior to the onset of construction activities, the District shall confirm such fencing is depicted on the appropriate demolition and construction plans. Construction screening shall meet the specifications defined in Part 2 of Section 01-50-00.	LTS	SU

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Light and Glare	The proposed project would not create substantial sources of light or glare.	PS	PS	See mitigation measure BIO-3, below. **AES-2: Ensure Airport Land Use Commission Review and Approval for Review Area 1.** During project design, the District shall submit a consistency application for Airport Land Use Commission (ALUC) review for all projects located within Review Area 1. The ALUC shall make a consistency determination as to whether the project is compatible with Airport Land Use Compatibility Plan (ALUCP) noise and safety compatibility policies, and whether the project requires Federal Aviation Administration (FAA) review or is determined by the FAA not to be a hazard or obstruction to air navigation. **AES-3: Ensure Airport Land Use Commission Review and Approval for Review Area 2.** Prior to project design, the District shall submit a consistency application for Airport Land Use Commission (ALUC) review for land use projects located within Review Area 2 if they propose increases in height limits compared to existing structures, or for projects that: • Have received a Notice of Presumed Hazard, a Determination of Hazard, or a Determination of No Hazard subject to conditions, limitations, or marking and lighting requirements, from the Federal Aviation Administration (FAA); and/or	LTS	LTS

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				• Would create any of the following hazards: o Glare o Lighting o Electromagnetic interference o Dust, water vapor, and smoke o Thermal plumes o Bird attractants		
Air Quality						
Air Quality Plans	The project would not conflict with or obstruct implementation of the applicable air quality plans.	LTS	LTS	No mitigation is required.	--	--
Air Quality Standards	The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.	LTS	LTS	No mitigation is required.	--	--
Sensitive Receptors	The project would not expose sensitive receptors to substantial pollutant concentrations.	LTS	LTS	No mitigation is required.	--	--
Odors	The project would not result in emissions, including those leading to odors, adversely affecting a substantial number of people	LTS	LTS	No mitigation is required.	--	--

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Biological Resources						
Sensitive Species	The project has the potential to result in direct adverse effects to trees on the project site supporting nesting of sensitive species. The proposed project has the potential to result in indirect adverse effects to sensitive species and their habitats in the adjacent MHPA. The project would not result to direct adverse effects to sensitive wildlife and their habitats located in the adjacent MHPA.	PS	LTS	**BIO-1: Migratory Bird Treaty Act Compliance**. In compliance with the Migratory Bird Treaty Act, the removal of any trees or vegetation, to the maximum extent possible, shall avoid the general avian breeding season (January 15 through August 31). If the project proposes construction involving ground disturbance, tree removal, or vegetation trimming or clearing between January 15 and August 31 in the vicinity of habitat with potential to support nesting birds, the District shall retain a qualified biologist to perform a nesting bird survey within the construction site. The survey shall be performed within 72 hours prior to project construction activities involving ground disturbance, tree removal, or vegetation trimming or clearing. If active nests are identified during the survey, the qualified biologist shall establish appropriate measures to avoid impacts on active nests, which may include a buffer around designated nests (300 feet for most nests, 500 feet for raptors) or other avoidance measures. The biologist shall monitor the nest at least once per week during the nesting season, and the avoidance measures shall be in place until it has been determined by the biologist that the young have fledged or the nest has been abandoned.	LTS	LTS

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				BIO-2: Coastal California Gnatcatcher Surveys and Monitoring. Construction noise that exceeds the maximum allowable levels shall be avoided during the breeding season for the coastal California gnatcatcher (February 15 through August 31). If construction is proposed during the breeding season for the species, USFWS protocol surveys shall be required in order to determine species presence/absence. If the initial survey determines suitable nesting habitat for the coastal California gnatcatcher is no longer present adjacent to the project site, no further surveys or monitoring shall be required. If protocol surveys are not conducted in suitable habitat during the breeding season for the coastal California gnatcatcher, presence shall be assumed with implementation of noise attenuation and biological monitoring, as detailed below: 1. Prior to the commencement of construction during the breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average or 3 dBA over the ambient hourly average for the presence of the coastal California gnatcatcher. Surveys shall be conducted pursuant to the protocol survey guidelines established by the United		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				States Fish and Wildlife Service within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met: a. Between February 15 and August 31, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist. Construction activities shall not result in noise levels exceeding 60 dBA hourly average or 3 dBA over the ambient hourly average at the edge of occupied gnatcatcher habitat. The qualified biologist, District staff, and a qualified noise specialist shall collaborate to determine suitable measures at the site. This can include, but not be limited to, the following: limitations on the placement of construction equipment and the simultaneous use of equipment, active monitoring of the gnatcatcher by the qualified biologist, or noise attenuation measures and barriers. If these implemented measures are determined to be inadequate by the qualified biologist, then the associated construction activities shall cease until such time that		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				adequate noise attenuation is achieved or until the end of the breeding season (August 31). 2. If coastal California gnatcatcher is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to District staff that demonstrates whether mitigation measures (described above) are necessary between February 15 and August 31 as follows: a. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then conditions shall be adhered to as specified above. b. If this evidence concludes that no impacts on this species are anticipated, the conditions provided above shall not be required. **BIO-3: Inadvertent Encroachment Prevention/MHPA Land Use Adjacency Guidelines Compliance**. The District shall retain a qualified biologist prior to construction to oversee the implementation of the following measures to prevent inadvertent encroachment into and indirect impacts to the MHPA.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				Prior to the commencement of construction, the District shall also verify the contractor has accurately represented the project's design in construction documents and/or contract specifications and that these documents are in conformance with the City's Multi-Habitat Planning Area Adjacency Guidelines, specifically addressing the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development. 1. **Erect Environmentally Sensitive Area Fencing**. Prior to construction, a qualified biologist retained by the District shall delineate any areas identified as containing sensitive biological resources and install temporary environmentally sensitive area (ESA) fencing. Construction personnel shall avoid entering any area containing ESA fencing, and the ESA fencing shall remain in place until the conclusion of construction.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				2. **Implement Construction Best Management Practices**. Prior to construction activities, the District shall obtain coverage under the National Pollutant Discharge Elimination System Construction General Permit, as issued by the San Diego Regional Water Quality Control Board. The District shall be responsible for ensuring that construction activities comply with the conditions in this permit, including development of a Stormwater Pollution Prevention Plan (SWPPP), implementation of Best Management Practices (BMPs) identified in the SWPPP, and monitoring (as required) to ensure that effects on water quality are minimized. As part of this process, the District shall implement multiple erosion and sediment control BMPs in areas with the potential to drain to surface water and sensitive habitat. Guidelines established in the City of San Diego Jurisdictional Runoff Management Plan or equivalent guidelines shall be followed in selecting, implementing, and monitoring BMPs for construction activities.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				3. **Limit Light Pollution**. If project construction activities requiring lighting are proposed, the District shall protect the MHPA from light pollution though the use of light barriers, redirecting light sources, and the use of downward facing and low-level illumination as appropriate. Permanent lighting sources shall also be directed to shield the MHPA from operational lighting. 4. **Protect Vernal Pools During Construction**. Prior to the start of construction, the District shall ensure that the existing chain link fencing along the northern boundary of the project site is in good condition without any breaks or holes, and straw wattles, sand bags, or other similar protective device shall be placed along the base of fencing to protect the vernal pools in the adjacent MHPA. Immediately prior to initial ground disturbing activities, a qualified biologist shall inspect the fencing and protective devices to ensure they are in place and that construction crews are aware of the adjacent vernal pool resources. The fencing and protective devices shall be maintained in place for the duration of construction and shall be inspected by the biologist at least once per week.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Sensitive Habitats	The project would not result in direct adverse effects to riparian habitat or other sensitive natural communities. However, the project may result in indirect adverse effects to off-site sensitive natural communities.	PS	LTS	See mitigation measure BIO-3, above.	LTS	LTS
Wetlands	The project would not have a direct, substantial adverse effect on state or federally protected wetlands. Indirect effects to wetlands, specifically vernal pools, would occur with the project.	PS	LTS	See mitigation measure BIO-3, above.	LTS	LTS
Wildlife Movement	The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	LTS	LTS	No mitigation is required.	--	--
Local Policies Protecting Biological Resources	The project would require the removal of trees protected by a local tree preservation policy.	PS	LTS	**BIO-4: Obtain a Tree Removal Permit and Provide Compensatory Mitigation**. Prior to construction, the District shall apply for a tree removal permit with the City of San Diego and provide compensatory mitigation as required by the City for any protected trees slated for removal.	LTS	LTS

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Conservation Plans	The project has the potential to conflict with the provisions of the applicable habitat conservations plans.	PS	LTS	See mitigation measures BIO-2 and BIO-3, above.	LTS	LTS
Greenhouse Gas Emissions						
Greenhouse Gas Emissions	The project would not generate greenhouse gas emissions that would have a significant impact on the environment.	PS	PS	**GHG-1: Implement Best Management Practices During Construction**. The District shall incorporate best management practices to reduce greenhouse gas emissions during construction, as applicable. Best management practices may include, but are not limited to: • Use local building materials. • Recycle construction waste or demolition materials. • Implement employee carpool programs. • Maintain all construction equipment in proper working condition according to manufacturers' specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. **GHG-2: Incorporate Sustainable Design Features**: During project planning and design phases, the District shall require all future projects to incorporate sustainable design features, including, but not limited to, the following: • All interior/exterior lighting shall be LED lighting.	SU	SU

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				• Photovoltaic (PV) solar systems shall be installed that meet the siting criteria in the District's *Solar PV Design Guide*. • An Energy Management System to control heating, ventilation, and air conditioning systems shall be installed. Provide adequate amounts of trash, recycle, and food waste receptacles that are easily accessible to staff and students		
Greenhouse Gas Reduction Plan Consistency	The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions.	LTS	LTS	No mitigation is required.	--	--
Noise and Vibration						
Noise Generation	The project would not result in substantial increases in noise levels at residences during construction. Construction noise could adversely affect nesting birds in the MHPA. Traffic generated by the project would not substantially increase noise levels. Stationary sources on the project site could generate noise levels exceeding applicable limits and the project building could be exposed to noise levels	PS	PS	See mitigation measure BIO-2, above. **NOI-1: Prohibit Exterior Construction Activities Outside of the City of San Diego's Permitted Construction Hours**. During construction of the project, the District shall require all contractors to limit exterior construction activities, including material or equipment deliveries and collections, to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, with no such work at any time on Sundays or legal holidays. Except for construction personnel specifically working on interior construction tasks, construction personnel shall not be permitted on the job site outside of the permitted exterior construction hours.	LTS	LTS

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
	exceeding land use compatibility criteria.			**NOI-2: Implement General Best Practices for Construction Noise Abatement**. During construction of the project, the District shall require all contractors to adhere to the following noise abatement measures: • All construction equipment and vehicles using internal combustion engines will be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. • All mobile or fixed construction equipment used on the project that is regulated for noise output by a local, state, or federal agency will comply with such regulation while in the course of proposed project activity. • All construction equipment will be properly maintained and serviced. • All construction equipment will be operated only when necessary and will be switched off when not in use. Construction employees will be trained in the proper operation and use of the equipment to avoid careless or improper operation of equipment that could increase noise levels.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				• Electrically powered equipment will be used instead of pneumatic or internal combustion powered equipment, where feasible. • Material stockpiles and mobile equipment staging, parking, and maintenance areas will be located as far as practicable from noise-sensitive receptors. • Construction site speed limits will be established and enforced during the construction period. • The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only. • The contractor will provide advance written notification of construction activities to residences around the construction site. Notification will include a brief overview of the proposed construction activity and its purpose and schedule. It also will include the name and contact information of the project manager or representative responsible for resolving any noise concerns. **NOI-3: Design and Install Mechanical Systems to Comply with Property Line Noise Limits**. During the architectural and engineering design phases of the project, an acoustical consultant shall be retained by the District to evaluate the mechanical system design and provide recommendations, as necessary, to		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
				ensure that exterior noise levels comply with the City's Municipal Code noise limits and MHPA noise limits. Such recommendations may include, but are not limited to, the selection of quieter mechanical units, changes in unit locations, changes to rooftop parapet walls, and acoustical louvers or screens. **NOI-4: Exterior-to-Interior Noise Analysis**. During the architectural and engineering design phases of the project, an exterior-to-interior analysis shall be performed for office spaces with facades facing Balboa Avenue or Ruffin Road and shall demonstrate that interior noise levels do not exceed 50 CNEL. The information in the analysis shall include wall heights and lengths, room volumes, window and door tables typical for a building plan, as well as information on any other openings in the building shell. With this specific building plan information, the analysis shall determine the predicted interior noise levels for the planned office spaces. If predicted noise levels are found to exceed 50 CNEL, the analysis shall identify architectural materials or techniques that could be included to reduce noise levels to 50 CNEL in office spaces. Standard measures such as window glazing with appropriate STC ratings, as well as walls with appropriate STC ratings, should be considered. Final plans shall demonstrate that interior noise levels do not exceed 50 CNEL for office facades with a line of sight to Balboa Avenue or Ruffin Road.		

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Vibration	The project would not generate excessive groundborne vibration during construction or operation.	LTS	PS	No mitigation is required.	--	SU
Aircraft Noise	The project would not expose people residing or working in the project area to excessive noise levels due to aircraft activity.	LTS	LTS	No mitigation is required.	--	--
Transportation						
Transportation Plans	The project would be consistent with programs, plans, ordinances, and policies addressing the circulation system.	LTS	LTS	No mitigation is required.	--	--
Vehicle Miles Traveled	The project would not result in increased regional vehicle miles traveled.	LTS	LTS	No mitigation is required.	--	--
Hazardous Design Features	The proposed project would not construct geometric design features or incompatible uses that would substantially increase hazards.	LTS	LTS	No mitigation is required.	--	--
Emergency Access	The project would not result in inadequate emergency access.	LTS	LTS	No mitigation is required.	--	--

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
Standard Construction Measures						
CM-1 – Compliance with California Building Code	--	--	--	1. Implementation of the proposed project shall comply with the California Building Code including all applicable seismic safety development requirements that would minimize seismic ground shaking effects in the event of a major earthquake as well as potential seismic or geologic hazards.	--	--
CM-2 – Compliance with General Construction Permit	--	--	--	1. A Storm Water Pollution Prevention Plan shall be developed prior to construction. 2. Site Design, Source Control, and Treatment Control Best Management Practices shall be implemented per the City's Stormwater Standards Manual.	--	--
CM-3 – Compliance with SDAPCD Rule 55	--	--	--	During construction activity generating fugitive dust emissions, the following measures shall be implemented to reduce such emissions: 1. Water exposed surfaces twice per day; 2. Limit speeds on unpaved surfaces to 25 miles per hour; and 3. Implement track-out/carry-out BMPs including street sweeping as needed.	--	--
CM-4 – Compliance with SDAPCD Rule 67.0.1	--	--	--	Coatings used for the proposed project shall comply with the volatile organic compound limits provided in SDAPCD Rule 67.0.1, which are 50 grams per liter for the building envelope and 100 grams per liter for traffic markings.	--	--

Issue	Impact	Project Significance Before Mitigation	Cumulative Significance Before Mitigation	Mitigation Measure(s)	Project Significance After Mitigation	Cumulative Significance After Mitigation
CM 5 – Compliance with SDMC Section 142.0151	--	--	--	Implement paleontological monitoring in accordance with the City's General Grading Guidelines for Paleontological Resources for locations with moderate paleontological sensitivity.	--	--

LTS = Less than Significant; PS = Potentially Significant; SU = Significant and Unavoidable

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1.0 INTRODUCTION

The San Diego Unified School District (District) is the Lead Agency preparing this Environmental Impact Report (EIR) for the proposed George Walker (G.W.) Smith Education Center Project (proposed project or project). The purpose of this EIR is to provide the decision-making body (the Board of Education) and the general public with information concerning the environmental impacts associated with the proposed project. This EIR assesses impacts that would result with project implementation, presents mitigation measures that would avoid or reduce the level of impacts deemed to be significant, and provides alternatives that would reduce or avoid significant environmental impacts.

The proposed project consists of building renovations and construction of a new administrative campus on a 7.8-acre site located at 9330 Balboa Avenue in the Kearny Mesa community within the City of San Diego (City). The proposed project also includes moving District administrative services presently located at the Central Office at 4100 Normal Street in the City to this proposed administrative campus. The project would be implemented in two phases. The first phase would entail construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements. The proposed project is described in detail in EIR Chapter 3, *Project Description*, and is analyzed within the subsequent sections of this EIR.

1.1 Purpose and Legal Authority

As outlined in the California Environmental Quality Act (CEQA) Guidelines Section 15121, an EIR is a public informational document used in the planning and decision-making process to inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. This EIR analyzes the potential environmental impacts associated with project implementation. The District will consider the information in this EIR, including the public comments and staff response to those comments, during the public review and hearing process. As a legislative action, the final decision would be made by the District Board of Education, who may approve, conditionally approve, or deny the project.

The purpose of an EIR is to identify:

- The significant potential impacts of the project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less than significant level.

An EIR also discloses potential growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of the Project when taken into consideration with past, present, and reasonably anticipated future projects.

CEQA requires an EIR to reflect the Lead Agency's independent judgment. A Draft EIR is circulated to responsible and trustee agencies with resources affected by a project, and to interested agencies, groups, and individuals. Draft EIR reviewers are requested to focus on the sufficiency of the document in identifying and analyzing a project's possible environmental impacts and ways in which those might be avoided or mitigated.

This EIR is being prepared as a Project-level EIR in accordance with CEQA Guidelines Section 15161, which states the following:

> The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.

In accordance with CEQA Guidelines Section 15121, the purpose of this EIR is to provide public agency decision-makers and members of the public with detailed information about the potential significant environmental effects of the project, possible ways to minimize its significant effects, and reasonable alternatives that would reduce or avoid identified significant effects. The EIR includes recommended mitigation measures which, when implemented, would lessen project impacts and provide the District—the Lead Agency as defined in Article 4 of the CEQA Guidelines (Sections 15050 through 15051)—with ways to substantially lessen or avoid significant effects of the project on the environment, whenever feasible. Alternatives to the proposed project are presented to evaluate alternative land use scenarios that would further reduce or avoid significant impacts associated with the project.

1.2 Background

1.2.1 San Diego Unified School District

The District encompasses approximately 208 square miles primarily within the City of San Diego and is the second largest school district in California, serving more than 121,000 students in preschool through 12th grade (District 2021). The District is composed of 223 total educational facilities, 10 administrative sites, and three vacant parcels of land, and employs 12,893 total employees.

The District's Facilities Planning and Construction (FPC) Department is responsible for facility needs throughout the District and implementation of the District's capital improvement program (CIP). CIP projects are funded by four General Obligation bond measures:

- Proposition S, San Diego School Repair and Safety Measure: $2.1 billion bond measure that was approved by 68.71 percent of San Diego voters in 2008
- Proposition Z, San Diego Neighborhood Schools Classroom Safety and Repair Measure: $2.8 billion bond measure approved by 61.8 percent of San Diego voters in 2012
- Measure YY, San Diego School Repair and Student Safety Measure of 2018: $3.4 billion bond measure that was approved by 65.08 percent of San Diego voters in 2018

- Measure U, San Diego Student Safety, Health, and School Repair Measure: $3.2 billion bond measure that was approved by 65.28 percent of San Diego Voters in 2022

The existing District administrative center, the Central Office or Eugene Brucker Education Center, is located at 4100 Normal Street in the University Heights neighborhood and Uptown community planning area of the City of San Diego. This facility is the central District office and houses administrative, personnel, school security, and other departments needed to operate the District. The existing main education center campus was constructed in 1953 and is characterized as an older building with aging and inadequate infrastructure and lacks air conditioning and ventilation. Other buildings within the education center campus are over 100 years old. Measures YY and U contained provisions allowing the District to acquire property for the design and construction of a new District administrative facility. Accordingly, the District purchased the project site in December 2019 with the intent to construct the proposed project.

1.2.2 District Capital Improvement Program

The District adopted their CIP in 2021 that provides the framework to repair, renovate, and revitalize District schools and administrative sites. The CIP consists of improvements identified in the District's Long-Range Facilities Master Plan and General Obligation Bond measures and generally fall within four project categories:

- New Acquisition and New School or Administrative Facilities Construction
- Whole Site Modernization
- Upgrades of Existing School and Administrative Sites
- Joint-Use Facilities Development Including Fields, Pools, and Play All Day Program

The District certified a Final Program Environmental Impact Report (PEIR) for the CIP (State Clearinghouse [SCH] 2019039131) in July 2021. These categories of future projects were evaluated in the PEIR at a program level, in that no site-specific projects were identified or proposed at that time; however, the PEIR identified and evaluated several types of common District CIP projects that could be implemented at any of the District's school or administrative sites. New administrative facilities such as the proposed project are included as one type of future improvement.

1.2.3 Kearny Mesa Community Plan

The project site is located within the Kearny Mesa Community Plan (KMCP) area of the City. The Kearny Mesa community is a 4,423-acre area located in the central portion of the City. The KMCP area is bound by State Route (SR) 52 on the north, Interstate (I-) 805 on the west, and I-15 on the east. The southern KMCP area boundary consists of properties south of Aero Drive and those extending to Friars Road along the western edge of I-15. The Kearny Mesa community primarily consists of industrial, commercial, and office uses. The project site is designated Industrial and Technology Park in the KMCP.

A comprehensive update to the KMCP (KMCP Update) was approved by the City of San Diego City Council on November 10, 2020 that provides a long-range policy framework and vision for growth and development in the Kearny Mesa community. The KMCP provides community-specific policies that further implement the City of San Diego General Plan with respect to the distribution and arrangement

of land uses and the local street and transit network; urban design guidelines; recommendations to preserve and enhance natural open space and historical and cultural resources; and prioritization and provision of public facilities within the Kearny Mesa community.

A PEIR was prepared for the KMCP Update (SCH No. 2018111024) and was certified by the City in November 2020 (Resolution R-313309). The PEIR provided program-level analysis of potential environmental impacts resulting from implementation of the KMCP Update based on land use assumptions, which for the project site include employment uses of the Industrial and Technology Park land use designation.

1.3 Notice of Preparation

This EIR has been prepared in compliance with CEQA (Public Resources Code [PRC], Section 21000, et seq.) and the procedures for implementation of CEQA set forth in the Guidelines for Implementation of CEQA (California Code of Regulations [CCR], Section 15000, et seq.; CEQA Guidelines). The District is the Lead Agency in the preparation of this EIR, as defined by CEQA Guidelines Section 15051.

Prior to the preparation of this EIR and during the early stages of the environmental review process, the District prepared a Notice of Preparation (NOP) and submitted it to the Office of Planning and Research's (OPR's) SCH for a 30-day review period from October 27, 2023 to November 27, 2023 (SCH No. 2023100817). The NOP described the proposed project, provided notification of EIR preparation, and solicited comments from the public to guide the District's determination of the scope of the EIR and the environmental issues that should be reviewed. During the NOP public review period, one comment letter was received from the Native American Heritage Commission (NAHC) regarding compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18 relative to cultural resources, as well as recommendations for cultural resources assessments. A copy of the NOP and comments received during the NOP review period are contained in Appendix A. Public comments received during the scoping process have been taken into consideration during the preparation of this EIR.

1.4 Scope and Content of the EIR

This EIR provides a detailed description of the proposed project (Chapter 3, *Project Description*) and the environmental review conducted for the proposed project (Chapter 4, *Environmental Analysis*). Based on the preliminary analysis during the scoping process, it was determined that implementation of the proposed project would not have an adverse effect on the following environmental issues:

- Agriculture and Forestry Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

In accordance with State CEQA Guidelines Section 15128, a brief explanation indicating the reasons that the effects on these resources would not be significant is provided in Chapter 6, *Effects Found Not to be Significant*.

The following environmental issue areas were identified for the proposed project as being potentially significant based on the scoping process and are addressed in this EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Noise and Vibration
- Transportation

Additional environmental review was conducted for these issue areas, and the results are presented in Chapter 4, *Environmental Analysis* (Sections 4.1 through 4.6) along with mitigation measures that the District has incorporated into the proposed project to avoid or reduce identified environmental impacts.

1.5 Organization

Pursuant to the CEQA Guidelines Section 15120(c), this EIR contains the information and analysis required by CEQA Guidelines Sections 15122 through 15131. Each of the required elements is covered in one of the EIR chapters and appendices, and the EIR is organized as follows:

- **Executive Summary** (CEQA Guidelines Section 15123): Provides a summary of the EIR and a brief description of the project; identifies areas of controversy and issues to be resolved by the decision-makers; and includes a summary table identifying significant impacts, proposed mitigation measures, and the significance of the impact after mitigation. A summary of the project alternatives and a comparison of the potential impacts of the alternatives with those of the project is also provided.

- **Chapter 1, Introduction:** Contains an overview of the legal authority, purpose, and intended uses of the EIR, as well as its scope and content. It also provides a discussion of the CEQA environmental review process, including public involvement.

- **Chapter 2, Environmental Setting** (CEQA Guidelines Section 15125): Provides a description of the project's regional context, location, and existing physical characteristics and land uses, as well as overview of available public infrastructure and services.

- **Chapter 3, Project Description** (CEQA Guidelines Section 15124): Provides a detailed discussion of the proposed project, including the background, objectives, key features, and a list of required discretionary actions.

- **Chapter 4, Environmental Analysis (**CEQA Guidelines Section 15126): Provides a detailed community-specific evaluation of potential environmental impacts associated with the proposed project for environmental issues determined through the initial review and public scoping processes to be potentially significant. The analysis of each issue includes a discussion of existing conditions, regulatory setting, significance determination thresholds, and an evaluation of potential impacts. If significant impacts are identified, feasible mitigation measures to avoid or reduce significant impacts are identified. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is provided.

- **Chapter 5, Cumulative Impacts** (CEQA Guidelines Section 15130): Provides a detailed discussion of the proposed project's cumulative impacts. Per CEQA Guidelines Section 15065(a)(3), a project's impacts are "cumulatively considerable" when the incremental effects of an individual project are considerable when viewed in connection with the effect of past projects, the effects of other current projects, and the effects of probable future projects.

- **Chapter 6, Effects Found Not to be Significant:** Identifies the issues determined in the initial scoping and environmental review process to be not significant for the project, and briefly summarizes the basis for these determinations.

- **Chapter 7, Other CEQA-Required Sections.** A discussion of significant irreversible environmental changes and growth-inducing effects.

- **Chapter 8, Alternatives** (CEQA Guidelines Section 15126.6): This chapter provides a description of the alternatives evaluation process, as well as a description of alternatives considered but eliminated from further analysis and the rationale thereof. This chapter also includes an analysis and assessment of impacts for alternatives retained, including the No Project Alternative and the Environmentally Superior Alternative.

- **Chapter 9, References**: Lists the reference materials cited in the EIR.

- **Chapter 10, List of Preparers** (CEQA Guidelines Section 15129): Identifies Lead Agency staff and CEQA consultants that contributed to the preparation of this EIR.

- **Appendices:** The appendices include the NOP, comments received in response to the NOP, and technical studies prepared for the project.

1.6 Incorporation by Reference

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines Section 15148 or have been incorporated by reference in accordance with CEQA Guidelines Section 15150, which encourage incorporation by reference as a means of reducing redundancy and the length of environmental reports. Information contained within these documents, which are included in Chapter 9, *References*, has been used for various sections of this EIR. Included within the list of materials incorporated by reference into this EIR are the following:

- District Capital Improvement Program Final Program Environmental Impact Report (SCH No. 2019039131); available at: https://cdnsm5-ss18.sharpschool.com/UserFiles/Servers/Server_27732394/File/Facilities%20Planning%20and%20Construction/Environmental/Attachment_2a_Final_SDUSD_CIP_PEIR_27July2021.pdf

- City of San Diego Kearny Mesa Community Plan Update Final Program Environmental Impact Report (SCH No. 2018111024); available at: https://www.sandiego.gov/sites/default/files/kmcpu_feir_07082020.pdf

1.7 EIR Process

The District, as the CEQA lead agency, is responsible for the preparation and review of this EIR. The EIR review process occurs in two basic stages. The first stage is the Draft EIR, which offers the public the opportunity to comment on the document, and the second stage is the Final EIR. In accordance with CEQA Guidelines Section 15105, the Draft EIR is being distributed for review to the public and interested and affected agencies for a review period of at least 30 days. Interested agencies and members of the public are invited to provide comments on the Draft EIR analysis and content to the District. Comments should be submitted in writing during the public review period to:

Paul Garcia, CEQA Environmental Coordinator
San Diego Unified School District Facilities Planning & Construction/Annex 5
4860 Ruffner Street
San Diego, CA 92111
or via email to: environmental@sandi.net
(619) 913-2999

The Draft EIR and related technical studies are available for review during the public review period at the District office located at 4860 Ruffner St., Annex Room 5, San Diego, California 92111, and on the District's Environmental Reviews webpage: https://www.sandiegounified.org/departments/facilities_planning_and_construction/environmental_reviews.

Following the end of the public review period, the District, as lead agency, will review comments received and prepare written responses to the comments per CEQA Guidelines Section 15088. The Final EIR will incorporate the comments and responses and resulting changes to the EIR. Additionally, a Mitigation Monitoring and Reporting Program (MMRP), Findings of Fact, and a Statement of Overriding Considerations for impacts identified in the EIR as significant and unavoidable will be prepared and compiled as part of the EIR finalization process. The Final EIR will be presented for potential certification as the environmental document for the project. Public agencies who comment on the Draft EIR will be notified of the availability of the Final EIR and the date of the public hearing at least 10 days prior to certification of the EIR.

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2.0 ENVIRONMENTAL SETTING

This chapter briefly describes the existing conditions at the project site. Further descriptions of the environmental setting related to individual environmental resources are provided in the applicable sections of Chapter 4, *Environmental Analysis*. In accordance with Section 15125 of the CEQA Guidelines, the baseline conditions described herein reflect the environmental setting at the time the NOP was released in October 2023.

2.1 Regional Setting

The project would occur in the Kearny Mesa community within the City of San Diego. The project site is in the eastern portion of the City's KMCP area, which is characterized by industrial, commercial, and office uses. The KMCP area is a 4,423-acre area located in the central portion of the City and bound by SR 52 on the north, I-805 on the west, and I-15 on the east. The southern KMCP area boundary consists of properties south of Aero Drive and those extending to Friars Road along the western edge of I-15. The project's location within the County of San Diego (County) is depicted on Figure 2-1, *Regional Location*, and its location within the KMCP area is depicted on Figure 2-2, *Kearny Mesa Community Plan Area*.

The District boundary encompasses approximately 208 square miles, primarily located within the southwestern portion of the City but also within small portions of the Cities of La Mesa and Lemon Grove, and unincorporated San Diego County. The District operates 223 educational facilities, including elementary, middle, and high schools, as well as 10 administrative sites.

2.2 Project Site

The project site is a 7.8-acre parcel located at 9330 Balboa Avenue in the City of San Diego. The site is located at the northwest corner of the Balboa Avenue/Ruffin Road intersection on a developed site (Assessor Parcel Number 369-161-06) that contains an existing two-story building encompassing approximately 150,000 square feet (SF) and associated surface parking and landscaping. Figure 2-3, *Project Site Location*, provides an aerial view of the site and immediately surrounding areas of the KMCP area.

The existing on-site building was constructed in the early 1960s and used as the corporate office for Jack in the Box from the early 1960s until 2019. The District acquired the property in December 2019 intending to improve the site for use as an office building for administrative employees. Access to the project site is currently provided via one full-access driveway on Ruffin Road at the northeast corner of the site, one full-access driveway on Balboa Avenue at the southwest corner of the site, and three right-in, right-out driveways along Balboa Avenue.

The project site has a land use designation of Industrial and Technology Park in the KMCP. The Industrial and Technology Park land use designation allows for a wide variety of industrial employment uses, including manufacturing, research and development, corporate headquarters, and other industrial uses. The site is zoned as Light Industrial (IL-2-1) in the City's Zoning Ordinance, which allows a mix of light industrial and office uses.

The project site is relatively flat at an elevation of approximately 435 feet above mean sea level (AMSL). The project site is situated in the coastal foothill section of the Peninsular Ranges Geomorphic Province. Underlying geologic units on the project site include fill soils and very old paralic deposits. The site is entirely developed and consists of an urban/developed land with ornamental vegetation consisting of non-native landscaped areas.

2.3 Surrounding Land Uses

Land uses surrounding the project site include open space within the City's Multi-Habitat Planning Area (MHPA) to the north followed by an office building, offices to the east and south across Ruffin Road and Balboa Avenue, respectively, and a military office facility to the west. The MHPA to the immediate north contains vernal pools. The Montgomery-Gibbs Executive Airport is located approximately 0.4 mile southwest of the project site across Balboa Avenue. I-15, approximately 0.6 mile east of the project site, provides access to Balboa Avenue from the east, and SR 163, approximately 0.9 mile west of the project site, provides access to Balboa Avenue from the west.

With the exception of the MHPA located north of the project site, parcels surrounding the project site to the south, east, and west, as well as north of the MHPA have land use designations of Industrial and Technology Park in the KMCP and are zoned IL-2-1. The MHPA land north of the site has a land use designation of Open Space in the KMCP and is zoned as Conservation Open Space (OC-1-1). Mixed-use and community commercial land uses are located further north of the project site along Clairemont Mesa Boulevard and east of the project site at Balboa Avenue and I-15.

Land uses that may be more sensitive to the environmental effects of the project include residential land uses (Avion Apartments) approximately 0.3 mile west of the project site, a preschool (Chinese Bilingual Preschool) approximately 0.3 mile northeast of the project site, and a hospital (Kaiser Permanente) approximately 0.45 mile northeast of the project site. Figure 2-4, *Sensitive Receptor Locations*, identifies sensitive land uses in the project vicinity.

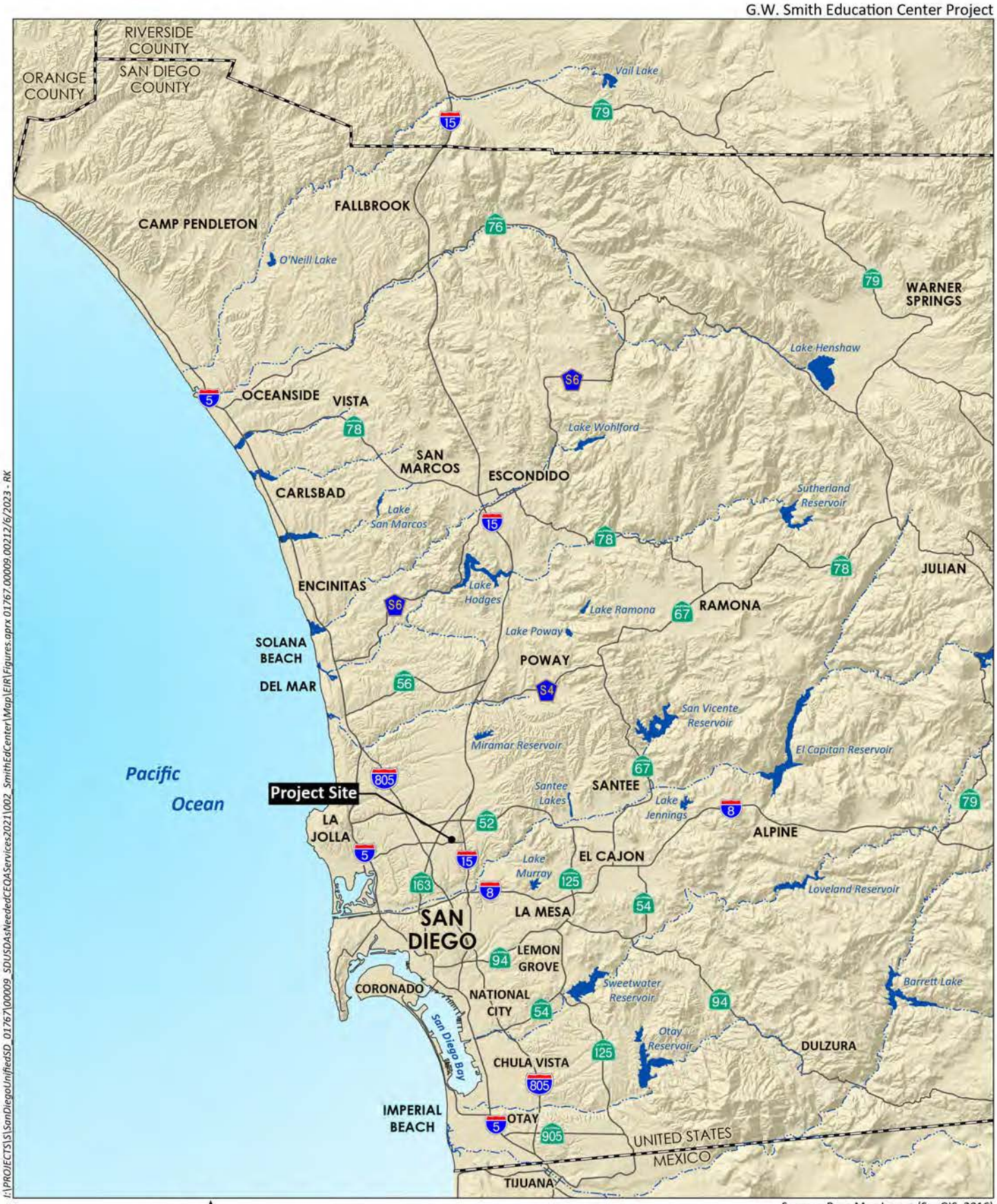
2.4 Planning Context

2.4.1 District Long-Range Facilities Master Plan

The District's Facilities Master Plan identifies and prioritizes District-wide needs for renovation and expansion of existing facilities and for new school construction. The Facilities Master Plan is based on a comprehensive assessment of needs and extensive outreach among District stakeholders to share findings from the assessment; discuss costs, funding sources, and priorities; and seek input.

In 2008, the District updated its District-wide Long-Range Facilities Master Plan (Master Plan) and developed the Proposition S bond proposal to fund a portion of it. The Master Plan identifies and prioritizes District-wide needs for renovation and expansion of existing facilities and for new school construction. The Master Plan update was based on a comprehensive assessment of needs and extensive outreach among District stakeholders to share findings from the assessment; discuss costs, funding sources, and priorities; and seek input.

Most of the District's 200-plus sites were built 20 to 50 years ago, and half of its buildings are more than 45 years old. The Master Plan update concluded that significant facility improvements were necessary to



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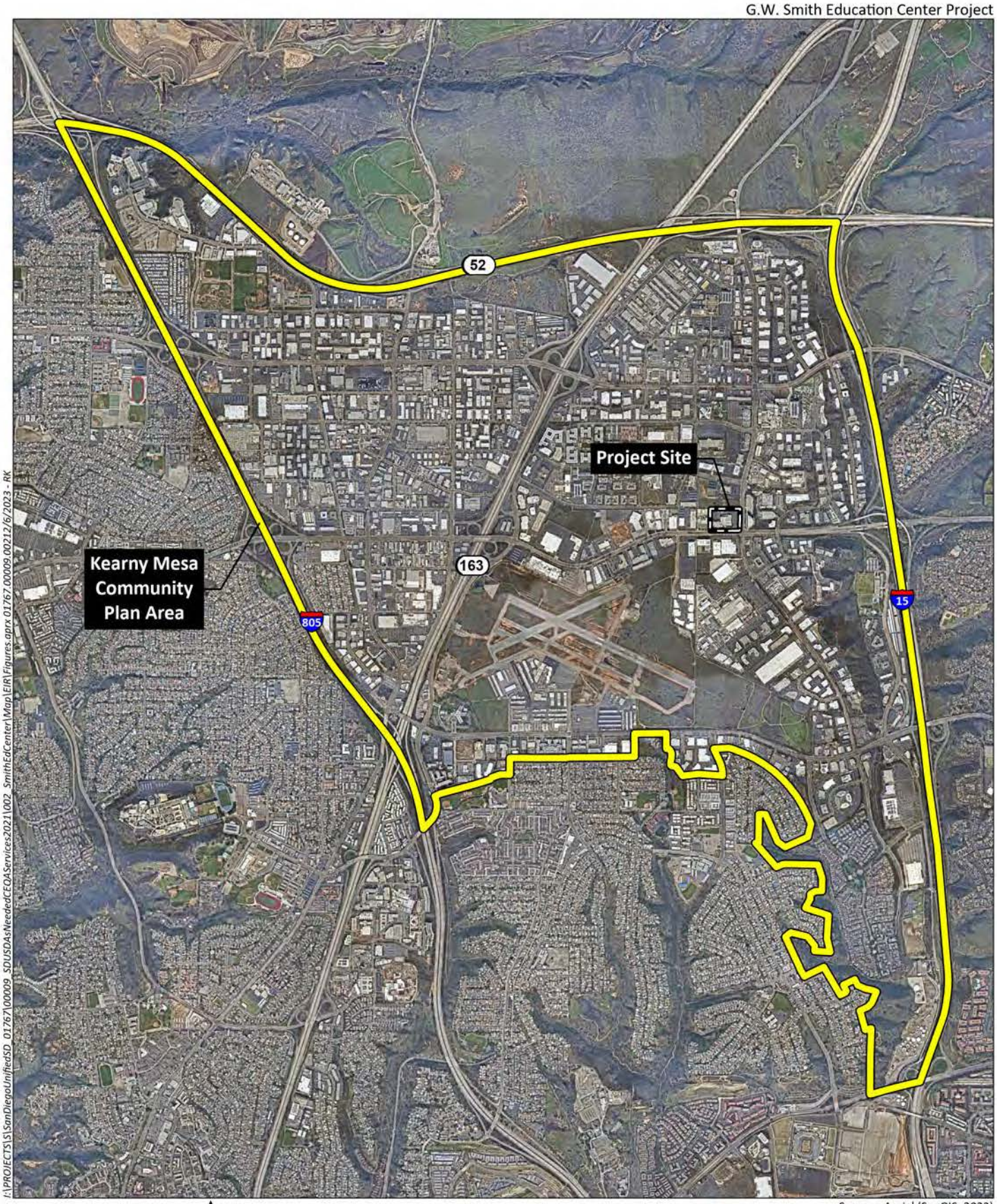
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 2-1



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0 3,000 Feet

Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Kearny Mesa Community Plan Area

Figure 2-2

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Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Project Site Location and Surrounding Uses

Figure 2-3

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0 800 Feet

Source: Aerial (SanGIS 2023)

HELIX Environmental Planning

Sensitive Receptor Locations

Figure 2-4

meet current educational needs, support 21st century teaching and learning, and ensure a safe, secure, and healthy environment for students and the staff.

2.4.2 San Diego Forward: The Regional Plan

San Diego Forward: The 2021 Regional Plan (Regional Plan; San Diego Association of Governments [SANDAG] 2021) provides a framework to create equal access to jobs, education, healthcare, and other community resources for the County. The Regional Plan calls to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies. It combines the Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS), and Regional Comprehensive Plan. As such, the 2021 Regional Plan must comply with specific state and federal mandates, including an SCS per SB 375 that achieves greenhouse gas (GHG) emission reduction targets set by the California Air Resources Board (CARB); compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process.

The Regional Plan incorporates five transformational strategies known as the 5 Big Moves which include:

- Complete Corridors: Roadways that offer dedicated, safe space for everyone, including people who walk, bike, drive, ride transit, and use Flexible Fleets, as well as those who drive freight vehicles. Complete Corridors use technology to dynamically manage the flow of traffic.

- Transit Leap: A complete network of fast, convenient, and reliable transit services that connect people from where they live to where they want to go.

- Mobility Hubs: Vibrant centers of activity where transit and on-demand travel options, supported by safe streets, connect people with their destinations and businesses with their customers. Mobility Hubs are also planned to accommodate future growth and development.

- Flexible Fleets: Transportation services of many forms, varying in size from bikes to scooters to shuttles, that offer first- and last-mile connections to transit and alternatives to driving alone.

- Next OS: The underlying technology that allows people to connect to transportation services and a digital platform that allows for dynamic management of roadways and transit services.

The Regional Plan has a horizon year of 2050, and projects regional growth and the construction of transportation projects over this period. The project site and vicinity are identified as being in a regional mobility hub.

2.4.3 Kearny Mesa Community Plan

The KMCP was last updated in 2020 and establishes a vision with strategies and policies to guide the future growth and development within Kearny Mesa, consistent with the City's General Plan.

The KMCP addresses applicable regulations, details comprehensive policies, and identifies needed public improvements for a beneficial quality of life for the community. It consists of seven sections, including:

- Land Use and Vision: introduces the vision and land use plan.
- Regulatory Framework and Policies: includes specific direction, guidance, or directives and the Community Plan Implementation Overlay Zone (CPIOZ) regulations for the mixed-use villages.
- Historic Preservation: describes the historical, cultural, and tribal cultural resources of Kearny Mesa.
- Mobility: supports the efficient movement of pedestrians, cyclists, transit riders, motorists, and goods.
- Urban Design: outlines general and site-specific standards to facilitate high-quality development projects.
- Parks, Recreation, and Open Space: provides strategies for active and passive recreation, as well as areas for resource conservation.
- Public Facilities, Services, and Safety: describes the community facilities needed as growth occurs

The project site is designated Industrial and Technology Park in the KMCP.

2.4.4 San Diego Municipal Code Land Development Code

Chapters 11 through 15 of the San Diego Municipal Code (SDMC) are referred to as the Land Development Code (LDC), as they contain the City's planning, zoning, subdivision, and building regulations that regulate how land is to be developed and used within the City. The LDC contains city-wide base zones that specify permitted land uses and development requirements for given zoning classifications; as well as overlay zones and supplemental regulations that provide additional development requirements.

The project site is zoned Light Industrial (IL-2-1), which allows a mix of light industrial and office uses, and is also within the Airport Land Use Compatibility Plan Overlay Zone associated with Montgomery-Gibbs Executive Airport and Marine Corps Air Station (MCAS) Miramar.

2.4.5 Airport Land Use Compatibility Plans

The Airport Land Use Commission (ALUC) is an agency that is required by state law to exist in counties in which there is a commercial and/or a general aviation airport. The purpose of the ALUC is to protect public health, safety, and welfare by ensuring the orderly development of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports, to the extent that these areas are not already devoted to incompatible uses. The ALUC is responsible for preparation of the Airport Land Use Compatibility Plans (ALUCPs) for each airport in the region. ALUCPs establish land use compatibility policies and development criteria for new development to protect the airports from incompatible land uses.

The site is within the Airport Influence Area (AIA) and Federal Aviation Administration (FAA) Part 77 Noticing Area for Montgomery-Gibbs Executive Airport and MCAS Miramar. The AIA is defined as "the

area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission" (San Diego County Regional Airport Authority [SDCRAA] 2010). The AIA serves as the planning boundary for the ALUCP and is divided into two review areas: (1) Review Area 1 includes the noise contours, safety zones, airspace protection surfaces, and overflight areas; and (2) Review Area 2 comprises the airspace protection surfaces and overflight areas. The project site is located within Review Area 1 for the Montgomery-Gibbs Executive Airport and Review Area 2 for MCAS Miramar.

2.4.6 City of San Diego Multiple Species Conservation Program

The County's Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans (SAPs), which describe specific implementing mechanisms.

The City's MSCP SAP was approved in March 1997. The MSCP SAP provides a plan and process for the issuance of permits under the federal and state Endangered Species Acts and the California Natural Communities Conservation Planning Act of 1991. The primary goal of the MSCP SAP is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth.

The MHPA is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. To address the integrity of the MHPA and mitigate for indirect impacts to the MHPA, guidelines were developed to manage land uses adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines are intended to be incorporated into the MMRP and/or applicable permits during the development review phase of a project. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development.

2.4.7 City of San Diego Vernal Pool Habitat Conservation Plan

The Vernal Pool Habitat Conservation Plan (VPHCP) is a comprehensive plan to provide the conservation of vernal pool habitats and seven sensitive species that do not have coverage under the City's MSCP SAP. The VPHCP encompasses the entire City and MSCP SAP coverage area and includes some lands owned by the City that are within unincorporated San Diego County. Some lands within the City limits not under City jurisdiction (e.g., school districts, water districts, federal and state lands, etc.) are not automatically covered by the VPHCP; however, those landowners can seek coverage under the VPHCP through a Certificate of Inclusion. In addition to authorizing the take of sensitive vernal pool species, the VPHCP serves to expand the City's MHPA, with a focus on the management and conservation of vernal pool habitats and their associated species.

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3.0 PROJECT DESCRIPTION

This chapter of the EIR provides a statement of the project goals and objectives, describes the specific characteristics of the project, discusses project phasing and construction, and identifies the discretionary actions required to implement the project. This chapter has been prepared pursuant to Section 15124 of the State CEQA Guidelines, which requires a project description to contain (1) the precise location and boundaries of a project site; (2) a statement of objectives sought by a project including the underlying purpose of the project; (3) a general description of a project's characteristics; and (4) a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, a list of the permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

3.1 Project Objectives

CEQA requires that an EIR contain a "statement of the objectives sought by the proposed project." Under CEQA, a "clearly written statement of objectives will help the Lead Agency develop a reasonable range of alternatives to evaluate the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations. The statement of objectives should include the underlying fundamental purpose of the project" (CEQA Guidelines Section 15124(b)). The District has identified the following objectives for the proposed project:

1. Use Voter Approved Measures YY and U funds for the design and construction of a new District administrative center;

2. Provide a new, modern administrative center to serve as the main District office to replace the outdated buildings at the existing education center campus at 4100 Normal Street, repair and replace associated aging infrastructure, and support anticipated increases in administrative staff;

3. Consolidate District staff and facilities into a single and more central location with convenient access to freeways and transit services;

4. Provide for the construction of additional employment uses in Kearny Mesa consistent with the KMCP, as well as applicable land use designations and underlying zoning.

3.2 Project Characteristics

The District proposes building renovations, the construction of a new administrative campus, and the relocation of the existing District administrative services and staff presently located at the Central Office at 4100 Normal Street to this new administrative campus. Implementation of the proposed project would occur in two phases. The first phase would entail construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements, as described below. Figure 3-1, *Site Plan*, shows the proposed layout of the project, and Figures 3-2 through 3-5, *Project Renderings*, show conceptual illustrative views of the proposed project elements.

3.2.1 Parking Garage

The proposed parking garage would be constructed in the northwestern portion of the site and would include 5 levels with a total area of approximately 180,000 SF to accommodate approximately 500 parking spaces for employees. Spaces for electric vehicles (EV) and EV infrastructure would also be provided.

The parking garage would be generally rectilinear in form with gray concrete panels along the exterior facades with some articulation. The parking garage would be a maximum height of 61 feet. Stairwells and elevators would be included to provide pedestrian access to a plaza between the garage and administration building. Refer to Figure 3-2 for the general form and location of the proposed parking garage (pictured in the top left) in relation to other project elements.

3.2.2 Administration Building

The proposed administration building would consist of the renovated existing 150,000-SF building with a new approximately 60,000-SF two-story addition on the north side of the existing building and a new entrance on the northeast side of the building.

The existing two-story building would be renovated both on the interior and exterior and incorporated into the overall new building. On the north and northeast sides of the existing building, an addition would be constructed that would include an entry foyer with a one-story wing extending from the foyer to the southwest and northeast. The entry foyer would consist of two stories consistent with the remainder of the two-story addition and existing building. A canopy and a flagpole would be featured at the entrance. The administration building would be a maximum height of approximately 30 feet.

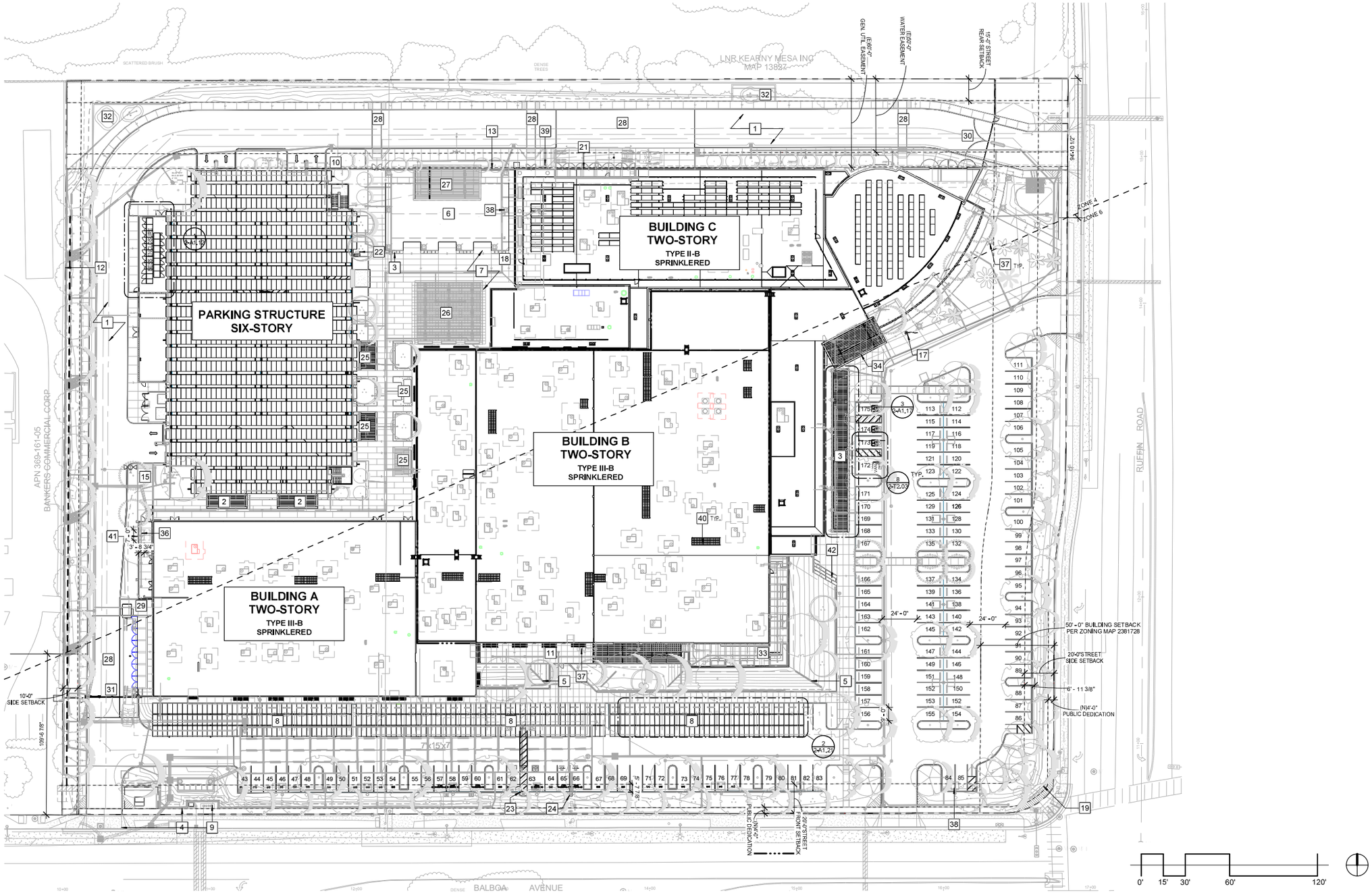
The renovated building would retain its existing industrial form with generally planar facades and minimal fenestration on the east and south elevations. On the northwest elevation, the existing windows that line the first and second floors would remain. The building addition would include articulated elements, step backs, curvilinear forms, large windows, and other architectural treatments (siding, overhangs) typical of a modern office building that would complement the existing building. The building would be painted neutral colors such as gray and brown, with color accents along windows on some elevations. Refer to Figures 3-2 through 3-5 for renderings of the proposed administration building.

A plaza would be constructed in the northwest portion of the site between the building and parking garage that would include walkways and outdoor gathering spaces. The plaza would contain turf areas, a pavilion, covered patios with tables, and planters. Refer to Figure 3-4 for a rendering of the plaza.

Surface parking lots would be constructed in the southern and eastern portions of the site that would provide a total of approximately 175 parking spaces, including EV and accessible spaces.

3.2.3 Access and Circulation

Access would be provided via two driveways along Balboa Avenue and two driveways along Ruffin Road. An access road to the proposed parking garage would be provided along the northern and western portions of the site.



Source: avrp Studio 2024

Source: avrp Studio 2023

Project Rendering – Overview Looking Northwest

Figure 3-2

Source: avrp Studio 2023

Project Rendering – Proposed Entrance

Figure 3-3

Source: avrp Studio 2023

Project Rendering – Courtyard Looking Southeast

Figure 3-4

Source: avrp Studio 2023

Project Rendering – Proposed Addition Area

Figure 3-5

3.2.4 Roadway Improvements

The project would include roadway improvements to Balboa Avenue and Ruffin Road along the project frontages. Along both roadways, the existing sidewalk would be removed, and a new five-foot-wide sidewalk would be constructed partially within the existing road right-of-way. A four-foot-wide public access easement would be dedicated along the southern and eastern project frontages of these adjacent roadways for the new sidewalk.

3.2.5 Utility Improvements

Proposed utility improvements include laterals and connections to existing utility infrastructure in adjacent roadways (Balboa Avenue and Ruffin Road), including water, sewer, electrical, and telecommunications.

An on-site stormwater system is proposed that would include a subsurface stormwater detention vault in the southwest portion of the site that would collect on-site flows and convey them to a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue. The stormwater detention vault would consist of 60 modules (each 7 feet wide by 15 feet long by 7 feet high) with a total volume of approximately 33,500 cubic feet.

3.2.6 Landscape/Hardscape Improvements

Landscaping would be installed along the roadway frontages of Balboa Avenue and Ruffin Road, within the surface parking lots, and around the new administrative building and parking garage. Hardscape improvements would be provided at building entrances, along pedestrian walkways, and at outdoor gathering spaces. A new monument sign would be installed in the southeast corner of the site adjacent to the roadway. Retaining walls would also be constructed along portions of the southern and western perimeters of the site.

3.3 Phasing/Construction

Project construction would occur in two phases for an overall construction duration of 32 months. The first phase is anticipated to begin in May 2024 with a completion date of May 2025 for an estimated duration of 12 months. Construction of the second phase is expected to start in February 2025 and finish in December 2026, for an estimated duration of 22 months. Grading would require 1,820 cubic yards (CY) of cut material and 13,807 CY of fill, resulting in an import of 11,987 CY. Maximum cut depths would be 10.5 feet and maximum fill heights would be 5 feet. Manufactured slopes would have a maximum 2:1 gradient ratio.

Construction would be limited to the hours of 7 a.m. to 7 p.m. to comply with the City's noise ordinance. Prior to construction, the District would be required to notify the FAA in compliance with FAA Part 77, Subpart B due to the project's location near the Montgomery Gibbs Executive Airport. Notification would involve completing FAA Form 7460-1 "Notice of Proposed Construction or Alteration" and submitting it to the FAA for review. During construction, the District would implement standard operating procedures or contractor specifications to comply with federal and state environmental regulations, including the California Building Code (CBC), the Construction General Permit, San Diego

County Air Pollution Control District (SDAPCD) rules, and City monitoring requirements. Table 3-1, *Construction Standard Operating Procedures and Specifications*, includes a list of specific measures that the District would implement for the proposed project. Stormwater best management practices (BMPs) limit erosion, minimize sedimentation, and control stormwater runoff water quality during construction activities. The Storm Water Pollution Prevention Plan (SWPPP) requires a description of the project site, identification of sources of sediment and other pollutants that may affect the quality of stormwater discharges, a list of BMPs to provide sediment and erosion control, waste-handling measures and non-stormwater management. The specific BMPs that would be implemented for the project would be identified during preparation of a SWPPP, which is required prior to construction. Typical construction BMPs include soil cover of inactive areas and the use of gravel bags and fiber rolls.

Table 3-1
CONSTRUCTION STANDARD OPERATING PROCEDURES AND SPECIFICATIONS

Measure	Description
CM-1 – Compliance with California Building Code	1. Implementation of the proposed project shall comply with the California Building Code including all applicable seismic safety development requirements that would minimize seismic ground shaking effects in the event of a major earthquake as well as potential seismic or geologic hazards.
CM-2 – Compliance with General Construction Permit	1. A Storm Water Pollution Prevention Plan shall be developed prior to construction. 2. Site Design, Source Control, and Treatment Control Best Management Practices shall be implemented per the City's Stormwater Standards Manual.
CM-3 – Compliance with SDAPCD Rule 55	During construction activity generating fugitive dust emissions, the following measures shall be implemented to reduce such emissions: 1. Water exposed surfaces twice per day; 2. Limit speeds on unpaved surfaces to 25 miles per hour; and 3. Implement track-out/carry-out BMPs including street sweeping as needed.
CM-4 – Compliance with SDAPCD Rule 67.0.1	1. Coatings used for the proposed project shall comply with the volatile organic compound limits provided in SDAPCD Rule 67.0.1, which are 50 grams per liter for the building envelope and 100 grams per liter for traffic markings.
CM 5 – Compliance with SDMC Section 142.0151	1. Implement paleontological monitoring in accordance with the City's General Grading Guidelines for Paleontological Resources for locations with moderate paleontological sensitivity.

3.4 Project Approvals

The District is the lead agency under CEQA and is responsible for approving and implementing the proposed project. Furthermore, there are several reviewing agencies that would potentially review and/or issue permits for the project. Table 3-2, *Permits and Agency Approvals*, lists the permits and approvals required of the project by the District and other agencies.

Table 3-2
PERMITS AND AGENCY APPROVALS

Approving Agency	Permit or Approval
San Diego Unified School District Board of Education (District)	Certification of the Final EIR Adoption of the Mitigation Monitoring and Reporting Program Adoption of Findings of Fact Adoption of Statement of Overriding Considerations
Office of the Division of State Architect (DSA)	Administrative approval of proposed project design for compliance with accessibility requirements under Americans with Disabilities Act
City of San Diego (City)	Public right-of-way and traffic control permits for work within City streets Administrative approval of proposed project design for compliance with CCR Title 24 Building Code Tree removal permit for removal of street trees
Regional Water Quality Control Board (RWQCB)	National Pollutant Discharge Elimination System (NPDES) permit
Federal Aviation Administration (FAA)	Determination of No Hazard

4.0 ENVIRONMENTAL ANALYSIS

This chapter of the EIR analyzes the potential environmental impacts that may occur as a result of project implementation. Sections 4.1 through 4.6 provide analysis related to the environmental issues that were identified in the Initial Study (IS) checklist as having potentially significant impacts and requiring further evaluation. The environmental topics addressed in this chapter include Aesthetics, Air Quality, Biological Resources, Greenhouse Gas Emissions, Noise and Vibration, and Transportation. Those environmental topics that were determined through preparation of the IS to have no impact or a less than significant impact with implementation of the proposed project are addressed briefly in Chapter 6, *Effects Found Not to be Significant.* The IS is also provided as Appendix B to the EIR.

Each of the following sections provides the environmental setting, regulatory framework, significance thresholds, analysis methodology and assumptions, and project-level impact analysis related to the environmental topic. Significance criteria addressed in this EIR are primarily based on Appendix G of the CEQA Guidelines. The District's CEQA Handbook was also used to determine the significance of impacts based on the thresholds provided therein. Where potentially significant impacts have been identified, mitigation measures are proposed and the level of impacts remaining with incorporation of the mitigation measures is identified.

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4.1 Aesthetics

This section of the EIR describes the existing visual setting of the project site and vicinity within the context of the surrounding community, identifies applicable guidelines and regulations related to aesthetics and visual resources, and evaluates potential aesthetics impacts related to implementation of the project.

4.1.1 Existing Conditions

4.1.1.1 Aesthetics Concepts and Terminology

This section defines the key concepts and terminology used to describe existing aesthetic and visual quality conditions or to describe the change in existing conditions from implementation of the proposed project.

Views refer to visual access and obstruction, or whether it is possible to see a focal point or panoramic scene from an area. Views may be discussed in terms of *foreground*, *middle ground*, and *background.* Foreground views are those immediately presented to the viewer and include objects at close range that may tend to dominate the view. Middle ground views occupy the center of the viewshed and tend to include objects that are the center of attention if they are sufficiently large or visibly different from adjacent visual features. Background views include distant objects and other objects that make up the horizon. Objects in the background eventually fade to obscurity with increasing distance. In the context of background, the skyline or the ocean can be an important visual feature because objects above this point are highlighted against the background of the sky or water. These “skylined” elements are typically more evident to the viewer because of their inherent contrast.

Scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a federal, state, or local agency.

Scenic highway is any stretch of public roadway that is designated as a scenic corridor by a federal, state, or local agency.

Visual character is descriptive and non-evaluative, which means it is based on defined attributes that do not include subjective positive or negative value judgments. Visual character is composed of pattern elements and pattern character. *Pattern elements* are the artistic attributes inherent in the elements that compose a landscape and include the primary visual attributes of objects such as form, line, color, and texture. The form of an object is its visual mass, bulk, or shape. Line is introduced by the edges of objects or parts of objects. The color of an object is both its visual or reflective brightness and its hue. Texture is apparent surface coarseness. Awareness of pattern elements varies with distance. *Pattern character* describes the dominance, scale, diversity, or continuity between the pattern elements. Dominance occurs when a specific feature is prominently positioned, contrasted, or extended to a point where the specific feature strongly influences the pattern character of a scene. Scale is the size relationship among landscape components in the visual environment. Diversity is the frequency, variety, and positioning of pattern elements. Continuity is the uninterrupted flow or transition among pattern elements.

Visual quality is evaluated based on the relative degree of vividness, intactness, and unity within a landscape, as modified by viewer preference and sensitivity. *Vividness* is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns. *Intactness* is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements; this factor can be present in well-kept urban and rural landscapes, and in natural settings. *Unity* is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape.

Viewer response, or awareness, is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a project's implementation. *Viewer sensitivity* is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. *Viewer exposure* is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, the speed at which the viewer moves, and position of the viewer. A viewer's response is also affected by the degree to which he/she is receptive to the visual details, character, and quality of the surrounding landscape. A viewer's ability to perceive the landscape is affected by his/her activity. A viewer on vacation would probably take pleasure in looking at the landscape, and an individual may be strongly attached to the view from his home, but a local resident commuting to work may not "register" those same visual resources on a daily basis.

Viewshed is the entirety of the surface area visible from a particular location or sequence of locations (e.g., roadway or trail).

4.1.1.2 Visual Setting and Site Characteristics

The project site comprises a 7.8-acre parcel located at the northwest corner of Balboa Avenue and Ruffin Road in the Kearny Mesa community of San Diego. The project site is located in an urbanized area developed primarily with industrial and commercial uses. Except for a few multi-family residential developments approximately 0.3 mile to the northwest clustered along Spectrum Center Boulevard, the project area consists of office and industrial park buildings. Existing surrounding development includes offices to the east and south, a military facility to the west, and a 4.4-acre open space parcel that is part of the City's MHPA to the north.

Landforms within the project site and vicinity are characterized by relatively flat terrain as most development in the Kearny Mesa community is concentrated on a generally flat mesa top that extends across the community. The project site is topographically level with an average elevation of approximately 435 feet. Small, landscaped slopes are present in the southern portion of site and around the site perimeter.

The project site is entirely developed with an existing two-story building encompassing approximately 150,000 SF and associated surface parking and landscaping. The building is set back from Balboa Avenue by a landscaped parkway and on-site slopes and landscaping. Portions of the building can be seen from the roadway in between the existing trees along the streetscape and within the project site. These views generally encompass the roadway and streetside landscaping in the foreground, and asphalt parking lots, pole-mounted lighting, on-site landscaping in front of the building, and flat building walls with limited articulation, varying roof lines, white/gray- and rust-colored surfaces in the middle ground.

Figure 4.1-1, *Existing Visual Conditions – Balboa Avenue Frontage,* shows typical views into the project site from Balboa Avenue.

Views from the adjacent Ruffin Road are more open as there is less intervening landscaping and more level topography. Views from the roadway encompass the roadway sidewalk, and street trees (approximately 10) in the foreground; asphalt parking lots, pole-mounted lighting, some on-site landscaping, and the building in the middle ground. The visible portions of the building consist of white walls with smooth and textured surfaces along with gray accents. Figure 4.1-2, *Existing Visual Conditions – Ruffin Road Frontage,* shows typical views into the project site from Ruffin Road.

Other existing on-site elements include a monument sign at the southeast corner of the site at the Balboa Avenue/Ruffin Road intersection that is slightly elevated on a dirt mound. Chain-link fencing lines the northern site boundary, and white wood fencing occurs along the western boundary. Utility boxes, transformer enclosures, a fenced area with a backup generator, and a single wooden utility pole with overhead power lines extending to the west are present in the northwest portion of the site within a paved surface parking area. Existing access is provided by four driveways along Balboa Avenue and one driveway along Ruffin Road.

4.1.1.3 Urban Form

Building forms within the project vicinity vary but are dominated by one- to two-story industrial buildings that range in size and style. Office-production industrial buildings include single-story massing, a styled front office attached to a warehouse space, and a loading area with warehouse doors. Industrial park complex buildings are typically one or two stories and comprised of multiple buildings with unifying design details for multiple tenant use. Most industrial buildings exhibit a Modernist architectural style where the materials and construction methods convey the style. Office park buildings are one or more stories and consist of multiple buildings with unifying design for multiple tenants and typically include exterior courtyards between the buildings. Commercial buildings in Kearny Mesa feature stylistic influences from various sub-styles of Modernism. Common materials for existing industrial and commercial office buildings within the project area include glass, concrete masonry units, decorative block, cast concrete, steel, and aluminum.

Residential buildings in the project area include multi-story, multi-family buildings in larger mid-rise style buildings. Most existing residential development in Kearny Mesa has occurred within the last 25 years, resulting in building forms and design that are more contemporary and urban than existing commercial and industrial buildings.

4.1.1.4 Scenic Views and Resources

The Urban Design Element of the KMCP identifies viewsheds within the Stonecrest neighborhood in the southeastern portion of the KMCP area, which is approximately 1.5 miles south of the project site. These identified viewsheds consist of interior canyon views and view outlooks along the canyon trail system and panoramic views toward the east into the neighboring Tierrasanta community from the Stonecrest neighborhood. Additionally, no prominent or iconic visual landmarks or designated scenic highways occur within or adjacent to the site or community.

4.1.1.5 Visual Character

The visual character of the project area encompasses diverse forms predominantly composed of built environment features intermixed with very limited natural features. The area is almost entirely developed with industrial and commercial office uses. Given the homogeneity of uses, building forms and overall development patterns share common elements but also vary with respect to shape and mass. The structures provide geometric forms with linear elements and a mix of colors on the building facades and roofs. Textures are generally smooth to semi-coarse depending on the exterior surface treatment on buildings. Roadways and parking areas provide additional developed features that exhibit similar pattern elements but are more uniform in color and texture. Natural features in the project area consist of the adjacent open space preserve nestled between surrounding developments and ornamental and native vegetation. These natural features are positioned in between, and are surrounded by, urban development and provide some contrasting shapes, colors, and textures compared to the industrial and office buildings. The vegetation provides various shades of greens, yellows, and browns with soft textures.

The project site itself contains one building that is moderate in size but is not at a scale that is viewed as a visually dominant element, particularly since it is visually consistent in form and size with surrounding buildings. The building is two stories with geometric forms and painted with gray, white, and rust colors. It is set back from the roadway and partially obscured with landscaping, as described above in Section 4.1.1.2 and pictured in Figures 4.1-1 and 4.1-2. The trees are greater in height than the other site features and along with one utility pole (positioned in the rear of the site), provide vertical linear elements. The building form, roofline, and parking areas create horizontal line elements. The parking lots provide a monotypic element in terms of color and texture. The texture of the developed site is typical of urban built environments, and includes a combination of generally smooth hardscaped features, asphalt, and building façades and surfaces. On-site landscaping and vegetation cover provide verdant features with softer textures than the developed features. Given the prevalence of industrial and office uses with generally commensurate building forms and development patterns along with the limited presence of natural features, the project site and area exhibit a low degree of diversity. As the area is predominantly characterized by industrial and office uses, the development pattern formed provides a moderate degree of continuity.

Overall, the character of the project site and surrounding area is urban in nature due to the integration of the manufactured environment comprised of industrial and commercial office uses with limited natural features. The site has a moderate level of dominance, low diversity, and a moderate degree of continuity.

4.1.1.6 Visual Quality

In relation to vividness, the project site does not contain memorable visual elements. The location of the project site within a developed urban area and surrounded by similar development results in a low vividness rating for the project site and surrounding area.

The project area contains homogenous land uses and exhibits a development pattern characteristic of an urbanized community, which provides some degree of intactness. There are very few natural elements that encroach into the built environment of the area, but there is some open space that minimally disrupts the intactness of the built environment. The intactness of the project site is therefore

HELIX Environmental Planning

Existing Visual Conditions – Balboa Avenue Frontage

Figure 4.1-1

HELIX Environmental Planning

Existing Visual Conditions – Ruffin Road Frontage

Figure 4.1-2

considered moderate. Although the built environment within the area is composed mostly of industrial and office development, buildings vary in terms of architectural style, size, color, configuration, and age. Some pockets of relatively homogenous blocks are evident, but the overall visual mosaic contributes to moderate unity. While there are some natural features present, they are generally isolated and are surrounded by built components.

The overall existing visual quality of the project site and project area is moderately low given the low degree of vividness and moderate rating of intactness and unity.

4.1.2 Regulatory Setting

4.1.2.1 State

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program, which was created in 1963 by the California Legislature to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are eligible for designation as scenic highways or that have been designated as such. The designation of a highway as scenic is based on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes on the travelers' enjoyment of the view. State laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263.

California Energy Code

The California Energy Code (24 CCR Part 6) creates standards to reduce energy consumption. The types of luminaries and the allowable wattage of certain outdoor lighting applications are regulated. Specifically, Section 110.9 provides mandatory requirements for lighting control devices and systems, ballasts, and luminaires.

4.1.2.2 Local

San Diego Unified School District Standard Design Guide, Guide Specifications, and Landscape Guide

Standard Design Guide

The District *Standard Design Guide* is one of several documents developed by the District to assist design professionals in providing the District with a consistent and predictable level of quality in the design of school facilities. The overall purpose of the *Standard Design Guide* is as follows:

- Communicate to design professionals and District staff which systems, products and materials have proven to work well in previous facilities, and which the District expects will provide long life, low maintenance, and minimal energy consumption.

- Standardize the application of systems and materials to provide a uniformity in facility quality throughout the District.

- Provide guidance in the selection of systems and materials to minimize maintenance, reduce energy expenditure, and improve levels of indoor air quality.

Guide Specifications

The Guide Specifications provide design professionals with a uniform basis for developing project-specific specifications that reinforce the District's commitment to high quality facilities. They also list specific materials, products, systems, and components that reflect those that have been used successfully in District facilities.

Landscape Guide

Section G2050, *Landscaping*, of the District's *Standard Design Guide*, establishes the goals and objectives related to implementation of landscaping at District facilities. The design concepts of the guide state that landscaping should be used to blend the transition zone between a school campus and the surrounding neighborhood, including the use of shrubs and vines to screen walls and utility areas and the use of the same street trees found in the neighborhood, if appropriate. In addition, trees, shrubs, and groundcover should be used to screen parking lots and visually reduce the large expanse of asphalt as well as provide shade.

District Administrative Regulation 3511(a)

District Administrative Regulation (AR) 3511 outlines the operational energy and water management policies for District facilities to reduce water and energy resource use. Specifically, the following district operational policies related to lighting are incorporated into the district's resource management program:

- All unnecessary lighting in unoccupied areas will be turned off even when lighting motion sensors are in place. Staff should make certain that lights are turned off when leaving the classroom or office when exiting the classroom or office. Use only natural lighting where sufficient.

- All outside lighting shall be off during daylight hours.

- Gym lights, stage, and multipurpose rooms shall not be left on unless the space is being occupied.

- All lights shall be turned off when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working.

- Refrain from turning lights on unless needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and, thereby, increases the use of electricity to cool the room.

City of San Diego General Plan – Urban Design Element

The City of San Diego prepared an Urban Design Element as part of its General Plan to guide physical development toward a desired scale and character that is consistent with the social, economic, and aesthetic values of the City (City 2008). Urban design describes the physical features that define the

character or image of a street, neighborhood, community, or the city. Urban design is the visual and sensory relationship between people and the built and natural environments.

The Urban Design Element includes general goals and policies for development and redevelopment within the city. These goals and policies include:

- Maintain an improved quality of life through safe and secure neighborhoods and public places;
- Preserve and protect natural landforms and features;
- Design buildings that contribute to a positive neighborhood character and relate to neighborhood and community context; and
- Provide lighting from a variety of sources at appropriate intensities and qualities for safety.

City of San Diego Municipal Code

Lighting Regulations

Lighting within the City is controlled by the City's Outdoor Lighting Regulations per Section 142.0740 of the SDMC. The Outdoor Lighting Regulations are intended to provide public safety, conserve energy, and protect surrounding land uses as well as astronomy activities at the Palomar and Mount Laguna Observatories from excessive light generated by new development. The project is not within 30 miles of the Palomar and Mount Laguna Observatories; therefore, regulations pertaining to these observatories are not applicable.

Glare Regulations

Glare within the City is controlled by SDMC Section 142.0730 (Glare Regulations). The City's Glare Regulations include the following:

- A maximum of 50 percent of the exterior of a building may be composed of reflective material that has a light-reflectivity factor greater than 30 percent (Section 142.0730 (a)).
- Reflective building materials shall not be permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space (Section 142.0730 (b)).

4.1.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with aesthetics resulting from implementation of the proposed project. The project would result in a significant aesthetics impact if it would result in any of the following:

a. Would the project have a substantial effect on a scenic vista?

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

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point)? If the project is in an urbanized area, conflict with an applicable zoning and other regulations governing scenic quality.

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

4.1.4 Methodology and Assumptions

Aesthetics impacts are identified through describing the existing visual setting, assessing the amount of change that would occur as a result of the proposed project, and interpreting how the affected public would respond to or perceive those changes. The analysis and methodology are largely based on the concepts and visual assessment guidelines contained in the Federal Highway Administration (FHWA)'s *Visual Impact Assessment for Highway Projects* (FHWA 2015), as well conformance with applicable District and City guidelines, plans, and regulations that govern visual resources. The assessment utilized data from observations, a spatial analysis, and a photographic inventory of the project site and larger visual environment of the project area.

4.1.5 Impact Analysis

4.1.5.1 Scenic Vistas

Threshold a: Would the project have a substantial effect on a scenic vista?

Impact Discussion

There are no designated scenic vistas, views, or view corridors on, near, or in the vicinity of the project site. The Urban Design Element of the KMCP identifies viewsheds within the Stonecrest neighborhood in the southeastern portion of the KMCP area, which is approximately 1.5 miles south of the project site. These identified viewsheds consist of interior canyon views and view outlooks along the canyon trail system and panoramic views toward the east into the neighboring Tierrasanta community from the Stonecrest neighborhood. Project elements would not obstruct any of the viewsheds identified in the KMCP. As such, the proposed project would not have a substantial adverse effect on a scenic vista.

Level of Significance Prior to Mitigation

Aesthetics impacts related to scenic vistas resulting from project implementation would be less than significant.

Mitigation Measures

No significant aesthetics impacts related to scenic vistas would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to scenic vistas would remain less than significant.

4.1.5.2 Scenic Resources

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

Impact Discussion

There are no highways in the project vicinity that are designated or eligible for listing as a scenic highway. The closest designated scenic highway is the portion of SR 52 generally between Santo Road in Tierrasanta and Mast Boulevard in Santee, which is as close as approximately 2.25 miles to the northeast. SR 52, between Santo Road and I-5, located approximately 1.25 miles to the north, is eligible for listing. The project site is not visible from these stretches of SR 52 due to distance and intervening development and topography. Accordingly, project implementation would not modify views along SR 52 such that they would detract from the visual attributes that contribute to their designations as protected resources.

There are no distinctive or landmark trees or mature stands of trees within the project site or surrounding area. Ornamental trees occur sporadically along the project frontages of Balboa Avenue and Ruffin Road and within the site, some of which are mature. Mature trees also line the northern site boundary; however, these are not considered protected visual resources. There are no rock outcroppings within the site. While the site contains one existing building, it is not identified as a historic building. No other notable scenic resources are present on the site. An adjacent 4.43-acre open space parcel to the immediate north is part of the City's MHPA preserve area, but this parcel would not be impacted by the project and would remain as an open space preserve area. No other scenic resources occur on the site or in the immediate vicinity.

Level of Significance Prior to Mitigation

Aesthetics impacts resulting from project implementation related to scenic resources would be less than significant.

Mitigation Measures

No significant aesthetics impacts related to scenic resources would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to scenic resources would remain less than significant.

4.1.5.3 Visual Character and Quality

Threshold c:	*Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, impacts may be significant if the project conflicts with applicable zoning and other regulations governing scenic quality?*

Impact Discussion

Zoning and Regulations Governing Scenic Quality

The project site is located in a developed area that meets the criteria of an "urbanized area" as defined in PRC 21071 defines the term "urbanized area" for the purpose of CEQA to mean an incorporated city that has a population of at least 100,000 persons or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. According to U.S. Department of Commerce Bureau of the Census (U.S. Census Bureau) data from 2022, the City of San Diego has a population of 1,381,162 (U.S. Census Bureau 2022). Thus, the project site is within an urbanized area as defined by PRC 21071.

Per California Government Code Section 53094(b), the District is not normally subject to the application of local ordinances, regulations, policies, and rules, including zoning and land use regulations. However, this government code section stipulates that the District may not take this action when the proposed use of the property by the school district is for non-classroom facilities, including, but not limited to, warehouses, administrative buildings, and automotive storage and repair buildings. Thus, the project is evaluated relative to applicable zoning and other regulations governing scenic quality.

The project site is zoned for light industrial uses, with a zone classification of IL-2-1. Zone IL-2-1 allows for a mix of light industrial and office uses with limited commercial uses. Government offices are a permitted use in the IL-2-1 zone pursuant to the use regulations in SDMC Section 131.0622, Table 131-06B.

The design of the proposed project would be consistent with applicable development regulations of the underlying IL zone pertaining to visual character, such as height limitations, floor area ratio (FAR), and setbacks.

There are no height limits for structures in industrial zones except as regulated by an overlay zone. The project site is within the Airport Land Use Compatibility Safety overlay zone associated with Montgomery-Gibbs Executive Airport and MCAS Miramar. The entire site is located within the Part 77 Airspace Surfaces boundary and the FAA Height Notification Boundary. Part 77 of the FAA Regulations (Title 14 of the Code of Federal Regulations [CFR]) establishes standards for identifying obstructions to navigable airspace. These regulations identify the height at which navigable airspace is present. Airspace obstructions are evaluated by the FAA by considering the height of an object relative to the runway elevation and the proximity of the object to the airport. Regulations establish a three-dimensional structure above the airport and if the building were to penetrate this airspace, an obstruction would be identified. Based on a preliminary Part 77 analysis, an airspace surface would be penetrated approximately 95 feet from ground surface at project site, which translates to about seven or eight stories (RS&H 2019). As the proposed administration building would be approximately 30 feet and two

stories in height and the parking garage would be 61 feet tall and five stories, the project would not exceed applicable height regulations for the site.

FAR is a measure that expresses the relationship of the total area of building space relative to the total area of the project site. FAR is directly proportional to density in that the higher the FAR, the more development intensity is perceived on a given site or area. The maximum FAR for buildings in the IL-2-1 zone within the KMCP area is 1.0. As proposed, the FAR of the administration building would be approximately 0.6, which would not exceed the applicable FAR regulations.

Minimum setbacks per the underlying zone include 15 feet for the front street side, 10 feet for the side, and 0 to 15 for the rear. The proposed building would be consistent with these required setbacks (refer to Figure 3-1).

Based on the above, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality.

Changes to Visual Character and Quality

Although the project is, by definition, within an urbanized area with a corresponding applicable significance threshold to evaluate visual character and quality impacts based on development regulations, the project has also been evaluated for aesthetics impacts relative to resulting changes to existing visual character and quality.

Landform Alteration

The project site is developed and relatively level. There are no steep slopes or other notable landforms within the site. Project construction would involve limited grading, and existing landforms and topographic conditions would essentially remain the same. Upon project development, the site would continue to be relatively level with very little topographic variation. Therefore, the project would not result in a substantial change to existing landforms.

Development Patterns and Building Forms

The proposed development would be consistent with the development patterns in the surrounding area. The proposed project would entail the redevelopment of an existing commercial office site with a similar use on a 7.8-acre site in an area that contains predominantly industrial and office uses. There are several such buildings that range in size and scale along Balboa Avenue, Ruffin Road, Viewridge Avenue, Spectrum Center Boulevard, and other roadways. Consistent with this visual pattern, the proposed project would provide an expanded existing commercial office building in the project area.

Building forms associated with the proposed administration building would be similar to those of surrounding developments, consisting of a two-story rectilinear structure setback from the surrounding roadways. While shape and scale of buildings differ, this overall development pattern is evident. The size of the proposed administration building would also be consistent with the character of existing buildings in the area.

With regard to the proposed parking garage, this structure would be five levels and 61 feet in height, which would be a departure from the existing overall development pattern of predominantly one- and two-story buildings in the project area. Although there are several four-and five-story buildings in the

project area, including the building across Ruffin Road, there are only a few multi-story parking structures in the vicinity. Parking for most industrial and commercial buildings in the area is provided on surface lots. While the size and scale of the parking garage would be visually compatible with other structures in the area, the proposed multi-story parking garage would provide a somewhat contrasting visual element in terms of building type and associated development patterns for parking. Even so, the project would not introduce a new land use or new type of building form that does not currently exist in the immediate area.

Public Views

Views of the project from public vantage points would primarily be available from surrounding local roadways. The largest number of viewers, as well as viewers having the most direct views onto the project site from public viewpoints, would be traveling along Balboa Avenue and Ruffin Road. These views would be open and project elements would be in the foreground and middle ground. Changes to the existing visual character and quality of the project site and surroundings are discussed below for each of these public vantage points.

Following implementation of the project, views from Balboa Avenue into the project site would be somewhat similar to the existing condition. Foreground views would continue to be dominated by streetside landscaping (upon maturity) and the on-site surface parking lot with on-site landscaping and the renovated building in the middle ground. Views of the building would look very similar to the existing building from the roadway because this portion of the building would retain its existing form, scale, and mass. Views of the upper levels of the parking garage may be visible, which would be a new vertical element in the viewshed. Also like the current condition, background views would generally be limited to the sky.

Views from Ruffin Road would also be similar to the existing condition although the building would be more visible and noticeable because of the building addition. Foreground views would continue to encompass streetside landscaping (upon maturity) and surface parking lots. Middle ground views would primarily be of the renovated and expanded building, with the addition most visible. The addition would look different than the existing building in terms of form. The design of the addition would include greater architectural details than the existing rectilinear building with more variety of treatments, materials, and colors. Views of the upper levels of the parking garage may be visible, which would be a new vertical element in the viewshed.

The project would result in a moderate level of change to the existing visual condition from these public viewpoints. The existing ornamental trees along the adjacent roadway frontages would be replaced and would take some time to reach maturity. In the interim, the trees would appear smaller and visibility of on-site elements would be more pronounced until the trees grow to maturity. The existing building would be renovated and expanded to provide a modern office building. While a parking garage would be constructed that would be taller than the administration building, it would not be a dominant visual element in the viewshed from the adjacent roadways primarily because it would be set back in the northwest portion of the site and somewhat shielded by the administration building.

The project would be visually compatible with surrounding development. Multi-story office developments occur in the project area and building forms and design elements would be compatible with these existing elements in terms of line, color, texture, treatments, styles. Proposed landscaping would also be visually compatible with surrounding development and would provide for increased visual

unity throughout the site and vicinity. The architectural design would provide for increased vividness as the building would be an aesthetic improvement and more memorable compared to the existing building. The configuration of the proposed administration building with its similar scale/forms and incorporation of common design elements would increase the intactness of the site upon project development. Overall, the visual quality from these viewpoints would be increased based on the added visual interest and increased visual unity, vividness, and intactness.

Construction Period Impacts

Views of the site during construction would include grading and construction activities, presence of construction vehicles and workers, and storage of building materials. These short-term elements could temporarily reduce the existing visual quality of the site during the construction period due to the introduction of additional visually contrasting features, such as construction fencing, construction equipment, and construction materials stockpiling and storage. Open views would be particularly available from Balboa Avenue and Ruffin Road, as well as from other local roadways at higher elevations.

Level of Significance Prior to Mitigation

The proposed project would not conflict with applicable zoning or other regulations governing scenic quality, nor would it substantially degrade the existing visual character or quality of public views of the site and its surroundings. Associated aesthetics impacts related to visual character and quality would be less than significant. Project construction, however, could result in a potentially significant temporary aesthetics impact. Mitigation identified in the District's CIP Final PEIR, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

AES-1: Install Construction Screening and Fencing. In compliance with District Guide Specification Section 01-50-00, Temporary Facilities and Controls, the District shall install construction-screening fencing around the entire perimeter of ~~a~~ the project site during construction ~~of a new school, administrative facility, or a whole site modernization~~ that would shield construction activities from sight and, prior to the onset of construction activities, the District shall confirm such fencing is depicted on the appropriate demolition and construction plans. Construction screening shall meet the specifications defined in Part 2 of Section 01-50-00.

Level of Significance After Mitigation

With implementation of mitigation measure AES-1, aesthetic impacts related to temporary construction period impacts would be reduced to below a level of significance.

4.1.5.4 Light and Glare

Threshold d:	*Would the project create a new source of substantial light and glare, which would adversely affect day and nighttime views in the area?*

Impact Discussion

There are two primary artificial sources of light that generally affect an urban environment: light emanating from building interiors that passes through windows to the outside, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting) that affect the natural ambient light level. The introduction of light can be a nuisance by affecting adjacent areas and diminishing the view of the clear night sky depending on the location of the light sources and its proximity to nearby light-sensitive areas.

The project site is located in a developed area with a mix of industrial and commercial development as well as adjacent open space. The existing light sources in the project area include streetlights and vehicle lights along surrounding roadways, as well as from interior and exterior building lighting emanating from the existing buildings both on site and on the surrounding properties.

Nighttime lighting sources during construction would consist of floodlights that would be focused on the work area to minimize light spillover. In the absence of District nighttime construction standards, nighttime construction activities would be limited to activities that would in compliance with the City of San Diego Noise Abatement and Control Ordinance in SDMC Section 59.5.0404, which specifies that construction is only permitted during daytime hours from 7 a.m. to 7 p.m., Monday through Saturday. This would require construction activities to cease operation by 7 p.m., and lights for construction work (e.g., bright pole-mounted balloon lights) would not be used beyond this timeframe. Some lighting may be used overnight at the construction site for security reasons, but overnight construction lighting would not be used. Lighting used for security reasons would involve downward-facing, shielded lights. Given the developed context of the project area, construction lighting from the project site would blend in with existing light sources in the area and would not represent a new substantial source of light. Therefore, impacts related to lighting during construction would be less than significant.

The proposed project would include the introduction of new lighting at a developed site with existing light sources. Proposed lighting would include ornamental or security lighting, which would be placed around landscaping or mounted on the buildings and in the parking lots. Lighting fixtures would be shielded and focused downward to minimize light spillover onto adjacent properties, the public right-of-way, and into the night sky. The proposed lighting would be similar to the existing project area lighting and would not introduce new and unique sources of light that would be substantial in relation to the existing lighting characteristics of the project area. Therefore, although the project would introduce new sources of light, the project would not create a new source of substantial light which would adversely affect views in the area.

Glare impacts can occur because of artificial light or sunlight reflecting off a surface. Glare can create discomfort or present safety concerns (i.e., if glare is directed into the eyes of motorists). Exterior surfaces on the proposed administration building would mostly consist of non-reflective building materials. Windows would be included that could generate some glare, but not to the extent that would adversely affect views in the area. As such, the proposed project would not introduce substantial new sources of glare.

Furthermore, the project site is adjacent to the City's MHPA. Lighting impacts to MHPA areas are regulated through compliance with the MHPA Land Use Adjacency Guidelines, which requires lighting of all developed areas adjacent to the MHPA to be directed away from the MHPA. Lighting and glare restrictions are also contained in the Montgomery-Gibbs Executive Airport ALUCP and MCAS Miramar ALUCP. Section 2.6.2 of the Montgomery-Gibbs Executive Airport ALUCP requires ALUC review of projects within Review Areas 1 and 2 that would have the potential to create electrical or visual hazards to aircraft in flight, including: electrical interference with radio communications or navigational signals; lighting which could be mistaken for airport lighting; glare or bright lights (including laser lights) in the eyes of pilots or aircraft using the airport; certain colors of neon lights (especially red and white) that can interfere with night vision goggles; and impaired visibility near the airport (San Diego Regional Airport Authority 2010). Similarly, Section 2.6.2(a)(2)(iii) of the MCAS Miramar ALUCP requires the same ALUC review of projects within Review Area 2 (SDCRAA 2011). Additionally, Section 3.5.6 (a)(1) of the Montgomery-Gibbs Executive Airport ALUCP regulates potential sources of glare (such as from mirrored or other highly reflective buildings or building features) or bright lights (including search lights and laser light displays). The project site is located within Review Area 1 for the Montgomery-Gibbs Executive Airport and Review Area 2 for MCAS Miramar. As discussed above, the project would not create substantial new sources of light or glare and project lighting would conform to these regulatory requirements.

Level of Significance Prior to Mitigation

Aesthetics impacts resulting from project implementation related to light and glare would be less than significant. Mitigation measures identified in the District's CIP PEIR to enforce compliance with regulatory requirements related to light and glare, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

Mitigation measure BIO-3 (provided in Section 4.3.5.2) would enforce project compliance with the MHPA Land Use Adjacency Guidelines. The following measures require project review by the ALUC for consistency with the applicable ALUCP regulations related to light and glare.

AES-2: Ensure Airport Land Use Commission Review and Approval for Review Area 1. During project design, the District shall submit a consistency application for Airport Land Use Commission (ALUC) review for all projects located within Review Area 1. The ALUC shall make a consistency determination as to whether the project is compatible with Airport Land Use Compatibility Plan (ALUCP) noise and safety compatibility policies, and whether the project requires Federal Aviation Administration (FAA) review or is determined by the FAA not to be a hazard or obstruction to air navigation. ~~The District shall include the FAA notice of determination (**MM-HAZ-9)** with the ALUC consistency application.~~

AES-3: Ensure Airport Land Use Commission Review and Approval for Review Area 2. Prior to project design, the District shall submit a consistency application for Airport Land Use Commission (ALUC) review for land use projects located within Review Area 2 if they propose increases in height limits compared to existing structures, or for projects that:

- Have received a Notice of Presumed Hazard, a Determination of Hazard, or a Determination of No Hazard subject to conditions, limitations, or marking and lighting requirements, from the Federal Aviation Administration (FAA); and/or

- Would create any of the following hazards:
    - Glare
    - Lighting
    - Electromagnetic interference
    - Dust, water vapor, and smoke
    - Thermal plumes
    - Bird attractants

Level of Significance After Mitigation

Mitigation measures BIO-3, AES-2, and AES-3 would enforce regulatory requirements related to light and glare. Impacts related to scenic resources would remain less than significant.

4.2 Air Quality

This section describes the existing conditions and regulatory setting for air quality and presents the results of an assessment of potential air quality impacts associated with construction and operation of the proposed project. The project's Air Quality Assessment (HELIX 2024) is included as Appendix C to the EIR.

4.2.1 Existing Conditions

The project site, described in Chapter 2, *Environmental Setting*, is located within the San Diego Air Basin (SDAB) where air quality is regulated by the SDAPCD. Existing air quality conditions and the local climate are described in this section. Additional information is provided in Appendix C, *Air Quality Assessment*.

4.2.1.1 Climate and Meteorology

Climate in Southern California, including the SDAB, is controlled largely by the strength and position of subtropical high-pressure cells over the Pacific Ocean. Most precipitation is limited to a few storms during the winter season. The predominant wind direction in the vicinity of the proposed project is from the west and the average wind speed is approximately 5.6 miles per hour (mph; Iowa Environmental Mesonet 2023). Wind patterns can also concentrate and carry pollutants from nearby areas, most notably Los Angeles, thereby adding to the local pollutant mix.

The weather station with long-term monitoring data closest to the project site is the San Diego Montgomery Field Station, which is less than one mile southwest of the project site and has climate data for the years 1998 through 2023. The annual average maximum temperature at the San Diego Montgomery Field Station is approximately 73 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 55°F. Total annual precipitation at the San Diego Montgomery Field Station averaged approximately nine inches per year between 1998 and 2023 (National Oceanic and Atmospheric Administration 2023a).

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, declines in air quality are created by the interaction between the ocean surface and the lower layer of the atmosphere, which creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrogen dioxide (NO_2) react under strong sunlight, creating smog. Light daytime winds, predominantly from the west, further aggravate conditions by driving the air pollutants inland, toward the foothills. During the fall and winter, worsened air quality is created due to carbon monoxide (CO) and NO_2 emissions. High NO_2 levels usually occur during fall or winter on days with summer-like conditions.

4.2.1.2 Air Pollutants of Concern

Federal and state laws regulate air pollutants emitted into the ambient air by stationary and mobile sources. These regulated air pollutants are known as "criteria air pollutants," and are categorized by primary and secondary standards. Primary standards are a set of limits based on human health effects.

Secondary standards are another set of limits intended to prevent environmental and property damage. Criteria air pollutants are defined by state and federal law as a risk to the health and welfare of the general public.

The following includes specific descriptions of health effects for each of the air pollutants that could potentially be associated with project construction and operation (CARB 2023a; U.S. Environmental Protection Agency [USEPA] 2023).

Ozone. Ozone (O_3) is considered a photochemical oxidant, which is a chemical that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X), both by-products of fuel combustion, react in the presence of ultraviolet light. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from ozone exposure.

Reactive Organic Gases. Reactive organic gases (ROGs; also known as VOCs) are compounds composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of ROGs. Other sources of ROGs include evaporative emissions from paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROGs, but rather by reactions of ROGs to form secondary pollutants such as O_3.

Carbon Monoxide. CO is a by-product of fuel combustion. CO is an odorless, colorless gas, and it affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease and can also affect mental alertness and vision.

Nitrogen Dioxide. NO_2 is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges have been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs. Diesel particulate matter (DPM) is classified a carcinogen by CARB.

Sulfur Dioxide. Sulfur dioxide (SO_2) is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Lead in the atmosphere occurs as particulate matter. With the phase-out of leaded gasoline, large manufacturing facilities have become the primary sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney, and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

4.2.1.3 Existing Air Quality

Regional Attainment Status

The USEPA has classified air basins (or portions thereof) as being in "attainment," "maintenance," "nonattainment," or "unclassified" for each criteria air pollutant, based on whether or not areas meet state or federal standards (California Ambient Air Quality Standards [CAAQS] or National Ambient Air Quality Standards [NAAQS]) for a particular pollutant. Local monitoring data are used to designate areas according to these standards. The four designations are further defined as follows.

- Nonattainment – assigned to areas where monitored pollutant concentrations consistently violate the standard in question.
- Maintenance – assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.
- Attainment – assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.
- Unclassified – assigned to areas where data are insufficient to determine whether a pollutant is violating the standard in question.

Table 4.2-1, *Federal and State Attainment Status for the San Diego Air Basin*, summarizes the attainment status of the SDAB. The SDAB is classified as a nonattainment area under NAAQS for O_3 (8-hour) and under the CAAQS for O_3 (1-hour and 8-hour), PM_{10}, and $PM_{2.5}$.

Table 4.2-1
FEDERAL AND STATE ATTAINMENT STATUS FOR THE SAN DIEGO AIR BASIN

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-hour)	Nonattainment	Nonattainment
Ozone (1-hour)	Attainment[1]	Nonattainment
Carbon Monoxide	Attainment	Attainment
Particulate Matter (PM_{10})	Unclassifiable[2]	Nonattainment
Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No Federal Standard)	Attainment
Hydrogen Sulfide	(No Federal Standard)	Unclassified
Visibility Reducing Particles	(No Federal Standard)	Unclassified

Source: SDAPCD 2023a

[1] The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

[2] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Ambient Criteria Pollutant Concentrations

Several ambient air quality monitoring stations in the SDAB monitor progress toward achieving and maintaining the federal and state air quality standards. The air quality monitoring station closest to the project site is the Kearny Villa Road Station, approximately 1.5 mile to the north. Table 4.2-2, *Kearny Villa Road Station Air Quality Monitoring Data*, summarizes the measured criteria pollutant concentrations at this station for the last three years for which complete data was available (2020-2022). CO, SO_2, and PM_{10} data were not available at this station; therefore, SDAPCD data for 2022 monitoring reports for the SDAB was reviewed for these pollutants (SDAPCD 2022). The highest one-hour CO concentrations of 2.2 parts per million (ppm) were reported at the Rancho Carmel Drive monitoring station, approximately 11.4 miles north of the site, but no days exceeded the NAAQS for CO. The highest one-hour SO_2 concentration in 2022 was reported to be 0.001 ppm at the Lexington Elementary School monitoring station, approximately 10.8 miles east of the project site, and no days exceeded the NAAQS for SO_2. The highest 24-hour PM_{10} concentration in 2022 was reported to be 243 $\mu g/m_3$ at the Donovan monitoring station, approximately 20.0 miles southeast of the project site. Three days at this site exceeded the NAAQS for PM_{10}; however, no days at the two other PM_{10} monitoring sites for the SDAB exceeded the NAAQS for PM_{10}. Table 4.2-2 shows the SDAB experienced violations of the federal and state ozone standards in 2020-2022 and violations of the federal $PM_{2.5}$ standard in 2020. Federal and state standards for the other pollutants were not exceeded at the Kearny Villa Road monitoring station. Existing violations of the ozone and particulate matter ambient air quality standards indicate that certain individuals exposed to this pollutant may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

Table 4.2-2
KEARNY VILLA ROAD STATION AIR QUALITY MONITORING DATA

Pollutant Standards	2020	2021	2022
Ozone(O_3)			
Maximum 1-hour concentration (ppm)	0.123	0.095	0.095
Maximum 8-hour concentration (ppm)	0.102	0.071	0.083
Number of days standard exceeded			
CAAQS 1-hour (>0.09 ppm)	2	1	1
CAAQS 8-hour (>0.070 ppm)	10	1	2
NAAQS 8-hour (>0.070 ppm)	10	1	2
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration (ppm)	0.052	0.060	0.051
Annual average concentration (ppm)	0.007	0.007	0.008
Number of days standard exceeded			
CAAQS 1-hour (>0.18 ppm)	0	0	0
NAAQS 1-hour (>0.100 ppm)	0	0	0
Annual average concentration exceeded			
CAAQS AAM (>0.030 ppm)	No	No	No
NAAQS AAM (>0.053 ppm)	No	No	No
Fine Particulate Matter ($PM_{2.5}$)			
Maximum 24-hour concentration ($\mu g/m_3$)	47.5	20.9	13.9
Annual average concentration ($\mu g/m_3$)	*	*	*
Number of days standard exceeded			
NAAQS measured 24-hour (>35 $\mu g/m_3$)	2	0	0
NAAQS/CAAQS Annual Average (12 $\mu g/m_3$)	*	*	*

Source: CARB 2023b
ppm = parts per million; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; $\mu g/m^3$ = micrograms per cubic meter; * = insufficient data available

4.2.1.4 Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. At these land uses there is reasonable expectation of continuous human exposure according to the averaging period for the air quality standards (i.e., 24-hour, 8-hour).

Sensitive receptors near the project site include residential land uses (Avion Apartments) approximately 0.3 mile west of the project site, a preschool (Chinese Bilingual Preschool) approximately 0.3 mile northeast of the project site, and a hospital (Kaiser Permanente) approximately 0.45 mile northeast of the project site (refer to Figure 2-4).

4.2.2 Regulatory Setting

4.2.2.1 Federal

Federal Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to the health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish NAAQS, which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, including O_3, CO, SO_2, NO_2, respirable particulate matter (PM_{10} and $PM_{2.5}$), and lead. Table 4.2-3, Ambient Air Quality Standards, shows the NAAQS and CAAQS for these pollutants.

Table 4.2-3
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Primary Federal Standards[1]	Secondary Federal Standards[2]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	–
$PM_{2.5}$	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3 (3)	9.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
SO_2	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	–	–
Lead	30-day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m^3	Same as Primary
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	No Federal Standards

Pollutant	Averaging Time	California Standards	Primary Federal Standards[1]	Secondary Federal Standards[2]
Sulfates	24 Hour	25 µg/m^3	No Federal Standards	No Federal Standards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	No Federal Standards	No Federal Standards
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	No Federal Standards	No Federal Standards

Source: CARB 2016; USEPA 2024

[1] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[2] The federal $PM_{2.5}$ standard was updated on February 7, 2024; therefore, the state standard is not currently more stringent than the federal standard and is anticipated to be updated in the future.

O_3 = ozone; ppm = parts per million; µg/m^3 = micrograms per cubic meter; PM_{10} = particulate matter with diameter of 10 microns or less; AAM = Annual Arithmetic Mean; $PM_{2.5}$ = particulate matter with diameter of 2.5 microns or less; CO = carbon monoxide; mg/m^3 = milligrams per cubic meter; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide; km = kilometer; – =No Standard

National Emission Standards for Hazardous Air Pollutants

In accordance with Section 112 of the CAA, the USEPA established the National Emission Standards for Hazardous Air Pollutants (NESHAP) with the purpose of protecting the public from exposure to hazardous air pollutants, or air toxics, which include specific compounds known or suspected to cause cancer or other serious health effects. One of the primary air toxics regulated under NESHAP is asbestos, which was identified as a hazardous pollutant by the USEPA in 1971. The USEPA's regulations for asbestos under NESHAP are intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Specifically, NESHAP includes regulations that require thorough inspection and proper handling of asbestos-containing materials prior to and during demolition and renovation of facilities.

Lead Renovation, Repair and Painting Rule

USEPA's Lead Renovation, Repair and Painting Rule (RRP Rule), established in 2008 and amended in 2010 and 2011, aims to protect the public from lead-based paint (LBP) hazards associated with renovation, repair, and painting activities. The RRP Rule requires that firms performing renovation, repair, and painting projects that disturb LBP in homes, child care facilities, and pre-schools built before 1978 have their firm certified by USEPA (or an authorized state), use certified renovators who are trained by USEPA-approved training providers, and follow lead-safe work practices.

4.2.2.2 State

California Clean Air Act/California Ambient Air Quality Standards

The USEPA allows states the option to develop different (stricter) standards on criteria pollutants. The State of California has developed the CAAQS and generally has set more stringent limits on the criteria pollutants than USEPA (see Table 4.2-3). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 4.2-3). The California CAA, also known as the Sher Bill or California AB 2595, was signed into law on September 30, 1988, and became effective on January 1, 1989. The California CAA requires that districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures.

CARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. SDAPCD is responsible for developing and implementing the rules and regulations designed to attain the NAAQS and CAAQS, as well as permitting new or modified sources, developing air quality management plans, and adopting and enforcing air pollution regulations for the County. Regional Air Quality Strategy (RAQS) plans from all California nonattainment areas are submitted to the CARB, which develops the California State Implementation Plan (SIP).

State Implementation Plan

The SIP is a collection of documents that set forth a state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to USEPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in 40 CFR 52.220.

The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards and appropriates money (including permit fees) to achieve these objectives.

California Energy Code

CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2022 and went into effect on January 1, 2023. The 2022 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings (California Energy Commission 2022). Most significantly, the update encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards. The 2025 standards will continue to improve upon the 2022 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2025 standards will go into effect on January 1, 2026.

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that follow a checklist compliance approach. The project is required to be designed to meet the current Title 24 energy efficiency standards.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the criteria pollutants previously discussed because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

The California Health and Safety Code (H&SC; Section 39655, subd. (a)) defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of CAA Section 112 (42 United States Code [U.S.C.] Section 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (AB 1807: H&SC Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase and the second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emissions data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California SB 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII, provided in Section 4.2.2.3 below.

Diesel Particulate Matter

Of particular concern statewide are DPM emissions. DPM was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by CARB and are

listed as carcinogens under California's Proposition 65 or under the Federal Hazardous Air Pollutants program.

Following the identification of DPM as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to DPM by 85 percent by 2020. Ongoing efforts to reduce exposure to diesel exhaust include cleaner-burning diesel fuel, retrofitting engines with particle-trapping filters, introduction of new particle-reducing technologies, and alternative fuel approaches. It is estimated that emissions of DPM in 2035 will be less than half of those in 2010, further reducing the health effects (CARB 2023c).

Asbestos Containing Materials

The California Division of Occupational Safety and Heath, known as Cal/OSHA, enforces asbestos standards in construction, shipyards, and general industry. Following identification of Asbestos Containing Materials (ACMs) in facilities proposed for demolition or renovation, Cal/OSHA regulations require that asbestos trained and certified abatement personnel perform asbestos abatement and that all ACMs removed from on-site structures must be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Registration with Cal/OSHA is required for contractors and employers that remove ACMs having an asbestos fiber content of more than 0.1 percent and 100 square feet or more of ACMs.

4.2.2.3 Local

Regional Air Quality Strategy

The California CAA requires areas that are designated nonattainment of CAAQS for ozone, CO, SO_2, or NO_2 to prepare and implement State plans to attain the standards by the earliest practicable date (H&SC Section 40911(a)). The SDAB is nonattainment for State ozone, $PM_{2.5}$, and PM_{10} (SDAPCD 2023a).

The SDAPCD and the SANDAG are responsible for developing and implementing the clean air plan for the attainment and maintenance of the ambient air quality standards in the SDAB. The SDAPCD prepared and adopted the most recent version of the San Diego County RAQS (known as 2022 RAQS) in 2023 (SDAPCD 2023b). As part of, and attached to, the RAQS are the Transportation Control Measures for the air quality plan prepared by SANDAG in accordance with AB 2595. Together, the RAQS and Transportation Control Measures provide the framework for achieving attainment of the CAAQS. The local RAQS, in combination with the RAQS from other nonattainment areas form the SIP.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County as part of the development of the County's General Plan. While SANDAG collaborates with the SDAPCD on the development of the portion of the SIP applicable to the SDAB, the SDAPCD is the lead agency. As such, the SDAPCD is responsible for projecting all future mobile source emissions. The SIP relies on the same

information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin.

Attainment Plan

The SDAPCD and SANDAG also develop and implement a plan for attainment of the NAAQS. The current regional air quality plan for NAAQS achievement in the SDAB is the *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County* (Attainment Plan; SDAPCD 2020). The Attainment Plan, which is a revision to the SIP, outlines SDAPCD's plans and control measures designed to attain the NAAQS for ozone. Similarly to the RAQS, local growth forecasts from land use plans inform the Attainment Plan.

San Diego Air Pollution Control District Rules and Regulations

Rule 50 (Visible Emissions)

Particulate matter pollution impacts the environment by decreasing visibility (haze). These particles vary greatly in shape, size and chemical composition, and come from a variety of natural and manmade sources. Some haze-causing particles are directly emitted to the air such as windblown dust and soot. Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of $PM_{2.5}$. These fine particles, caused largely by combustion of fuel, can travel hundreds of miles causing visibility impairment.

Visibility reduction is probably the most apparent symptom of air pollution. Visibility degradation is caused by the absorption and scattering of light by particles and gases in the atmosphere before it reaches the observer. As the number of fine particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range. Light absorption by gases and particles is sometimes the cause of discolorations in the atmosphere but usually does not contribute very significantly to visibility degradation. Scattering by particulates impairs visibility much more readily. SDAPCD Rule 50 (Visible Emissions) sets emission limits based on the apparent density or opacity of the emissions using the Ringelmann scale.

Rule 51 (Nuisance)

SDAPCD Rule 51 prohibits emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days.

Rule 55 (Fugitive Dust Control)

SDAPCD Rule 55 (Fugitive Dust Control) requires action be taken to limit dust from construction and demolition activities from leaving the property line. Similar to Rule 50 (Visible Emissions), Rule 55 (Fugitive Dust Control) places limits on the amount of visible dust emissions in the atmosphere beyond the property line. It further stipulates that visible dust on roadways as a result of track-out/carry-out shall be minimized through implementation of control measures and removed at the conclusion of each work day using street sweepers.

Rule 67.0.1 (Architectural Coatings)

Project development is required to comply with SDAPCD Rule 67.0.1 (Architectural Coatings) which sets the standards for the VOC content of coatings, including the following:

- Building envelope coatings are to have a VOC content less than or equal to 50 grams per liter (g/L)
- Traffic marking coatings (includes parking areas) are to have a VOC content less than or equal to 100 g/L

Regulation XII (Toxic Air Contaminants)

SDAPCD Regulation XII includes rules regarding toxic air contaminants, including:

- Rule 1200 (Toxic Air Contaminants – New Source Review): Requires risk assessments to be completed for new and modified equipment and updates cancer risk thresholds.
- Rule 1202 (Hexavalent Chromium – Cooling Towers): Establishes limits for hexavalent chromium-containing compounds in cooling towers and requires testing.
- Rule 1203 (Ethylene Oxide Sterilizers and Aerators): Establishes limits for ethylene oxide in sterilizers or aerators and requires documentation of use.
- Rule 1205 (Control of Dioxins Emissions from Medical Waste Incinerators): Establishes requirements for operation of medical waste incinerators and monitoring equipment.
- Rule 1206 (Asbestos Removal, Renovation, and Demolition): Establishes requirements for asbestos surveys, removal, and notification before and after facility renovation or demolition.
- Rule 1210 (Toxic Air Contaminant Health Risks – Public Notification and Risk Reduction): Establishes requirements for public notices of health risk assessments and risk reduction plans.

City of San Diego Municipal Code

The City's Off-Site Development Impact Regulations (SDMC Chapter 14, Article 2, Division 7) are intended to provide standards for air contaminants, noise, electrical/radioactivity disturbance, glare, and lighting. These regulations apply to development that produces air contaminants, noise, electrical/ radioactivity disturbance, glare, or lighting in any zone. Section 142.0710 establishes that air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the premises upon which the use emitting the contaminants is located.

San Diego Unified School District Standard Construction Specifications

All projects within the District are required to comply with the District's most recent Standard Construction Specifications during construction of a project. Several of the standard specifications require compliance with existing regulations or require contractors to avoid or minimize impacts. Some

of the sections of the specifications related to air quality impacts include, but are not limited to, the following:

- Section 02 82 33, *Removal and Disposal of Asbestos Containing Materials*, of the District's Standard Construction Specifications, which includes all labor, materials, facilities, equipment, services, employee training, permits, agreements, waste transport, and disposal necessary to perform the work required for asbestos, requires removal in accordance with specifications from USEPA, SDAPCD, Cal/OSHA, National Institute for Occupational Safety and Health (NIOSH), State of California regulations, and any other applicable Federal, State, and local government regulations.

- Section 02 83 33, *Removal and Disposal of Material Containing Lead*, of the District's Standard Construction Specifications, which includes all labor, materials, facilities, equipment, services, employee training, permits, agreements, waste transport, and disposal necessary to perform the work required for removal of materials containing lead, must occur in accordance with specifications from USEPA, SDAPCD, Cal/OSHA, NIOSH, State of California regulations, and any other applicable Federal, State, and local government regulations.

4.2.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with air quality resulting from implementation of the proposed project. The project would result in a significant environmental impact on air quality if it would result in any of the following:

a. Conflict with or obstruct implementation of the applicable air quality plan;

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;

c. Expose sensitive receptors to substantial pollutant concentrations; or

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

To determine whether the project would result in emissions that would result in a cumulatively considerable increase of criteria pollutants and contribute substantially to the SDAB's air quality standard violations, the project's emissions are evaluated in comparison with the thresholds used in the District's CIP PEIR. These thresholds were based on the quantitative daily emission thresholds established by the SDAPCD in Rule 20.2. SDAPCD Rule 20.2 does not establish a screening threshold for VOC emissions; therefore, the District CIP PEIR considered the South Coast Air Quality Management District screening criteria of 75 pounds per day as recommended by the County (County 2007). The District CIP PEIR also considered a $PM_{2.5}$ threshold of 55 pounds per day, as this County-recommended threshold is more conservative than the SDAPCD screening threshold of 67 pounds per day (District 2021). While SDAPCD Rule 20.2 identifies hourly and annual emissions rates, the daily rates are most appropriate when assessing the project's impacts from standard construction and operation emissions. The applicable screening criteria are provided in Table 4.2-4, *Criteria Pollutant Significance Thresholds.*

Table 4.2-4
CRITERIA POLLUTANT SIGNIFICANCE THRESHOLDS

Air Contaminant	Emission Rate (Pounds/Day)
Volatile Organic Compounds (VOCs)	75
Nitrogen Oxides (NO_X)	250
Carbon Monoxide (CO)	550
Sulfur Oxides (SO_X)	250
Respirable Particulate Matter (PM_{10})	100
Fine Particulate Matter ($PM_{2.5}$)	55

Source: District 2021

4.2.4 Methodology and Assumptions

Criteria pollutant and ozone precursor emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2022). The input data and subsequent emission estimates for the project are discussed below and the CalEEMod output files are included in Appendix C.

Construction Emissions

The quantity, duration, and intensity of construction activity have an effect on the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner.

The construction schedule was determined based on input provided by the District and supplemented with CalEEMod defaults where appropriate. Construction of the project is assumed to start in May 2024 and is projected to end in December 2026. The construction schedule used in CalEEMod is provided in Table 4.2-5, *Construction Schedule*. If a less intensive buildout schedule is followed during project construction, actual emissions could be less than those forecasted as fewer daily emissions would occur over a longer time interval.[1] In addition, if construction is delayed or occurs over a longer time period and, therefore, occurs at a later date, emissions could be reduced because of a more modern and cleaner-burning construction equipment fleet mix than incorporated in CalEEMod.

[1] For example, if one piece of equipment takes five days to complete a task, the daily emissions would be less than if five pieces of equipment work to complete the same task in one day.

Table 4.2-5
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period Start	Construction Period End	Construction Period Number of Working Days
Site Preparation	5/1/2024	5/1/2025	262
Grading	5/15/2024	5/15/2025	262
Demolition	2/1/2025	2/28/2025	20
Building Construction	3/1/2025	12/1/2026	457
Architectural Coating	6/1/2026	12/1/2026	132

Source: Appendix C

Construction would require heavy equipment for the project's construction phases of site preparation, grading, demolition, building construction, and architectural coating application. Construction equipment estimates are based on default values in CalEEMod. Table 4.2-6, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 4.2-6
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Site Preparation	Rubber-Tired Dozers	3
	Tractors/Loaders/Backhoes	4
Grading	Graders	1
	Excavators	1
	Tractors/Loaders/Backhoes	3
	Rubber Tired Dozer	1
Demolition	Rubber Tired Dozers	2
	Excavators	3
	Concrete/Industrial Saw	1
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Source: Appendix C

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Worker trips are anticipated to vary between 15 and 114 trips per day, depending on construction activity. Vendor delivery trips would be 39 per day during building construction. Based on the model default haul truck capacities, exporting of materials during site preparation would require 303 loads (606 trips), importing of soil during grading would require 749 loads (1,498 trips), and exporting demolition debris would require 701 loads (1,402 trips). The CalEEMod default worker, vendor, and haul trip distances were used in the model.

The project would incorporate BMPs during construction to reduce emissions of fugitive dust in accordance with SDAPCD Rule 55. To ensure compliance with Rule 55, modeling included the application

of water at a minimum of twice per day and limiting speeds on unpaved surfaces. Based on CalEEMod defaults, the fugitive PM_{10} and $PM_{2.5}$ control efficiency for watering two times per day is 61 percent. Modeling also assumes compliance with SDAPCD Rule 67.0.1 requirements related to the VOC content of coatings for buildings and traffic markings.

Operational Emissions

Operational sources of emissions include area, energy, and mobile sources. Operational emissions were calculated for the earliest anticipated full year of operation—2027.

Area sources include emissions from landscaping equipment, the use of consumer products, and the reapplication of architectural coatings for maintenance. Direct emissions related to energy may result from the burning of natural gas from the use of furnaces, hot water heaters, and appliances. Emissions associated with area and energy sources were estimated using the CalEEMod default values.

Operational emissions from mobile sources are associated with project-related vehicle trip generation and trip length. The project would generate 2,540 average daily trips (ADT) based on the Institute of Transportation Engineers (ITE) trip generation rate for School District Office land uses (ITE 2021). Default trip lengths in CalEEMod for the land use type were applied to these trips. The emissions reduction measure for projects within one-half mile of a high-frequency transit station was applied to project emissions with the default modal split given the location of a high-frequency transit station adjacent to the project site.

4.2.5 Impact Analysis

4.2.5.1 Air Quality Plans

Threshold a:	*Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Impact Discussion

The applicable air quality plans for the project include the Attainment Plan and RAQS. Projects that are consistent with the assumptions and emission forecasts used in the development of these plans are considered to not conflict with or obstruct the attainment of the air quality levels identified in such plans. Emissions forecasts rely on projections of vehicle miles traveled (VMT) by the Metropolitan Planning Organizations (MPOs), such as SANDAG, and population, employment, and land use projections made by local jurisdictions during development of the area and general plans.

The KMCP Update proposed an increase in multi-family residential units and nonresidential development in the KMCP area compared to the previously adopted KMCP; therefore, a conflict with the existing RAQS was identified as a significant impact in the KMCP PEIR. As mitigation for this impact, the City was required to provide a revised land use map and housing and employment forecast to SANDAG to ensure that any revisions to the population and employment projections would be considered in future air quality plan updates. Since certification of the KMCP PEIR, SDAPCD has adopted the 2022 RAQS and 2020 Attainment Plan (SDAPCD 2023b; SDAPCD 2020), which include consideration of the project site's land use designation. Further, there were no changes to the land use or zoning of the project site in the KMCP Update and therefore, the land use for the project site was known when air

quality plans were prepared based on the prior KMCP. The project is compatible with its land use designation and would be consistent with the land use assumptions contained in the RAQS and Attainment Plan. In addition, as provided under Section 4.2.5.2, below, the project would not generate emissions exceeding the SDAPCD project-level thresholds that ensure timely attainment of air quality standards.

The project also would relocate existing employees (from the existing District main office) and would not generate employment opportunities such that population growth would exceed the applicable air quality plan assumptions. The proposed building would initially accommodate 500 existing District employees working in the existing main office in the community of Uptown, approximately five miles southwest of the project site. The capacity of the proposed building would be 750 employees; however, employment at District occurs in response to growth within the District service area requiring additional staff. Thus, the project would not generate employment opportunities that would attract unplanned population growth to the region.

Level of Significance Prior to Mitigation

The project would not conflict with or obstruct implementation of the applicable air quality plans and impacts would be less than significant.

Mitigation Measures

No significant air quality impacts related to consistency with air quality plans would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to consistency with air quality plans would remain less than significant.

4.2.5.2 Air Quality Standards

Threshold b:	*Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

Impact Discussion

The project would result in the generation of criteria pollutants in the short-term during construction activities and in the long-term during operation. The project region is nonattainment under the NAAQS for 8-hour O_3 and under the CAAQS for O_3 (1-hour and 8-hour), PM_{10}, and $PM_{2.5}$. As described further in Section 4.2.3.1, the project's emissions are compared to the quantitative emission thresholds established by the SDAPCD, which are intended to ensure individual projects would not result in a cumulatively considerable increase in criteria pollutants and obstruct the timely attainment of the NAAQS and the CAAQS.

Construction Emissions

The results of the modeling in CalEEMod for project construction activities are shown in Table 4.2-7, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the applicable thresholds. As shown in Table 4.2-7, the maximum daily emissions would not exceed the thresholds.

Table 4.2-7
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Construction Activity	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	3.72	36.26	33.87	0.05	9.46	5.46
Grading	1.97	18.87	19.77	0.03	3.84	2.17
Demolition	2.56	29.09	23.03	0.06	6.32	1.91
Building Construction	1.77	13.14	20.64	0.03	2.07	0.81
Architectural Coating	7.98	0.95	2.37	<0.01	0.26	0.08
Maximum Daily Emissions[1]	**9.62**	**77.90**	**72.72**	**0.14**	**19.27**	**9.22**
Screening Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod; Appendix C

[1] Maximum Daily Emissions for all pollutants except VOC would occur when Site Preparation, Grading, and Demolition activities occur concurrently. Maximum Daily Emissions for VOC would occur during concurrent Building Construction and Architectural Coating activities.

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides ; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SDAPCD = San Diego Air Pollution Control District

Operational Emissions

Operational emission modeling results from CalEEMod are shown in Table 4.2-8, *Maximum Daily Operational Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the applicable thresholds. As shown in Table 4.2-8, the maximum daily emissions would not exceed the thresholds.

Table 4.2-8
MAXIMUM DAILY OPERATIONAL EMISSIONS

Emission Category	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile	8.67	5.98	63.78	0.16	14.08	3.65
Area	7.56	0.14	16.96	<0.01	0.03	0.02
Energy	0.10	1.81	1.52	0.01	0.14	0.14
Winter						
Mobile	8.49	6.57	60.03	0.15	14.08	3.65
Area	4.77	0.00	0.00	0.00	0.00	0.00
Energy	0.10	1.81	1.52	0.01	0.14	0.14
Total Maximum Daily Emissions[1]	**16.33**	**8.38**	**82.26**	**0.17**	**14.25**	**3.81**
Screening Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod; Appendix C
[1] Totals may not sum due to rounding.
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter;
SDAPCD = San Diego County Air Pollution Control District

Level of Significance Prior to Mitigation

The project would not exceed the applicable emissions thresholds during construction or operation. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Air quality impacts related to air quality standards would be less than significant.

Mitigation Measures

No significant air quality impacts related to air quality standards would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to air quality standards would remain less than significant.

4.2.5.3 Sensitive Receptors

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

Impact Discussion

Sensitive receptors in the project vicinity include residential and school (Chinese Bilingual Preschool) land uses approximately 0.3 mile west and northeast of the proposed project site, respectively, and a hospital (Kaiser Permanente) located approximately 0.45 mile northeast of the project site (refer to Figure 2-4).

Construction Emissions

Asbestos dust and lead are known carcinogens classified as TACs by CARB. Both may be found in buildings constructed prior to 1979 when lead was used in LBP and asbestos was used as a component of building materials such as walls, ceilings, insulation, or fireproofing. As the existing building was constructed in the early 1960s, prior to these materials being banned, demolition of the building has the potential to disturb ACMs and LBP. Federal and state regulations prohibit emissions of asbestos from demolition or construction activities. If ACMs are identified in the building, all demolition activities during project construction would be subject to the USEPA's asbestos NESHAP, which protect the public by minimizing the release of asbestos fibers during activities involving the processing, handling, and disposal of ACM. Adherence to regulations for demolition and renovation involving LBP and ACMs are included in the District's standard construction specifications Sections 02 82 33 and 02 83 33. As such, project construction would comply with regulations related to the handling of ACMs and LBP, if present, and would not expose sensitive receptors to these materials.

Equipment and vehicles used during project construction would generate TACs, such as DPM. The dose of a TAC to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time period. According to OEHHA, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with a project. There would be few pieces of off-road, heavy-duty diesel equipment operating at a given time during project construction, and the construction period would be short, especially when compared to 30 years. In addition, the nearest sensitive receptor sites to the project site are 0.3 mile away. Based on the highly dispersive properties of DPM, the distance to the nearest sensitive receptors, and relatively short-term construction period, project construction would not expose sensitive receptors to substantial emissions of TACs.

Operational Emissions

Localized air quality impacts to sensitive receptors during operation may be associated with the installation of TAC-generating equipment or the generation of CO hotspots. CARB siting recommendations suggest a detailed health risk assessment should be conducted for sensitive receptors within 1,000 feet of a warehouse distribution center, within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater), 50 feet of a typical gas dispensing facilities, or within 300 feet of a dry cleaning facility that uses perchloroethylene (CARB 2005). The project does not include these types of land uses and would not represent a substantial source of TACs.

Vehicle exhaust is the primary source of CO in California and in an urban setting, the highest CO concentrations are generally found near congested intersections. Project-generated traffic resulting in heavily congested intersections has the potential of contributing to localized "hot spots" of CO off-site. Because CO is a byproduct of incomplete combustion, exhaust emissions are worse when fossil-fueled vehicles are operated inefficiently, such as in stop-and-go traffic or through heavily congested intersections. If a project generates vehicular traffic that increases average delay at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E of F with the project, the project could result in significant CO hotspot-related effects to sensitive receptors.

According to the Local Mobility Assessment (LMA) prepared for the project, the intersections of Ruffin Road/Balboa Avenue and Viewridge Avenue/Balboa Avenue would operate at LOS E with project implementation (CR Associates 2024a). However, there would be no increase in delay at the Viewridge Avenue/Balboa Avenue intersection with the project and no further CO hotspot analysis is warranted. In the absence of a SDAPCD guidance related to CO hotspots, the evaluation of the Ruffin Road/Balboa Avenue intersection considers screening guidance developed by the Bay Area Air Quality Management District (BAAQMD). The BAAQMD screening guidance concerning the volume of traffic which could result in a CO hotspot states a less than significant impact would occur for intersections which carry more than 44,000 vehicles per hour or intersections which carry more than 24,000 vehicles per hour and where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) (BAAQMD 2023). The Ruffin Road/Balboa Avenue intersection is anticipated to carry 3,735 vehicles during the peak hour (CR Associates 2024a). This intersection is not located where mixing is limited and would carry far less than 44,000 vehicles during the peak hour; therefore, the project would not generate a CO hotspot that could expose sensitive receptors to substantial CO concentrations.

Level of Significance Prior to Mitigation

The project would not expose sensitive receptors to substantial pollutant concentrations during project construction or operation. Air quality impacts related to sensitive receptors would be less than significant.

Mitigation Measures

No significant air quality impacts related to sensitive receptors would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Air quality impacts related to sensitive receptors would remain less than significant.

4.2.5.4 Odors

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

Impact Discussion

Emissions from construction equipment, such as diesel exhaust, and VOCs from architectural coatings and paving activities may generate odors; however, these odors would be temporary, intermittent, and not expected to affect a substantial number of people. Additionally, noxious odors would be confined to the immediate vicinity of construction equipment. As the nearest sensitive receptors to the project site are approximately 0.3 mile away, by the time such emissions reach any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Furthermore, short-term construction-related odors are expected to cease upon the drying or hardening of the odor-producing materials. Therefore, impacts associated with construction-generated odors would be less than significant.

The types of facilities that are considered to generate objectionable odors during operation include wastewater treatments plants, landfills and other waste processing facilities, refineries, paint/coating operations (e.g., auto body shops), agricultural operations, and some manufacturing uses (CARB 2005). The project proposes an administrative office building and parking garage and would not introduce land uses that would generate substantial odor. Solid waste generated by the proposed project would be typical of urban development and would be collected regularly in accordance with SDMC Chapter 14, Article 2, Division 8 such that substantial odor-generating emissions would not occur. Therefore, the project would not result in other emissions, including those leading to odors, that would adversely affect a substantial number of people.

Level of Significance Prior to Mitigation

The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Air quality impacts related to odors would be less than significant.

Mitigation Measures

No significant air quality impacts related to odors would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Air quality impacts related to odors would remain less than significant.

4.3 Biological Resources

This section describes the existing conditions and regulatory setting for biological resources and describes potential biological resource impacts associated with construction and operation of the proposed project.

4.3.1 Existing Conditions

4.3.1.1 Vegetation Communities

The proposed project involves renovating and expanding existing office uses on a completely developed site. The biological resources report prepared for the KMCP PEIR classified the project site as Urban/Developed and there were no existing vegetation communities identified on the site (City 2020). Ornamental landscaping is present around the existing building and along the site perimeter, but the landscaping is considered part of the Urban/Developed land cover type. The site remains in the same condition.

The project site is adjacent to MHPA lands that were mapped in the KMCP PEIR as containing Diegan coastal sage scrub and non-native grassland (City 2020). The City's VPHCP mapping tool identifies 22 vernal pools within the MHPA area north of the project site (City 2023). The vegetation types present in the adjacent MHPA area are described in further detail below.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a sensitive upland community. It is a low, soft-woody, subshrub that may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* ssp. *Fasciculatum*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), and black sage (*Salvia mellifera*).

The coastal form of Diegan coastal sage scrub is nearly identical to Diegan coastal sage scrub, except that it is known to occur at lower elevations below 1,000 feet AMSL. Baccharis scrub is a subtype of coastal sage scrub, but chiefly supports baccharis species such as broom baccharis (*Baccharis sarothroides*) and coyote bush (*Baccharis pilularis*) (Oberbauer et al. 2008). Diegan coastal sage scrub is mapped across the majority of the MHPA area north of the project site.

Non-Native Grassland

Non-native grassland occurs seasonally in response to winter and spring rains and is a dense to sparse cover of annual, non-native grasses, sometimes associated with species of showy-flowered, native, annual forbs. This community characteristically occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species in non-native grassland include oats (*Avena* spp.), red brome (*Bromus madritensis* ssp. *Rubens*), ripgut grass (*Bromus diandrus*), ryegrass (*Lolium* sp.), and mustard (*Brassica* sp.). Most of the annual, introduced species that comprise the majority of species and biomass within non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California's climate. These two factors, in addition to intensive grazing and agricultural practices in conjunction with severe droughts, contributed to the successful

invasion and establishment of these species and the replacement of native grasses with an annual-dominated, non-native grassland. These grasslands occur throughout the County and serve as valuable raptor foraging habitat.

Broadleaf-dominated non-native grassland is a subtype of non-native grassland but is dominated greater than 50 percent by one or several invasive annual broadleaf species, such as: mustard, fennel (*Foeniculum vulgare*), or thistle (*Centaurea* spp.). Non-native grasslands are mapped within the central portion of the MHPA area north of the project site.

Vernal Pools

Vernal pools are a highly specialized wetland plant habitat that support a unique flora. Vernal pools are associated with two important physical conditions: a subsurface hardpan or claypan that inhibits the downward percolation of water and a topography characterized by a series of low hummocks called mima mounds and low depressions (the vernal pools) which prevent above ground water runoff. As the result of these two physical conditions, water collects in these depressions during the rainy season. As the rainy season ends and the dry season begins, the water that has collected in these vernal pools gradually evaporates. A temporal succession of plant species will occur at the receding pool margins, depending upon the physical and chemical microenvironmental characteristics of the pool. Vernal pools in a wet year will have a high proportion of native species that are endemic to this habitat. During these years, exotic, ruderal species characteristic of the nonnative grasslands that occur on the surrounding mima mounds may be suppressed as they cannot compete with wet adapted species like they can in a dry year. There are 22 vernal pools mapped within the MHPA area north of the project site (City 2023).

4.3.1.2 Aquatic Resources

As described above, the project site is developed and does not contain vegetation communities, including those that are potentially jurisdictional aquatic resources. The MHPA area north of the project site contains vernal pools, which may be considered jurisdictional aquatic resources. The National Wetlands Inventory database shows no wetland resources within the MHPA adjacent to the project site (U.S. Fish and Wildlife Service [USFWS] 2023).

4.3.1.3 Sensitive Plants

Sensitive plant species are those that are considered federal, State, or California Native Plant Society (CNPS) rare, threatened, or endangered; MSCP Covered Species; or MSCP Narrow Endemic (NE) species. More specifically, pursuant to the SDMC (Chapter 11, Article 3, Division 1), sensitive biological resources means upland and/or wetland areas that meet any one of the following criteria:

a) Lands that have been included in the City of San Diego MSCP Preserve;

b) Wetlands;

c) Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats;

d) Lands supporting species or subspecies listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the Federal Endangered Species Act (FESA), Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

e) Lands containing habitats with Narrow Endemic Species as listed in the Biology Guidelines in the Land Development Manual; or

f) Lands containing habitats of covered species as listed in the Biology Guidelines in the Land Development Manual.

A plant species may also be considered sensitive if it is included in the CNPS Inventory of Rare and Endangered Plants. Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

Approximately 20 rare, endangered, or threatened plant species were identified as being within or adjacent to the KMCP area with additional plant species having potential to occur within the KMCP area (City 2020). While the project site is developed and there are no sensitive plant species anticipated to occur on the project site, the MHPA adjacent to the property is considered a sensitive biological resource according to the SDMC definition and has the potential to contain rare, endangered, or threatened plant species.

4.3.1.4 Sensitive Wildlife

Sensitive animal species are those that are considered federal or State threatened or endangered; MSCP Covered Species; or MSCP NE species. More specifically, if a species is designated with any of the following statuses below, it is considered sensitive according to the SDMC (Chapter 11, Article 3, Division 1):

a) A species or subspecies is listed as endangered or threatened under Section 670.2 or 670.5, Title 14, CCR, or the FESA, Title 50, CFR, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;

b) A species is a NE as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or

c) A species is a MSCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018)

A species may also be considered sensitive if it is included on the California Department of Fish and Wildlife's (CDFW's) Special Animals List as a candidate for federal or State listing, State Species of Special Concern, State Watch List species, State Fully Protected species, or federal Bird of Conservation Concern. Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss. Additionally, avian nesting is

protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG Code).

Based on the sensitive wildlife species known to occur in the KMCP area, those with potential to occur within the habitats in the adjacent MHPA (City 2020), and species that may utilize trees on developed sites, such as the project site, the following species may be found at or adjacent to the project site:

- California glossy snake (*Arizona elegans occidentalis*) (CDFW Species of Special Concern)
- coast horned lizard (*Phrynosoma blainvillii*) (CDFW Species of Special Concern, MSCP Covered)
- coastal California gnatcatcher (*Polioptila californica californica*) (Federally Threatened, CDFW Species of Special Concern, MSCP Covered)
- Cooper's hawk (*Accipter cooperii*) (CDFW Watch List, MSCP Covered)
- Coronado skink (*Plestiodon skiltonianus interparietalis*) (CDFW Species of Special Concern)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) (CDFW Species of Special Concern)
- orange-throated whiptail (*Aspidoscelis hyperythra*) (CDFW Watch List, MSCP Covered)
- San Diego fairy shrimp (*Branchinecta sandiegonensis*) (Federally Endangered, MSCP/VPHCP Covered)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) (CDFW Species of Special Concern, MSCP Covered)
- Western spadefoot (*Spea hammondii*) (CDFW Species of Special Concern)

While there are historical records of prairie falcon (*Falco mexicanus*), a CDFW Watch List species, and quino checkerspot butterfly (*Euphydryas editha quino*), a Federally Endangered species, in the KMCP area, these species are no longer anticipated to occur in the KMCP area surrounding the site (City 2020).

4.3.1.5 Wildlife Corridor Movement

Wildlife corridors are linear spaces of undeveloped native habitats that connect large natural open space and provide opportunities for wildlife movement either at a regional or local scale. Habitat linkages between wildlife corridors connect isolated blocks of habitat and allow movement or dispersal species over a large scale and the consequent mixing of genes between populations (i.e., gene pool diversity). Wildlife corridors and habitat linkages contribute to species' sustainability by providing access to adjacent habitat areas for dispersal, foraging, and mating. Wildlife movement corridors and linkages are considered sensitive biological resources.

There are no designated regional corridors crossing the KMCP area, and thereby the project site. The nearest regional corridor extends from the west to east via San Clemente Canyon south of SR 52 then transitions north of SR 52 continuing through MCAS Miramar. Smaller open space areas within the

project area, such as the MHPA area to the north, are constrained by existing development but may serve as stepping stones or local links between larger habitat areas. The overall KMCP area is likely to support urban-adapted and migrating terrestrial wildlife species (i.e., birds, mammals, reptiles and amphibians, etc.), including the coyote (*Canis latrans*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), and mountain lion (*Felis concolor*).

4.3.2 Regulatory Setting

4.3.2.1 Federal

Endangered Species Act

Administered by the USFWS, the FESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the FESA. FESA Section 9(a) defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. The goal is to restore healthy populations of listed species within their native habitats, so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for the preparation of a Habitat Conservation Plan and issuance of an incidental take permit.

Migratory Bird Treaty Act

Migratory bird species that are native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (Federal Register Doc. 05-5127). The MBTA is generally protective of migratory birds. In common practice, the MBTA is now used to place restrictions on the disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Clean Water Act

The U.S. Army Corps of Engineers (USACE) regulates impacts to waters of the United States under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 401 et seq.; 33 U.S.C. 1344; U.S.C. 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the United States. A federal CWA Section 404 Permit would be required for a project to place fill in waters of the United States. Projects impacting waters of the United States could be permitted on an individual

basis or be covered under one of several approved nationwide permits. Individual permits are assessed individually based on the type of action, amount of fill, etc. Individual permits typically require substantial time (often longer than one year) to review and approve, while nationwide permits are pre-approved if a project meets appropriate conditions. A CWA Section 401 Water Quality Certification administered by the RWQCB must be issued prior to issuance of a Section 404 Permit.

4.3.2.2 State

California Endangered Species Act

Similar to the FESA, the California Endangered Species Act (CESA) of 1970 provides protection to species considered threatened or endangered by the State of California (CFG Code, Section 2050 et seq.). The CESA recognizes the importance of threatened and endangered fish, wildlife, and plant species and their habitats, and prohibits the taking of any endangered, threatened, or rare plant and/or animal species unless specifically permitted for education or management purposes.

The CESA established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with the CESA (CFG Code Section 2080.1[a]). For state-only listed species, CFG Code Section 2081 authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met. The City was issued a take permit for their adopted MSCP SAP pursuant to CFG Code Section 2081.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. CFG Code Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

Under CFG Code Sections 1600 et. seq., CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife and requires a Streambed Alteration Agreement for such activities. The CDFW issues a Streambed Alteration Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources. The CDFW has jurisdiction over riparian habitats associated with watercourses.

CFG Code Section 2800 et. seq., known as the Natural Community Conservation Planning Act, is intended to conserve, protect, restore, and enhance natural communities. It promotes the protection of natural communities at the ecosystem scale while accommodating compatible land uses. CDFW is the

principal state agency implementing the Natural Community Conservation Planning program. Natural Community Conservation Plans developed in accordance with this program provide for comprehensive management and conservation of multiple wildlife species and identify and provide for the regional or area-wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth.

4.3.2.3 Local

Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for San Diego County. The goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms.

The City's MSCP SAP was approved in March 1997. The MSCP SAP provides a plan and process for the issuance of permits under the federal and state Endangered Species Acts and the California Natural Communities Conservation Planning Act of 1991 (City 1997). The primary goal of the MSCP SAP is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth.

In July 1997, the City of San Diego signed an Implementing Agreement (IA) with USFWS and CDFW. The IA serves as a binding contract between the City, USFWS, and CDFW that identifies the roles and responsibilities of the parties to implement the MSCP and Subarea Plan. The IA became effective on July 17, 1997 and allows the City to issue Incidental Take Authorizations under the provisions of the MSCP. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.

The MSCP includes management priorities to be undertaken by the City as part of its MSCP implementation requirements. Those actions identified as Priority 1 are required to be implemented by the City as a condition of the MSCP Take Authorization to ensure that covered species are adequately protected. The actions identified as Priority 2 may be undertaken by the City as resources permit.

Multi-Habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, with limited development permitted based on the development area allowance of the OR-1-2 zone (open space residential zone).

Pursuant to the City's MSCP Subarea Plan, private land entirely within the MHPA is only allowed up to 25 percent development in the least sensitive areas. Should more than 25 percent development be desired, an MHPA boundary line adjustment may be proposed and requires approval by wildlife agencies (USFWS and CDFW) and the City. The MHPA area north of the project site is mapped for 100 percent conservation.

For parcels located outside the MHPA there is no limit on the encroachment into sensitive biological resources, except for wetlands, and listed non-covered species' habitat (which are regulated by state and federal agencies) and narrow endemic species. However, impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance with the City's Biology Guidelines.

MHPA Land Use Adjacency Guidelines

To ensure the integrity of the MHPA and prevent potential indirect impacts to the MHPA as a result of nearby development, guidelines were developed to manage land uses adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines are intended to be addressed at the project level and measures may be incorporated into a project's MMRP and permit conditions if needed. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development.

Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

Toxics

Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

Lighting

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or

activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Barriers

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

Invasive Species

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Brush Management

New development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zone 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Brush management zones will not be greater in size than is currently required by the City's Municipal Code regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards (i.e., to avoid the nesting season and preferentially remove non-natives over natives) and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a homeowner's association or other private party. For existing project and approved projects, the brush management zones, standards and locations, and clearing techniques will not change from those required under existing regulations.

Grading/Land Development

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

Framework Management Plan

The MSCP SAP Framework Management Plan, included in Section 1.5.1 of the City's MSCP SAP, sets management goals and objectives to maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats, thereby preventing local extirpation and ultimate extinction, and minimizing the need for future listings, while enabling economic growth in the region. Section 1.5.2 of the SAP lists general management directives that apply throughout the SAP area related to mitigation; restoration; public access, trails, and recreation; litter/trash and materials storage; adjacency management issues; invasive exotics control and removal; and flood control. The portion of the MHPA adjacent to the project site is identified within Section 1.2.3 of the SAP as being in an "Urban Area," and the overall management of these areas is directed by Section 1.5.7 of the SAP.

Vernal Pool Habitat Conservation Plan

The City adopted the revised final VPHCP in 2019 (City 2019a). The VPHCP is a comprehensive plan to provide the conservation of vernal pool habitats and seven sensitive species that do not have coverage under the City's MSCP SAP. The VPHCP encompasses the entire City and MSCP SAP coverage area of approximately 206,124 acres and includes some lands owned by the City that are within unincorporated portions of the County (i.e., Cornerstone Lands which include water supply areas for the City). Some lands within the City limits not under City jurisdiction (e.g., school districts, water districts, federal and state lands, etc.) are not automatically covered by the VPHCP; however, those landowners can seek coverage under the VPHCP through a Certificate of Inclusion.

In addition to authorizing the take of sensitive vernal pool species, the VPHCP serves to expand the City's MHPA, with a focus on the management and conservation of vernal pool habitats and their associated species, particularly the covered species of the VPHCP. The VPHCP is comprised of three Planning Units: north, central, and south. The project site is located within the central Planning Unit of the VPHCP but is not identified for conservation given its developed nature. As the MHPA area north of the project site was designated for conservation in the MSCP SAP, no additional conservation status was established by the VPHCP.

The seven species covered under the VPHCP include five plants and two animals, as listed below. The vernal pools adjacent to the project site are mapped as supporting three of the seven covered VPHCP species. Species known to be adjacent to the project site are indicated with *:

- Otay Mesa mint (*Pogogyne nudiuscula*) (Federally Endangered, State-listed Endangered)
- San Diego mesa mint* (*Pogogyne abramsii*) (Federally Endangered, State-listed Endangered)
- Spreading navarretia (*Navarretia fossalis*) (Federally Threatened)
- San Diego button-celery* (*Eryngium aristulatum* var*. Parishii*) (Federally Endangered, State-listed Endangered)
- California Orcutt grass (*Orcuttia californica*) (Federally Endangered, State-listed Endangered)
- Riverside fairy shrimp (*Streptocephalus woottoni*) (Federally Endangered)
- San Diego fairy shrimp* (Federally Endangered)

Any future proposed development not included as one of the four covered projects or three planned projects, and actions not included in the list of covered activities (i.e., land use and public infrastructure and conservation activities) in the VPHCP are required to undergo project-specific analyses (including applicable public environmental review) to identify vernal pool resources, evaluate impacts, and provide any required avoidance/mitigation relative to the provisions of the VPHCP. If a project is determined by the City to be consistent with the requirements of the VPHCP, the project could be authorized to impact vernal pools and covered species through the City's VPHCP Incidental Take Permit.

Regardless of impact authorization, the VPHCP first requires all feasible impacts to be avoided and minimized to limit any impact to vernal pools and their associated species. Such measures include, but are not limited to, redesigning a project to avoid resources; performing pre-construction biological

surveying; translocating soils, propagules, and/or species; conducting biological monitoring throughout project construction; conducting contractor environmental awareness training; directing project run-off away from vernal pools; installing temporary construction fencing to protect off-site vernal pools; installing artificial watering to control/eliminate fugitive dust; conducting seasonally timed grading operations; top soil salvaging; installing permanent protective fencing; and conducting other typical construction BMPs.

City of San Diego Environmentally Sensitive Lands Regulations

Environmentally Sensitive Lands (ESL) include sensitive biological resources (e.g., MHPA), steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the requirements of the City's Biology Guidelines (City 2018) as outlined in the City's ESL Regulations (SDMC Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the City's ESL Regulations, which serve to implement standards and requirements of CEQA and the City's MSCP Subarea Plan.

The purpose of the ESL Regulations is to "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations require that development avoid impacts to certain sensitive biological resources as much as possible including, but not limited to, MHPA lands; wetlands and vernal pools in naturally occurring complexes; federal and state listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values. While a 100-foot buffer width is generally required in the coastal zone and recommended in areas outside the coastal zone, this width may be increased or decreased on a case-by-case basis in consultation with the City, CDFW, USACE, and USFWS (City 2018). Development of the proposed project would be required to comply with all applicable City ESL Regulations.

Biology Guidelines

In September 1991, the City's Biology Guidelines, part of the Land Development Manual, were adopted, to aid in the implementation and interpretation of the ESL Regulations (SDMC Chapter 14, Article 3, Division 1) and the OR-1-2 Zone (SDMC Chapter 13, Article 1, Division 2). Section III of the Biology Guidelines serve as standards for the determination of impacts and associated mitigation requirements under CEQA and the Coastal Act. The guidelines are the baseline biological standards for processing Neighborhood Development Permits, Site Development Permits, and Coastal Development Permits issued pursuant to the ESL Regulations. The City's Biology Guidelines were most recently updated in February 2018.

General Plan Conservation Element

The General Plan establishes citywide policies to be cited in conjunction with a Community Plan. The General Plan presents goals and policies for biological resources in the Conservation Element, which generally aim to: protect and conserve the landforms, canyon lands, and open spaces; limit development of floodplains and sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands; manage and minimize runoff, sedimentation, and erosion due to construction activity in order to improve watershed management and water quality; manage wetland areas for natural flood

control and preserve wetland areas; preserve areas within the MSCP and implement the goals and policies of the City's MSCP Subarea Plan; support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values; and to work with private, State, and federal organizations or people in order to implement an effective wetland management system.

District Standard Design Guide, Educational Specifications, Guide Specifications, and Landscape Guide

Section G2050, *Landscaping*, of the District's Standard Design Guide establishes the goals and objectives for the installation of landscaping at District facilities. Specifications in the design guide stipulate leaving the native vegetation of canyon slopes adjacent to District facilities undisturbed. The plant selection guidelines also encourage the use of native and "climate similar" plants, trees, and groundcovers, whenever possible, and avoidance the use of invasive plant species.

4.3.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with biological resources resulting from implementation of the proposed project. The project would result in a significant environmental impact on biological resources if it would result in any of the following:

a. A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

b. A substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

c. A substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means;

d. Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

e. Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f. Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

4.3.4 Methodology and Assumptions

Biological resources may be either directly, or indirectly impacted by growth and development. Such impacts may be considered temporary or permanent impacts. Direct, indirect, temporary, and permanent impacts are defined as follows.

Direct Impacts: A direct impact is a physical change in the environment which is caused by and immediately related to the project. An example of a direct physical change in the environment is the removal of vegetation.

Indirect Impacts: An indirect impact is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct impact in turn causes another physical change in the environment, then the secondary change is an indirect impact. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact that may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable. Potential indirect impacts may include the following:

- *Noise*: Elevated ambient noise levels that could result from construction or development could impact species that rely on sound to communicate (e.g., birds). Elevated ambient noise levels have the potential to disturb species and/or cause direct habitat avoidance. The impact of noise on wildlife differs from species to species and is dependent on the source of the noise (e.g., vehicle traffic versus blasting) and the decibel level, duration, and timing.

- *Changes in Hydrology and Drainage*: Changes in surface or ground hydrology such as those related to runoff, salinity levels, and sedimentation could have indirect impacts on species and habitats.

- *Invasive Exotic and Predator Species*: Introduction of exotic or invasive plant and animal species to areas in or adjacent to MHPA and other biologically sensitive areas could be considered an indirect impact. Non-native species may have fewer natural predators, reduce habitat quality through reduced support of native species, and may aggressively outcompete native species.

- *Lighting*: Artificial night lighting associated with development could impact habitat value for some species, particularly for nocturnal species, through potential modification of predation rates, obscuring of lunar cycles, and/or causing direct habitat avoidance. Nighttime lighting could also disturb diurnal species roosting in adjacent habitat.

- *Toxins and Fugitive Dust*: Increased use of chemical products including pesticides, herbicides, and machinery fluids along with fugitive dust generated during construction and urban buildout (i.e., from aerosolized soil, tire wear, and car exhaust) could adversely impact plants and animals by coating the plant surfaces and disrupting various plant and animal lifecycle functions such as reproduction, photosynthesis, and respiration.

- *Unauthorized Access*: Development could create or increase use of habitats that otherwise were not easily accessible to humans. Disturbance from human activities (i.e., trampling of species from recreational activity) and trash left by human activities can adversely impact species and degrade habitat.

Permanent Impacts: Impacts that result in the irreversible removal or loss of biological resources are considered permanent.

Temporary Impacts: Temporary disruptions of habitat and temporary staging areas that do not alter landform and that will be revegetated are generally not considered to be permanent habitat loss.

No fieldwork was conducted as part of the analysis of biological resources because the site is completely developed and does not contain biological resources. Sources utilized for review and analysis of biological resources included the following:

- Kearny Mesa Community Plan Update Biological Resources Report (Appendix C to the KMCP PEIR; HELIX 2019)
- City of San Diego MSCP SAP (City 1997)
- VPHCP Interactive Map (City 2023)
- CDFW California Natural Diversity Database (CDFW 2023)
- USFWS Critical Habitat for Threatened & Endangered Species (USFWS 2022)
- USFWS National Wetlands Inventory (USFWS 2023)

4.3.5 Impact Analysis

4.3.5.1 Sensitive Species

Threshold a:	*Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*

Impact Discussion

The project site is classified as Urban/Developed land and vegetation on the site consists of ornamental landscaping. The site does not contain sensitive plant species or habitat supporting such species and is not mapped as USFWS Critical Habitat (USFWS 2022). As there are no vegetation communities on the project site, the project site is not anticipated to support special status animal species. However, landscaping on the project site, including scattered trees, may provide nesting habitat for birds and raptors protected under the MBTA. Construction involving the removal or trimming of on-site trees supporting protected species during the nesting season could adversely affect nesting birds and raptors, either through direct nest removal or indirect disturbances to the nesting environment.

The portion of the MHPA north of the project site contains Diegan coastal sage scrub, non-native grassland, and vernal pools. Special-status species supported by these habitats in the project area include amphibians, reptiles, birds, and mammals listed in Section 4.3.1.4. No sensitive individuals are anticipated to be directly affected by project construction, as these species are mobile and anticipated to occur primarily outside of the construction footprint. No permanent structures would be constructed within the MHPA and all project activities, including brush management, would occur within the developed project site. Therefore, the project would not result in direct adverse effects to sensitive wildlife or their habitats.

Construction and operation adjacent to the MHPA has the potential to result in substantial indirect effects on sensitive species utilizing the MHPA. Construction of the project would result in elevated noise levels, which has the potential to disturb coastal California gnatcatcher nesting within the MHPA. In addition, construction materials and alterations to drainage patterns have the potential to result in polluted runoff to the MHPA. Once operational, the project would reintroduce lighting adjacent to the

MHPA. The project has the potential to result in indirect adverse effects to sensitive wildlife and their habitats.

Level of Significance Prior to Mitigation

The project would result in less than significant direct impacts to sensitive wildlife and their habitats located in the adjacent MHPA. Direct impacts to trees on the project site supporting nesting and indirect impacts to sensitive species and their habitats in the MHPA would be potentially significant. The portions of mitigation measures applicable to these potentially significant impacts identified in the District's CIP Final PEIR, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

BIO-1: Migratory Bird Treaty Act Compliance. ~~During the project-specific design stage, the District shall retain a qualified biologist to perform a desktop analysis to determine the potential for site-specific biological resource impacts. The review shall include a 1-mile radius around the project site. As necessary, field visits will supplement desktop analysis. If any project requires the removal of any trees or vegetation, in~~ In compliance with Migratory Bird Treaty Act, ~~if a project requires~~ the removal of any trees or vegetation, to the maximum extent possible, ~~Proposed Program activity construction~~ shall avoid the general avian breeding season (January 15 through August 31) near habitat that may contain sensitive species. If ~~a~~ the project proposes construction involving ground disturbance, tree removal, or vegetation trimming or clearing ~~during the nesting season~~ between January 15 and August 31 in the vicinity of habitat with potential to support nesting birds, the District shall retain a qualified biologist to perform a nesting bird survey within the construction site. The survey shall be performed within 72 hours prior to project ~~activities~~ construction activities involving ground disturbance, tree removal, or vegetation trimming or clearing. If active nests are identified during the survey, the qualified biologist shall establish appropriate measures to avoid impacts on active nests, which may include a buffer around designated nests (300 feet for most nests, 500 feet for raptors) or other avoidance measures. The biologist shall monitor the nest at least once per week during the nesting season, and the avoidance measures shall be in place until it has been determined the young have fledged or the nest has been abandoned.

BIO-2: Coastal California Gnatcatcher Surveys and Monitoring. ~~If potential nesting habitat for the coastal California gnatcatcher is identified on or adjacent to a project site, c~~ Construction noise that exceeds the maximum allowable levels shall be avoided during the breeding season for the coastal California gnatcatcher (February 15 through August 31). If construction is proposed during the breeding season for the species, USFWS protocol surveys shall be required in order to determine species presence/absence. If the initial survey determines suitable nesting habitat for the coastal California gnatcatcher is no longer present adjacent to the project site, no further surveys or monitoring shall be required. If protocol surveys are not conducted in suitable habitat during the breeding season for the ~~aforementioned listed species~~ coastal California gnatcatcher, presence shall be assumed with implementation of noise attenuation and biological monitoring, as detailed below:

1. Prior to the commencement of construction during the breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(a) recovery permit) shall survey those habitat areas that would be subject to construction noise levels exceeding 60 A-weighted decibels (dBA) hourly average or 3 dBA over the ambient hourly average for the presence of the

coastal California gnatcatcher. Surveys shall be conducted pursuant to the protocol survey guidelines established by the United States Fish and Wildlife Service within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met:

a. Between February 15 and August 31, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist. Construction activities shall not result in noise levels exceeding 60 dBA hourly average or 3 dBA over the ambient hourly average at the edge of occupied gnatcatcher habitat. The qualified biologist, District staff, and a qualified noise specialist shall collaborate to determine suitable measures at the site. This can include, but not be limited to, the following: limitations on the placement of construction equipment and the simultaneous use of equipment, active monitoring of the gnatcatcher by the qualified biologist, or noise attenuation measures and barriers. If these implemented measures are determined to be inadequate by the qualified biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 31).

2. If coastal California gnatcatcher is not detected during the protocol survey, the qualified biologist shall submit substantial evidence to District staff that demonstrates whether mitigation measures (described above) are necessary between February 15 and August 31 as follows:

a. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then conditions shall be adhered to as specified above.

b. If this evidence concludes that no impacts on this species are anticipated, ~~no mitigation measures will be necessary~~ the conditions provided above shall not be required.

BIO-3: Inadvertent Encroachment Prevention/MHPA Land Use Adjacency Guidelines Compliance. The District shall retain a qualified biologist prior to construction to oversee the implementation of the following measures to prevent inadvertent encroachment into and indirect impacts to the MHPA. Prior to the commencement of construction, the District shall also verify the contractor has accurately represented the project's design in construction documents and/or contract specifications and that these documents are in conformance with the City's Multi-Habitat Planning Area Adjacency Guidelines, specifically addressing the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development.

1. **Erect Environmentally Sensitive Area Fencing.** ~~If sensitive species are identified as being present within the project site, p~~Prior to construction, a qualified biologist retained by the District shall delineate any areas identified as containing sensitive biological resources and install temporary environmentally sensitive area (ESA) fencing. Construction personnel shall avoid entering any area containing ESA fencing, and the ESA fencing shall remain in place until the conclusion of construction.

2. **Implement Construction Best Management Practices**. Prior to ~~the onset of any~~ construction activities ~~affecting over 1 acre of land~~, the District shall obtain coverage under the National Pollutant Discharge Elimination System Construction General Permit, as issued by the San Diego

Regional Water Quality Control Board. The District shall be responsible for ensuring that construction activities comply with the conditions in this permit, including development of SWPPP, implementation of BMPs identified in the SWPPP, and monitoring (as required) to ensure that effects on water quality are minimized. As part of this process, the District shall implement multiple erosion and sediment control BMPs in areas with the potential to drain to surface water and sensitive habitat. Guidelines established in the City of San Diego Jurisdictional Runoff Management Plan or equivalent guidelines shall be followed in selecting, implementing, and monitoring BMPs for construction activities. ~~The District shall verify that a notice of intent has been submitted to the State Water Resources Control Board and a SWPPP has been completed before allowing construction to begin.~~

~~Prior to the onset of any construction activities under 1 acre, the District shall prepare a BMP Plan that identifies implementation of BMPs to ensure that effects on water quality are minimized. As part of this process, the District shall implement multiple erosion and sediment control BMPs in areas with the potential to drain to surface water.~~

3. **Limit Light Pollution**. If ~~Proposed Program~~ project construction activities requiring lighting are proposed ~~on a site in the vicinity of sensitive biological resources~~, the District shall protect the ~~biological resources~~ MHPA from light pollution though the use of light barriers, redirecting light sources, and the use of downward facing and low-level illumination as appropriate. Permanent lighting sources shall also be directed to shield the MHPA from operational lighting.

4. **Protect Vernal Pools During Construction.** ~~If, during preparation of the project-specific biological resources technical report, it is determined that construction activities would occur within 250 feet of a vernal pool, the District shall, prior to the start of construction, delineate the boundaries of vernal pool resources with clearly visible flagging or fencing. The flagging and/or fencing shall be maintained in place for the duration of construction. Flagged and fenced areas shall be avoided during construction activities in that area.~~ Prior to the start of construction, the District shall ensure that the existing chain link fencing along the northern boundary of the project site is in good condition without any breaks or holes, and straw wattles, sand bags, or other similar protective device shall be placed along the base of fencing to protect the vernal pools in the adjacent MHPA. Immediately prior to initial ground disturbing activities, ~~the qualified biological monitor~~ a qualified biologist shall ~~survey the site to ensure that fencing is installed~~ inspect the fencing and protective devices to ensure they are in place and that construction crews are aware ~~that vernal pool resources cannot be affected~~ of the adjacent vernal pool resources. The fencing and protective devices shall be maintained in place for the duration of construction and shall be inspected by the biologist at least once per week.

Level of Significance After Mitigation

With implementation of mitigation measures BIO-1 through BIO-3, direct and indirect project impacts to candidate, sensitive, and special status species, as well as their habitats, would be less than significant.

4.3.5.2 Sensitive Habitats

Threshold b:	*Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?*

Impact Discussion

The City's Biology Guidelines define sensitive vegetation communities in four tiers based on rarity and ecological importance with the first being the most sensitive and the fourth being the least sensitive (City 2018). Impacts to Tier I (rare uplands), Tier II (uncommon uplands), Tiers IIIA or IIIB (common uplands), wetlands and waters of the United States, and typically non-sensitive habitats supporting a sensitive species may be considered significant.

The project site contains developed land, which is ranked Tier IV and not considered a riparian habitat or sensitive natural community. The project would occur adjacent to MHPA lands containing sensitive natural communities of Diegan coastal sage scrub (Tier II), non-native grassland (Tier IIIB), and vernal pools (wetlands). However, the project would be constructed within the existing developed site and would not have direct adverse effects on riparian habitat or other sensitive natural communities. Indirect adverse effects to the adjacent sensitive natural communities could occur as a result of construction and operation occurring adjacent to these vegetation communities.

Level of Significance Prior to Mitigation

The project would not result in direct impacts to riparian habitat or other sensitive natural communities. Indirect impacts to off-site sensitive natural communities would be potentially significant. Mitigation identified in the District's CIP Final PEIR, as modified for the proposed project, would be implemented, as identified below.

Mitigation Measures

Mitigation measure BIO-3 would address indirect impacts to riparian habitat and other sensitive natural communities.

Level of Significance After Mitigation

With implementation of mitigation measure BIO-3, both direct and indirect impacts to riparian habitat and sensitive natural communities would be less than significant.

4.3.5.3 Wetlands

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

Impact Discussion

The project site does not contain wetlands. Vernal pools are located in the MHPA to the north, which are considered wetlands, but development of the project would not encroach into the adjacent MHPA to impact these pools. However, the project has the potential to result in indirect impacts to vernal pool resources as a result of development adjacent to this area. The City's VPHCP states indirect impacts to vernal pools would be minimized given compliance with the MHPA Land Use Adjacency Guidelines. Therefore, the project could have an adverse effect on wetlands, including vernal pools, if compliance with such guidelines does not occur.

Level of Significance Prior to Mitigation

The project would not have a direct, substantial adverse effect on state or federally protected wetlands, and no direct impact would occur. Indirect impacts to wetlands, specifically vernal pools, would be potentially significant. Mitigation identified in the District's CIP Final PEIR, as modified for the proposed project, would be implemented, as identified below.

Mitigation Measures

Mitigation measure BIO-3 would address indirect impacts to vernal pools.

Level of Significance After Mitigation

With implementation of mitigation measure BIO-3, indirect impacts to wetlands, specifically vernal pools, would be less than significant.

4.3.5.4 Wildlife Movement

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

Impact Discussion

The PEIR prepared for the KMCP Update identified the MHPA north of the site a wildlife movement opportunity area given its location within the MHPA and designation as open space; however, the project site itself was not identified as a wildlife movement opportunity area (City 2020). The site contains existing development and project implementation would not remove the open space north of the project site that may provide a stepping stone or nursery site for wildlife in the region. Therefore, the project would not interfere with the movement of wildlife species or impede the use of nursery sites.

Level of Significance Prior to Mitigation

The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to wildlife movement would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to wildlife movement would remain less than significant.

4.3.5.5 Local Policies Protecting Biological Resources

Threshold e:	*Would the project conflict any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Impact Discussion

Alterations to street trees in the City are regulated by SDMC Chapter 6, Article 2, Division 6, *Street Planting*. These regulations prohibit the planting, trimming, and removal of trees within the public rights-of-way of the City without a permit from the Parks and Recreation Director. The project would require the removal of seven trees along the project frontage of Balboa Avenue. Removal of these street trees would be coordinated with the City through a tree removal permit.

Other local policies protecting biological resources in the City include the MSCP SAP, VPHCP, and ESL Regulations. As described throughout this section, the project would comply with these regulations protecting habitat and sensitive species occurring within the MHPA adjacent to the project site.

Level of Significance Prior to Mitigation

The project would require the removal of trees protected by a local tree preservation policy. As such, the project would result in a potentially significant impact related to conflicts with local policies. Mitigation identified in the District's CIP Final PEIR, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

BIO-4: **Obtain a Tree Removal Permit and Provide Compensatory Mitigation.** Prior to construction ~~for a non-educational facility at a new site acquisition~~, the District shall apply for a tree removal permit with the City of San Diego and provide compensatory mitigation as required by the City for any protected trees slated for removal.

Level of Significance After Mitigation

With implementation of mitigation measure BIO-4, the project would not conflict with the City's local tree preservation policy and impacts would be less than significant.

4.3.5.6 Conservation Plans

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

Impact Discussion

Habitat conservation plans applicable to the project include the MSCP SAP and VPHCP. Since the project site does not consist of lands designated for conservation, there would be no conflicts with these plans regarding development within conserved lands. However, the project site occurs adjacent to lands dedicated for 100-percent conservation in the MSCP SAP and contains vernal pools protected by the VPHCP. As such, indirect impacts to sensitive species protected by the MSCP SAP could occur during construction and operation, and the project is required to demonstrate compliance with the MHPA Land Use Adjacency Guidelines. The VPHCP also identifies compliance with the MHPA Land Use Adjacency Guidelines as the applicable avoidance measures for indirect impacts to vernal pools. The following subsections provide the MHPA Land Use Adjacency Guidelines (in *italics*) followed by an analysis of the project's compliance with the applicable guideline.

Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales, or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

The project includes the installation of an on-site stormwater system including a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue. Runoff from the project site would drain to the proposed detention vaults and would not drain into the MHPA. The stormwater system would be maintained in accordance with the project's SWQMP. During construction, the project would implement a SWPPP containing BMPs to prevent runoff into the MHPA, as required by mitigation measure BIO-3.

Toxics

Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding

areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

The project does not propose land uses that would require the regular use of chemicals or would generate toxic by-products. Standard pollutants from urban development and vehicle use would occur on-site but would not enter the MHPA, as the project includes the installation of a stormwater system that would collect and treat runoff prior to discharging it to the City's stormwater system. As such, runoff from the project site that may contain pollutants would not enter the MHPA and would not result in adverse effects to wildlife, sensitive species, habitat, and water quality.

Lighting

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

The project would install exterior lights on the proposed building, parking structure, and surface parking lots for safety. Exterior lighting would be shielded away from the MHPA and sensitive species. Project construction is expected to occur during daylight hours. Should construction lighting be necessary, lighting would be directed away from the MHPA and, if necessary, adequately shielded to protect the MHPA and sensitive species from night lighting. Adherence to these requirements on final plans would be ensured through implementation of mitigation measure BIO-3.

Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

As described Section 4.3.5.1, construction noise from the proposed project has the potential to interfere with nesting of coastal California gnatcatcher if they are present in the suitable habitat located in the MHPA. Mitigation measure BIO-2 would reduce this potential impact to a less than significant level by requiring the implementation of noise attenuation measures if active nests are present. Operation of the project would generate noise levels similar to the existing office building and surrounding development. As such, project operation noise would not interfere with sensitive species in the MHPA.

Barriers

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

An existing chain link fence along the northern project site boundary separates the project site from the MHPA. This fence would remain with implementation of the proposed project and would prevent

human access or domestic animal predation in the MHPA. Further, the project does not propose a residential land use and is not anticipated to introduce domestic animals to the project site.

Invasive Species

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

The District plant selection guidelines encourage the use of native and "climate similar" plants, trees, and groundcovers, whenever possible, and avoidance of the use of invasive plant species. The project proposes landscaping including a mixture of trees, shrubs, and ground cover plants. No invasive, non-native plant species identified in the City's list of prohibited landscape species (City 2016a) are proposed to be installed on the project site.

Brush Management

New development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zone 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Brush management zones will not be greater in size than is currently required by the City's Municipal Code regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards (i.e., to avoid the nesting season and preferentially remove non-natives over natives) and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a homeowner's association or other private party. For existing project and approved projects, the brush management zones, standards and locations, and clearing techniques will not change from those required under existing regulations.

The proposed building would be set back approximately 60 feet from the MHPA. The project brush management zones would not extend beyond the project's permanent footprint or encroach into the MHPA. The proposed building would be set back from the adjacent MHPA to meet applicable brush management requirements.

Grading/Land Development

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

The project does not propose slopes or development within the MHPA and all proposed development would occur within the developed project site.

Level of Significance Prior to Mitigation

The project has the potential to conflict with the provisions of the MSCP SAP and VPHCP associated with the MHPA Land Use Adjacency Guidelines. Impacts are considered potentially significant. Mitigation identified in the District's CIP Final PEIR, as modified for the proposed project, would be implemented, as identified below.

Mitigation Measures

Mitigation measures BIO-2 and BIO-3 would be required to address indirect impacts to resources protected by the MSCP SAP and VPHCP.

Level of Significance After Mitigation

With incorporation of mitigation measures BIO-2 and BIO-3, the project would not conflict with a habitat conservation plan and impacts would be less than significant.

4.4 Greenhouse Gas Emissions

This section describes the existing conditions and regulatory setting for GHG emissions and provides an analysis of potential GHG emissions impacts associated with construction and operation of the proposed project.

4.4.1 Existing Conditions

Prior operation on the project site would have been a source of anthropogenic GHG emissions, with emissions generated by vehicular traffic and by the energy use, water use, and solid waste generation of the existing office development. However, at the time the NOP was released, the existing building was vacant. Therefore, the baseline condition considered in this analysis assumes no GHG emissions are generated at the project site.

As described further below, GHG emissions generally do not result in localized impacts but rather inherently contribute to cumulative impacts related to climate change. Thus, the existing conditions described for GHG emissions consider the global and statewide atmosphere.

4.4.1.1 Climate Change Overview

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 global surface temperatures ranking as the warmest year on record since 1880. The newest release in long-term warming trends announced the last nine consecutive years (2014-2022) have been the warmest nine years on record. During 2022, an increase of 1.6 degrees Fahrenheit compared to the 1951-1980 average ranked as the fifth warmest year since 1880 (NASA 2023a). GHG and aerosol emissions from human activities are the most significant driver of observed climate change since 1750 (United Nations Intergovernmental Panel on Climate Change [IPCC] 2021). The IPCC Fifth Assessment Report constructed several emission trajectories of GHG emissions needed to stabilize global temperatures and climate change impacts. The statistical models showed a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations were stabilized at about 450 ppm carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014). As of the Sixth Assessment Report published in 2022, the IPCC determined warming would "likely" exceed 1.5 degrees Celsius and would become difficult to limit to 2 degrees Celsius if it is not already limited by 2030 (IPCC 2022).

4.4.1.2 Greenhouse Gases

The GHGs defined under California's AB 32 include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Carbon Dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The average global atmospheric CO_2 concentration in 2010 was 389 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of August 2023, the global monthly average CO_2 concentration was approximately 417 ppm, a 49 percent increase since 1750 (NASA 2023b).

Methane. CH_4 is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous Oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because hydrofluorocarbons destroy stratospheric ozone, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report. In 2007, the IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5; IPCC 2013). However, United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4 (IPCC 2007). To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values, and statewide and national GHG inventories have not yet updated their GWP values to the AR5 values.

By applying the GWP ratios, project related CO_2e emissions can be tabulated in metric tons (MT) per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.4-1, *Global Warming Potentials and Atmospheric Lifetimes*.

Table 4.4-1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-324a	14	1,430
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HFC = hydrofluorocarbon; PFC = perfluorocarbon

4.4.1.3 Worldwide and National GHG Emissions Inventory

In 2020, total GHG emissions worldwide were estimated at 47,513 million metric tons (MMT) of CO_2e emissions (World Resource Institute 2023). The U.S. contributed the second largest portion (11.1 percent) of global GHG emissions in 2020. The total U.S. GHG emissions was 5,289 MMT CO_2e in 2020. On a national level, approximately 29 percent of U.S. GHG emissions were associated with transportation and about 33 percent were associated with electricity generation (World Resource Institute 2023).

4.4.1.4 Statewide GHG Emissions Inventory

CARB performs statewide GHG inventories that are divided into six broad sectors: agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Table 4.4-2, *California Greenhouse Gas Emissions by Sector*, shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2020. As shown in Table 4.4-2, statewide GHG emissions totaled approximately 431 MMT CO_2e in 1990, 462 MMT CO_2e in 2000, 442 MMT CO_2e in 2010, and 369 MMT CO_2e in 2020. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

Table 4.4-2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	1990 Emissions (MMT CO_2e)	2000 Emissions (MMT CO_2e)	2010 Emissions (MMT CO_2e)	2020 Emissions (MMT CO_2e)
Agriculture and Forestry	18.9 (4%)	30.8 (7%)	33.6 (8%)	31.6 (9%)
Commercial	14.4 (3%)	14.6 (3%)	20.1 (5%)	22.0 (6%)
Electricity Generation	110.5 (26%)	105.2 (23%)	90.6 (20%)	59.8 (16%)
Industrial	105.3 (24%)	101.2 (22%)	97.9 (22%)	85.3 (23%)
Residential	29.7 (7%)	31.5 (7%)	32.1 (7%)	30.7 (8%)
Transportation	150.6 (35%)	178.5 (39%)	168.0 (38%)	139.9 (38%)
Unspecified Remaining	1.3 (<1%)	-	-	-
TOTAL	430.7	461.9	442.3	369.2

Source: CARB 2007; CARB 2022a
MMT = million metric tons; CO_2e = carbon dioxide equivalent

4.4.1.5 City of San Diego GHG Emissions Inventory

An emissions inventory prepared as part of the City's 2022 Climate Action Plan (CAP) Update reported GHG emissions totaling approximately 10.5 MMT CO_2e in 2019 (City 2022a), reduced from approximately 13.0 MMT CO_2e in the 2015 CAP baseline year of 2010 (City 2015a). The 2019 emissions by sector for the City are provided in Table 4.4-3, *City of San Diego Greenhouse Gas Emissions by Sector*. Similar to the statewide emissions, transportation-related GHG emissions contributed the most Citywide, followed by emissions associated with energy use.

Table 4.4-3
CITY OF SAN DIEGO GREENHOUSE GAS EMISSIONS BY SECTOR

Sector	2019 Emissions (MMT CO_2e)
On-road Transportation	5.81 (55%)
Electricity	2.38 (23%)
Natural Gas	1.91 (18%)
Solid Waste	0.28 (3%)
Off-Road Transportation (Construction Equipment Only)	0.07 (1%)
Water	0.07 (1%)
Wastewater	0.03 (<1%)
TOTAL	10.53

Source: City 2022a
MMT = million metric tons; CO_2e = carbon dioxide equivalent

4.4.1.6 San Diego Unified School District GHG Emissions Inventory

The District prepared a GHG emissions inventory for the year 2015 and identified total emissions of 74,742 MT CO_2e (District 2017a). Similar to other inventories, transportation and electricity use accounted for the vast majority of the District's GHG emissions. Transportation emissions accounted for 62 percent of District GHG emissions, comprised of 26 percent for employee travel, 23 percent for student travel, and 13 percent from use of the District vehicle fleet. Purchased electricity contributed 30 percent of total District emissions while natural gas combustion contributed only 4 percent of total

emissions. Remaining emissions were generated by solid waste (3 percent), water use (1 percent), and wastewater generation (0.1 percent) (District 2017a).

4.4.2 Regulatory Setting

4.4.2.1 Federal

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that CO_2 is an air pollutant, as defined under the federal CAA, and that the USEPA has the authority to regulate emissions of GHGs. USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation (USDOT). The standards were established on April 1, 2010 for 2012 through 2016 model year vehicles and on October 15, 2012 for 2017 through 2025 model year vehicles (USEPA 2022; USEPA and NHTSA 2012).

On June 30, 2022, the U.S. Supreme Court decision published in *West Virginia v. U.S. Environmental Protection Agency* overturned the USEPA's Clean Power Plan rule which cited Section 111(d) of the CAA for authority to set limits on CO_2 emissions from existing coal- and natural-gas-fired power plants. The June 30, 2022 decision does not overturn the April 2, 2007 decision; however, it may limit the USEPA's authority to develop rules limiting GHG emissions without clear congressional authorization.

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA have worked together to develop a national program of regulations to reduce GHG emissions and to improve the fuel economy of light-duty vehicles. The USEPA established the first-ever national GHG emissions standards under the CAA, and the NHTSA established Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. In March 2022, the agencies finalized standards for model years 2024 through 2026 and established an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026.

4.4.2.2 State

California Energy Code

As described further in Section 4.2.2.2, CCR Title 24 Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, sets standards for energy efficiency within buildings in California. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions. The current 2022 Title 24 standards encourage use of efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic

and battery storage standards, and strengthen ventilation standards (California Energy Commission 2022). The transition towards fully electric buildings would reduce GHG emissions associated with natural gas use and provide future opportunities for GHG emissions reductions as greater proportions of electricity are provided by renewable sources.

California Green Building Code Standards

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings throughout California (California Building Standards Commission 2022). The City adopts CALGreen with city-specific amendments as Chapter 14, Article 10 of the SDMC. The current 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2023. The 2025 Standards will continue to improve upon the 2022 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2025 Standards will go into effect on January 1, 2026.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Executive Order S-3-05 – Statewide GHG Emission Targets

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

Assembly Bill 32 – California Global Warming Solutions Act

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB was directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The 2020 target established by AB 32 was achieved four years earlier than mandated (CARB 2022b).

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's MPOs. CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare an SCS as an integral part of its RTP. The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or APS categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

The SANDAG is San Diego's local MPO and has responded to the requirements of SB 375 with the preparation of The Regional Plan (SANDAG 2021) discussed in greater detail in Section 4.4.2.3, below.

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to balance the needs of congestion management more appropriately with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

Senate Bill 97

SB 97 required the Governor's OPR to develop recommended amendments to the State CEQA Guidelines addressing GHG emissions, including effects associated with transportation and energy consumption. The amendments became effective March 18, 2010.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California met the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32 (CARB 2022b). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 32 and Assembly Bill 197

As a follow-up to AB 32 and in response to EO B-30-15, SB 32 was passed by the California Legislature in August 2016 to codify the EO's California GHG reduction target of 40 percent below 1990 levels by 2030 and requires the State to invest in the communities most affected by climate change. AB 197 establishes a legislative committee on climate change policies to help continue the State's activities to reduce GHG emissions.

Assembly Bill 1279

Approved by Governor Newsom on September 16, 2022, AB 1279, the California Climate Crisis Act, declares the policy of the State to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 anticipates achieving these policies through direct GHG emissions reductions, removal of CO_2 from the atmosphere (carbon capture), and almost complete transition away from fossil fuels.

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2023d). By 2035, all new passenger cars, trucks and SUVs sold in California will be zero emissions. The Advanced Clean Cars II regulations were adopted in 2022 to impose low- and zero-emission vehicle standards for model years 2026-2035 ahead of the 2035 deadline (CARB 2023d).

Assembly Bill 341

The State legislature enacted AB 341 (PRC Section 42649.2), increasing the solid waste diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 CY or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce GHG emissions, and increase the use of clean energy.

Climate Change Scoping Plan

The Scoping Plan is a strategy CARB develops and updates at least one every five years, as required by AB 32. It lays out the transformations needed across California society and economy to reduce emissions and reach climate targets. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing VMT and vehicle GHG emissions through fuel and efficiency measures. These measures would be implemented statewide rather than on a project-by-project basis.

On December 11, 2008, CARB adopted the first Scoping Plan as directed by AB 32 (CARB 2008). The 2008 Scoping Plan included a mix of incentives, regulations, and carbon pricing, laying out the portfolio approach to addressing climate change and clearly making the case for using multiple tools to meet California's GHG emission targets (CARB 2008). The 2013 Scoping Plan assessed progress toward achieving the 2020 mandate and made the case for addressing short-lived climate pollutants (CARB 2014). In response to EO B-30-15 and SB 32, all State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target since the mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions. Therefore, CARB adopted the 2017 Scoping Plan Update in December 2017 and provided a technologically feasible and cost-effective path to achieving the SB 32 mandate to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels (CARB 2017).

On December 15, 2022, CARB approved the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels; further reductions in short-lived climate pollutants; support for sustainable development; increased action on natural and working lands to reduce emissions and sequester carbon; and the capture and storage of carbon (CARB 2022b).

4.4.2.3 Local

San Diego Association of Governments 2021 Regional Plan

As described further in Section 2.4.2, SANDAG prepared the Regional Plan, which includes the SCS and RTP for the County. The 2021 Regional Plan calls for a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies. In accordance with SB 375, the SCS must achieve the GHG emissions reduction targets set by CARB. The 5 Big Moves incorporated into the 2021 Regional Plan include Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and Next OS. Implementation of these strategies would reduce GHG emissions in the County as a result of decreased vehicle travel by individuals and decreased emissions associated with goods movement through the County. The project site and vicinity are identified in the Regional Plan as being in a regional mobility hub.

City of San Diego General Plan

The City's General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element policy CE-A.2 aims to reduce the City's carbon footprint and to develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth related to climate change (City 2008). The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or State and federal legislation.

City of San Diego Climate Action Plan

In October 2010, the City Council established the Environmental and Economic Sustainability Task Force as an independent advisory body to work with City staff on the development of a plan for both City operations and the community to reduce GHG emissions and to begin to evaluate vulnerabilities in the community and outline adaptation strategies. The City prepared a CAP that was approved by the City Council in December 2015 (City 2015a). The CAP serves four primary purposes: (1) providing a roadmap for the City to achieve GHG reductions; (2) conforming the City's climate change efforts to California laws and regulations; (3) implementing climate change actions from the General Plan; and (4) providing CEQA tiering for the GHG emissions of new development. On August 2, 2022, the City Council adopted an update to the CAP (2022 CAP) to establish a community-wide goal and roadmap to net-zero emissions by 2035 (City 2022a). The 2022 CAP includes the following six strategies: decarbonization of the built environment, access to clean and renewable energy, mobility and land use, circular economy and clean communities, resilient infrastructure and healthy ecosystems, and emerging climate actions.

To provide a mechanism for CEQA tiering under the 2015 CAP, the City developed a CAP Consistency Checklist to provide a streamlined review process for GHG emissions analysis of proposed new developments that are subject to CEQA. The CAP Consistency Checklist contained measures required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP would be achieved. As proposed in the 2022 CAP, in October 2022, the City Council approved an amendment to the Land Development Code (SDMC Chapter 14, Article 3, Division 14), which established the CAP Consistency Regulations. The CAP Consistency Regulations replaced the CAP Consistency Checklist as the measures that could be implemented on a project-by-project basis pursuant to CEQA Guidelines Section 15183.5(b)(1)(D). Implementation of these measures would ensure that new development is consistent with relevant CAP strategies that work toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through compliance with the CAP Consistency Regulations may rely on the CAP for the cumulative impact analysis of GHG emissions.

San Diego Unified School District

The District has a dedicated team to ensure compliance with state and local goals for energy conservation, energy efficiency, and sustainability. The District formed the Environmental Sustainability Advisory Committee in 2013 to discuss a range of environmental sustainability activities, projects, and

policies, which included the "Dream Big" ideas that were approved by the Board of Education in 2014. The District is also the first school district to develop a comprehensive plan to reduce GHG emissions. In 2016, the Board approved an agreement with the Climate Action Campaign to develop a comprehensive GHG reduction plan, which included GHG emission inventories, reduction targets, and various mitigation and adaptation strategies and goals (District 2017a). The GHG reduction plan was consistent with existing District policies for environmental accountability. The District's initiatives and programs are highlighted below.

Dream Big

The Dream Big initiatives include a variety of measures ranging from energy efficiency to reducing food waste. These are non-binding initiatives, and successful implementation of the measures is dependent upon adequate funding being awarded to the District through state bond measures. The District has made progress towards meeting the Go Off-Grid with Solar by 2025, Adopt Net Zero Energy by 2030, and Flip the Switch to LED Lighting initiatives, which focus on reducing electricity use by the District. Other Dream Big initiatives include development of a CAP, water conservation goals, shifts to buying local, improvements to waste generation and recycling, and improvements to transportation sustainability.

Board Policies and Administrative Regulations

Policies adopted by the Board of Education and their corresponding ARs provide direction for the District's sustainability improvements. Board Policy and AR 3511 require the development a resource management program to address effective and sustainable resource practices, explore renewable and clean energy technologies, reduce energy and water consumption, minimize utility costs, reduce the amount of waste from consumable materials, encourage recycling and green procurement practices, and promote conservation principles. Board Policy and AR 3511.1 more specifically require the implementation of a cost-effective integrated waste management program.

Climate Mitigation and Adaptation Goals

The District developed a comprehensive plan for reducing GHG emissions in its Climate Mitigation and Adaptation Goals (District 2017a). The plan included strategies that aligned with the District's policies stated above, focused on reduction of energy use in buildings, solar energy generation, use of a community choice aggregation program, student and employee transportation improvements, solid waste diversion, and water efficient fixtures. Since adoption of these goals in 2017, the District has adopted a net zero energy plan, made energy efficiency upgrades across its properties, purchased electric-powered school buses, and improved waste diversion practices.

Based on the District's Greenhouse Gas Inventory for 2015, transportation and electricity contributed more than 90 percent of the District's GHG emissions. Transportation included employee travel (26 percent), student travel (parent drop-off) (23 percent), and district vehicle fleet (13 percent); purchased electricity contributed 30 percent (District 2017b). Many of the reduction strategies focused on renewable and energy efficiency sources because the District can oversee implementation of specific actions, whereas modes of transportation are more difficult to enforce. Much progress has been made toward reaching GHG reduction goals and complying with state and local goals; notable accomplishments are described below.

4.4.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with GHG emissions resulting from implementation of the proposed project. The project would result in a significant environmental impact on GHG emissions if it would result in either of the following:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.4.4 Methodology and Assumptions

The CEQA Guidelines do not prescribe a particular threshold of significance or method for determining significance of GHG emissions in CEQA documents, but instead allow lead agencies to adopt thresholds and methods that are previously adopted or recommended by other public agencies or recommended by experts. Lead agencies may also analyze the effects associated with GHG emissions at a programmatic level and tier project-level analyses from the programmatic analysis. In accordance with CEQA Guidelines Section 15183.5, a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan, such as the City's CAP. Therefore, if the project complies with the City's CAP Consistency Regulations (SDMC Chapter 14, Article 3, Division 14), the project's GHG emissions impact would be considered less than significant.

In addition, a quantitative analysis of the project's conformance with District efficiency thresholds is considered in this analysis. The District considered the applicability of various thresholds previously adopted by other lead agencies in their CIP PEIR and determined the most appropriate methodology for evaluating GHG emissions impacts associated with District-wide improvements was a combination of an efficiency-based metric and demonstration of compliance with SB 32 goals to reduce GHG emissions 40 percent below 1990 levels by 2030. Efficiency-based metrics were developed for each land use type in the District to achieve reductions consistent with SB 32 goals. For administrative facilities, the CIP PEIR determined that an efficiency threshold of 0.007 MT CO_2e per square foot would ensure operational impacts resulting from GHG emissions would be less than significant. No construction-period metric for GHG impact evaluation was adopted in the CIP PEIR; therefore, construction-period GHG emissions are amortized over 30 years and added to the project's operational emissions for comparison with the applicable efficiency threshold.

The project's GHG emissions were quantified in CalEEMod and the input methodology is provided in Section 4.2.4 and Appendix C to this EIR. The project's inclusion of photovoltaic solar panels providing approximately 80 percent of the project's electricity demand was included in the calculation of GHG emissions.

4.4.5 Impact Analysis

4.4.5.1 GHG Emissions

Threshold a:	*Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Impact Discussion

CAP Consistency

As discussed above, the significance of the project's GHG emissions can be evaluated qualitatively by an analysis of consistency with the City's 2022 CAP. The 2022 CAP, which sets a community-wide goal of net-zero GHG emissions by 2035, included CAP Consistency Regulations (codified in SDMC Chapter 14, Article 3, Division 14) for the implementation of the CAP by all future developments. The purpose of the CAP Consistency Regulations is to provide a streamlined review process for proposed new development projects and advance implementation of CAP strategies and actions specific to new development. The CAP Consistency Regulations are applicable to development of three or more residential dwelling units, non-residential development of at least 5,000 SF, and parking facilities. Therefore, as the project proposes non-residential development of over 5,000 SF and associated parking facilities, the project is subject to the CAP Consistency Regulations. Specific measures from the CAP Consistency Regulations applicable to the proposed project include the requirement to provide the following:

- Pedestrian enhancements that reduce heat island effects through the planting of trees that shade 50 percent of the sidewalk area;
- Pedestrian amenities consisting of one of the following for every 250 linear feet of street frontage: a trash receptacle, a seating fixture, sidewalk lighting, public artwork, signage, or public transit stop enhancement;
- Outlets for charging at 50 percent of bicycle parking spaces; and
- Two trees planted for every 5,000 square feet of lot area.

The project would incorporate the features listed above in compliance with the City's Municipal Code. If future project plans deviate from the CAP Consistency Regulations requirements, the project would require a Neighborhood Development Permit subject to findings made in accordance with SDMC Sections 126.0404(a) and 126.0404(h). These findings would ensure the project includes alternative project features that reduce GHG emissions to an extent comparable to the CAP Consistency Regulations. The project would be consistent with the City's CAP, and consequently other plans for reducing the emission of GHGs statewide. As such, the project would not generate emissions that would have a significant impact on the environment.

Efficiency Metric

While CEQA Guidelines Section 15183.5 allow GHG emissions to be considered less than significant where a project is consistent with a previously adopted plan, the project's estimated GHG emissions are also compared with the District's efficiency metric to provide a quantitative analysis. The project

includes 210,000 SF of administrative facility space and the District's efficiency metric for administrative facilities is 0.007 MT CO_2e per SF. Therefore, the applicable threshold for the project is 1,470 MT CO_2e per year.

Project construction and operation GHG emissions were estimated using CalEEMod and the complete modeling results are provided within Appendix C. Estimated GHG emissions resulting from project construction and operation are provided in Table 4.4-4, *Project Greenhouse Gas Emissions*, and compared to the District's efficiency metric.

Table 4.4-4
PROJECT GREENHOUSE GAS EMISSIONS

Emission Sources	Greenhouse Gas Emissions (MT CO_2e)
Construction	
2024	714.58
2025	990.65
2026	601.90
Construction Subtotal[1]	**2,307.14**
Operation	
Area	5.72
Energy	383.55
Mobile	1,850.51
Refrigerants	0.08
Solid Waste	60.97
Water	62.96
Operation Subtotal[1]	**2,363.78**
Construction (Annualized over 30 years)	76.90
Total[1]	**2,440.68**
District Threshold[2]	*1,470*
Exceed Threshold?	**Yes**

Source: CalEEMod; Appendix C
[1] Totals may not sum due to rounding.
[2] Threshold based on District metric of 0.007 MT CO_2e per square foot and project size of 210,000 square feet.
MT = metric tons; CO_2e = carbon dioxide equivalent

As shown in Table 4.4-4, the project's operational emissions would exceed the District's efficiency metric for administrative facilities based on the SB 32 targets. Therefore, the project could generate GHG emissions that would have a significant impact on the environment.

Level of Significance Prior to Mitigation

Impacts related to GHG emissions would be potentially significant. To reduce GHG emissions, mitigation identified in the District's CIP PEIR, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

GHG-1: Implement Best Management Practices During Construction. The District shall incorporate best management practices to reduce greenhouse gas emissions during construction, as applicable. Best management practices may include, but are not limited to:

- Use local building materials.
- Recycle construction waste or demolition materials.
- Implement employee carpool programs.
- Maintain all construction equipment in proper working condition according to manufacturers' specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

GHG-2: Incorporate Sustainable Design Features: T~~o ensure future projects would reduce operational greenhouse gas (GHG) emissions, d~~D<u></u>uring project planning and design phases, the District shall require all future projects to incorporate sustainable design features, including, but not limited to, the following:

- All interior/exterior lighting shall be LED lighting.
- Photovoltaic (PV) solar systems shall be installed ~~at school sites~~ that meet the siting criteria in the District's *Solar PV Design Guide*.
- ~~All school sites shall have a~~A<u></u>n Energy Management System to control heating, ventilation, and air conditioning systems ~~for all school site rooms~~ <u>shall be installed</u>.
- ~~All school sites shall p~~P<u></u>rovide adequate amounts of trash, recycle, and food waste receptacles that are easily accessible to staff and students.

Level of Significance After Mitigation

Implementation of mitigation measures GHG-1 and GHG-2 would reduce GHG emissions during project construction and operation; however, such reductions are not readily quantifiable. In addition, the majority of project GHG emissions would result from mobile sources, which are not regulated or under the jurisdiction of the District. Therefore, while the project would provide an office site in proximity to transit facilities that would promote reductions in vehicle use and thereby GHG emissions, the District cannot ensure mobile GHG emissions would be reduced below the applicable efficiency metric. Therefore, impacts related to GHG emissions would remain significant and unavoidable.

4.4.5.2 GHG Reduction Plan Consistency

Threshold b:	*Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Impact Discussion

As described throughout Section 4.4.2, there are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State regulations are AB 32 and SB 32, the California Global Warming Solutions Act of 2006. The initial quantitative goal of AB 32 to reduce GHG emissions to 1990 levels by 2020 was achieved and SB 32 would require further reductions of 40 percent below 1990 levels by 2030. AB 1279 directs anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045. The 2022 Scoping Plan provides the framework to achieve AB 1279 targets for carbon neutrality anthropogenic GHG emission reductions. The majority of Scoping Plan actions would be taken by State agencies to implement additional programs and regulations for the purposes of achieving these goals. For example, regulations related to GHG emissions standards for vehicles and regulations requiring an increasing proportion of electricity from utility providers to be generated from renewable sources are being implemented at the statewide level and compliance at the project level is not addressed or required. The project would be consistent with the Scoping Plan measures through compliance with applicable laws, such as Title 24 regulations related to energy efficiency. The project would also provide on-site renewable energy, which would contribute to Scoping Plan goals to increase the use of renewable energy sources throughout the State.

At the regional level, the SANDAG Regional Plan directs growth to occur consistent with smart growth principles and close to transit connections. The location of the proposed office within a mobility hub would be consistent with the vision of the Regional Plan to encourage transit use, thereby decreasing GHG emissions associated with commute trips. The project also supports the multi-modal strategy of the Regional Plan through the provision of planned improvements to pedestrian facilities adjacent to the project site. The proposed project is consistent with the goals of the Regional Plan for reducing the GHG emissions associated with new development.

As the District's efficiency metric described under Threshold a is not based on a GHG reduction plan, the project's exceedance of this metric would not result in conflicts with applicable plans, policies, or regulations. The applicable local GHG reduction plan would be the City's CAP and associated regulations. As described under Threshold a, the City's 2022 CAP Update resulted in the adoption of the CAP Consistency Regulations, which ensure the implementation of the City's plan for GHG emission reduction at the project level. As the project proposes development consistent with the project site land use designation, the project is considered consistent with the assumptions contained in the City's CAP. The project would implement the features required by the CAP Consistency Regulations. More broadly, the project would provide renewable energy and development within proximity of transit facilities consistent with the CAP strategies for decarbonization of the built environment and increased mobility. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Level of Significance Prior to Mitigation

The project would not conflict with applicable GHG reduction plans, policies, or regulations, and impacts would be less than significant.

Mitigation Measures

No significant GHG emissions impacts related to applicable plans, policies, or regulations would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to GHG reduction plans, policies, and regulations would remain less than significant.

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4.5 Noise and Vibration

This section describes the existing conditions and regulatory setting for noise and vibration and identifies potential noise and vibration impacts associated with construction and operation of the proposed project.

4.5.1 Existing Conditions

4.5.1.1 Existing Noise Environment

The project site is in an urban environment surrounded by existing commercial and industrial land uses and roadways, as well as an isolated open space parcel. The primary existing noise sources in the project vicinity are vehicular traffic, aircraft activity, and stationary sources at existing buildings, including heating, ventilation, and air conditioning (HVAC) systems. The project site is primarily exposed to vehicular noise from Balboa Avenue and Ruffin Road as well as aircraft activity originating at Montgomery-Gibbs Executive Airport, approximately 0.2 mile to the southwest. The majority of the project site is mapped within the 60 to 65 Community Noise Equivalent Level (CNEL) traffic noise contours for existing conditions in the KMCP PEIR (refer to KMCP PEIR Figure 5.9-2) and within the 60 to 70 CNEL traffic noise contours at KMCP buildout (refer to KMCP PEIR Figure 5.9-3; City 2020). The project site is outside of the 60 CNEL noise contours for both the Montgomery-Gibbs Executive and MCAS Miramar airports (SDCRAA 2010; SDCRAA 2011).

4.5.1.2 Noise and Vibration Sensitive Land Uses

Noise-sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise. The most common noise-sensitive uses include residences, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, childcare facilities, and certain types of recreational parks and open space. Existing NSLUs near the project site include residences approximately 0.3 mile to the west, a preschool approximately 0.3 mile to the northeast, and a hospital approximately 0.45 mile to the northeast (refer to Figure 2-4). Industrial and commercial land uses, which neighbor the project site, are generally not considered to be sensitive to noise.

Vibration-sensitive land uses (VSLUs) are generally the same as those that would be sensitive to noise and would typically include residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, museums, and childcare facilities. It is noted, however, that vibration effects are typically only considered inside occupied buildings and not at outside areas such as residential yards, parks, or open space. Schools, museums, and other institutional uses are considered to be sensitive to human annoyance effects from vibration only during their standard hours of operation. Existing VSLUs near the project site include residences and a preschool approximately 0.3 mile to the west and northeast, respectively, and a hospital approximately 0.45 mile to the northeast (refer to Figure 2-4). Because building damage would be considered a permanent negative effect at any building, regardless of land use, any type of building would typically be considered sensitive to vibration damage impacts.

4.5.1.3 Noise and Sound Level Descriptors and Terminology

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) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound.

Noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ}, with a specified duration. The CNEL is a 24-hour average, where noise levels during the evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dBA weighting, and sound levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dBA weighting. This is similar to the Day Night sound level (L_{DN}), which is a 24-hour average with an added 10 dBA weighting on the same nighttime hours, but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on dBA. These metrics are used to express noise levels for both measurement and municipal regulations, as well as for land use guidelines and enforcement of noise ordinances.

In the science of acoustics, the fundamental 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 contribute to the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. A logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA units. The threshold of hearing for the human ear is approximately 0 dBA, which corresponds to 20 micro Pascals (µPa).

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions.

4.5.1.4 Vibration Descriptors and Terminology

Vibration is defined as any oscillatory motion induced in a structure or mechanical device as a direct result of some type of input excitation. Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or manufactured (explosions, trains, machinery, traffic, construction equipment, etc.). Vibration sources may be transient, steady-state (continuous), or pseudo steady-state. Examples of transient construction vibrations are those that occur from blasting with explosives, impact pile driving, demolition, and wrecking balls.

Ambient and source vibration information are expressed in terms of the peak particle velocity (PPV) in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak

amplitude of the vibration velocity. Unlike many quantities used in the study of environmental acoustics, PPV is typically presented using linear values and does not employ a dB scale. Because it is related to the stresses that are experienced by buildings, PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage. The root mean square (RMS) of a signal is the average of the squared amplitude of the signal in decibels (relative to 1 micro-inch per second). Because the net average of a vibration signal is zero, the RMS amplitude is used to describe the "smoothed" vibration amplitude. The RMS amplitude is always less than the PPV and is always positive. The RMS average is typically calculated over a one-second period.

Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

4.5.2 Regulatory Setting

4.5.2.1 State

California Noise Control Act of 1973

California H&SC Sections 46000 through 46080, also known as the California Noise Control Act of 1973, state that excessive noise is a serious hazard to the public health and welfare, and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. This act also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Green Building Standards Code

Section 5.507 of CALGreen establishes requirements for acoustical control in non-residential buildings (CBSC 2022). The standards require that wall and roof-ceiling assemblies making up the building envelope shall have a Sound Transmission Class (STC) value of at least 50, and exterior windows shall have a minimum STC of 40 or Outdoor-Indoor STC of 30 for buildings within: (1) the 65 CNEL noise contour of an airport; or (2) the 65 CNEL or L_{DN} noise contour of a freeway or expressway, railroad, industrial source, or fixed-guideway source. Wall and floor-ceiling assemblies separating tenant spaces and public places shall have an STC of at least 40. Additionally, Section A5.507.5 requires that classrooms have a maximum interior background noise level of no more than 45 dBA L_{EQ}.

Caltrans Transportation and Construction Vibration Guidance Manual

The California Department of Transportation (Caltrans) provides widely referenced vibration guidelines in its *Transportation and Construction Vibration Guidance Manual* (Caltrans 2020). Although these guidelines do not represent strict standards that apply to the project, they are useful in establishing appropriate thresholds for vibration impacts in the absence of City or District standards for groundborne vibration levels. The manual establishes vibration impact criteria in terms of both the potential for building damage and the potential for human annoyance. Groundborne vibration annoyance criteria are typically only assessed at building locations rather than within exterior areas such as yards, parks, or

playgrounds because people are much less sensitive to groundborne vibration when they are using exterior areas than when they are inside of a building. Table 4.5-1, *Caltrans Vibration Damage Potential Criteria*, provides the suggested building damage criteria and Table 4.5-2, *Caltrans Vibration Annoyance Potential Criteria*, displays criteria for assessing human annoyance from vibration. Transient sources create a single isolated vibration event and may include sources such as blasting. Continuous/frequent intermittent sources of vibration include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 4.5-1
CALTRANS VIBRATION DAMAGE POTENTIAL CRITERIA

Structure and Condition	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans 2020
in/sec = inches per second; PPV = peak particle velocity

Table 4.5-2
CALTRANS VIBRATION ANNOYANCE POTENTIAL CRITERIA

Human Response	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.1
Severe	2.0	0.4

Source: Caltrans 2020
in/sec = inches per second; PPV = peak particle velocity

4.5.2.2 Local

City of San Diego Municipal Code

Section 59.5.0404 – Construction Noise

SDMC Section 59.5.0404, as follows, establishes sound level limits for construction noise within the City. Generally, the SDMC permits construction between 7:00 a.m. to 7:00 p.m. Mondays through Saturdays with an average sound level of no greater than 75 dBA L_{EQ} at the property line of a residentially zoned property during this 12-hour period.

(a) It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the SDMC, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish,

excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance, would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.

(b) Except as provided in subsection (c) hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 dBA during the 12-hour period from 7:00 a.m. to 7:00 p.m.

(c) The provisions of subsection (b) of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

Section 59.5.0401 – Sound Level Limits

SDMC Section 59.5.0401, as follows, establishes sound level limits for the City that apply to operational noise sources. The permissible sound level is determined by the land use of the affected property, as provided in Table 4.5-3, *City of San Diego Property Line Noise Limits*.

(a) It shall be unlawful for any person to cause noise by any means to the extent that the one-hour average sound level exceeds the applicable limit given in the following table [Table 4.5-3], at any location in the City on or beyond the boundaries of the property on which the noise is produced. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person.

Table 4.5-3
CITY OF SAN DIEGO PROPERTY LINE NOISE LIMITS

Land Use Zone	Time of Day	One-hour Average Sound Level (dBA)
Single Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a maximum density of 1/2000)	7:00 a.m. to 7:00 p.m.	55
	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

Source: SDMC Section 59.5.0401, Table K-4 Sound Level Limits

(b) The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts. Permissible construction noise level limits shall be governed by Section 59.5.0404 of this article.

General Plan Noise Element

The City's General Plan Noise Element (City 2015b) includes policies intended to prevent excessive noise exposure in the City. The Noise Element contains goals and policies to guide compatible land use siting and ensure the incorporation of noise attenuation measures for new uses. The majority of such goals and policies apply at the City level for land use planning and guidance for new uses in proximity to transit and airport facilities. In addition, the Noise Element includes noise compatibility guidelines, which identify the limits for acceptable noise levels for different land use categories, as provided in Table 4.5-4, *City of San Diego Land Use Noise Compatibility Guidelines.*

Table 4.5-4
CITY OF SAN DIEGO LAND USE NOISE COMPATIBILITY GUIDELINES

Land Use Category	Exterior Noise Exposure (CNEL)				
	<60	60-65	65-70	70-75	75+
Parks and Recreational					
Parks, Active and Passive Recreation					
Outdoor Spectator Sports, Golf Courses; Water Recreational Facilities; Indoor Recreation Facilities					
Agricultural					
Crop Raising & Farming; Community Gardens, Aquaculture, Dairies; Horticulture Nurseries & Greenhouses; Animal Raising, Maintain & Keeping; Commercial Stables					
Residential					
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units		45	45		
Institutional					
Hospitals; Nursing Facilities; Intermediate Care Facilities; K-12 Educational Facilities; Libraries; Museums; Child Care Facilities		45			
Other Educational Facilities including Vocational/Trade Schools and Colleges, and Universities)		45	45		
Cemeteries					
Retail Sales					
Building Supplies/Equipment; Groceries; Pets & Pet Supplies; Sundries, Pharmaceutical, & Convenience Sales; Apparel & Accessories			50	50	
Commercial Services					
Building Services; Business Support; Eating & Drinking; Financial Institutions; Maintenance & Repair; Personal Services; Assembly & Entertainment (includes public and religious assembly); Radio & Television Studios; Golf Course Support			50	50	
Visitor Accommodations		45	45	45	
Offices					
Business & Professional; Government; Medical, Dental & Health Practitioner; Regional & Corporate Headquarters			50	50	
Vehicle and Vehicular Equipment Sales and Services Use					
Vehicle Repair & Maintenance; Vehicle Sales & Rentals; Vehicle Equipment & Supplies Sales & Rentals; Vehicle Parking					
Wholesale, Distribution, Storage Use Category					
Equipment & Materials Storage Yards; Moving & Storage Facilities; Warehouse; Wholesale Distribution					
Industrial					
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking & Transportation Terminals; Mining & Extractive Industries					

Land Use Category				Exterior Noise Exposure (CNEL)				
				<60	60-65	65-70	70-75	75+
Research & Development							**50**	
	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.					
		Outdoor Uses	Activities associated with the land use may be carried out.					
45, 50	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number (45 or 50) for occupied areas.					
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.					
	Incompatible	Indoor Uses	New construction should not be undertaken.					
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.					

Source: City 2015b
CNEL = Community Noise Equivalent Level

MHPA Land Use Adjacency Guidelines

Section 1.2.6 of the City of San Diego MSCP SAP (City 1997) describes the MHPA Land Use Adjacency Guidelines for projects occurring adjacent to protected MHPA lands. The noise section of the MHPA Land Use Adjacency Guidelines reads:

> Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Airport Land Use Compatibility Plans

The SDCRAA, which acts as the ALUC for the County, maintains the ALUCPs for the County's airports. The ALUCPs contain policies to regulate land use and development, including noise compatibility considerations. Consideration of airport compatibility related to noise is intended to result in development that is compatible with aircraft noise. Specifically, each ALUCP limits new noise-sensitive development within the noise compatibility boundary, identifies sound attenuation goals for noise-sensitive development, and considers if avigation easements are necessary. The project site is within the plan areas for the Montgomery Field and MCAS Miramar ALUCPs (SDCRAA 2010; SDCRAA 2011).

4.5.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with noise resulting from implementation of the proposed project. The project would result in a significant noise impact if it would result in any of the following:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

b. Generation of excessive groundborne vibration or groundborne noise levels; or

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, exposure of people residing or working in the project area to excessive noise levels?

According to the District's CEQA Handbook (District 2021), a significant impact related to threshold a would occur if:

- Project construction activity occurs outside the permitted hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday; or

- Project construction activity generates a 12-hour L_{EQ} in excess of 75 dBA L_{EQ} at NSLUs between 7:00 a.m. and 7:00 p.m.;

- Project operations generate noise levels at NSLUs that noticeably exceed existing ambient noise levels and the noise limits provided by Section 59.5.0401 of the SDMC; or

- Project-generated traffic causes a noticeable increase in noise levels (3 dBA or more) at any off-site NSLU that would result in a noise level exceeding the applicable City criterion (i.e., 65 dB CNEL at any offsite residence, hospital, nursing facility, intermediate care facility, school, day care, library, hotel, motel, or park, or 70 dB CNEL at any offsite church or museum).

Significant impacts associated with threshold b would occur if the project would generate vibration exceeding the Caltrans criteria for building damage identified in Table 4.5-1 and the distinctly perceptible human annoyance threshold provided in Table 4.5-2. Potentially significant impacts associated with threshold c would occur if the project would conflict with applicable ALUCP policies related to land use siting and noise compatibility.

4.5.4 Methodology and Assumptions

The project site and surrounding properties have an industrial base zone and the applicable property line noise limit is 75 dBA L_{EQ} for all hours (refer to Table 4.5-3). The MHPA north of the project site may contain nesting birds during project construction and operation. Based on existing traffic noise levels, the potential nesting habitat in the MHPA may be exposed to ambient noise levels above 60 dBA L_{EQ}, which would increase the allowable noise level from the project at these locations; however, in order to provide a conservative analysis in the absence of an established ambient noise level, the standard noise

limit of 60 dBA L_{EQ} is considered applicable at the MHPA boundary. Therefore, this analysis considers 60 dBA L_{EQ} the applicable noise limit at the northern property line and 75 dBA L_{EQ} the applicable noise limit at the southern, eastern, and western property lines.

Project construction noise was analyzed using the Roadway Construction Noise Model (RCNM; USDOT 2008), which utilizes estimates of sound levels from standard construction equipment. According to the air quality assessment (Appendix C), the project would require construction equipment for demolition, site preparation, grading, building construction, and application of architectural coatings. Calculations in RCNM considered the list of equipment anticipated to be used for project construction, as provided in Table 4.2-6.

Stationary equipment associated with office building operation that would generate noise would include HVAC systems. Specific units have not been identified at this stage of project design; therefore, a 10-ton rooftop commercial HVAC unit is used in the following analysis. The Carrier 50HCD12 rooftop HVAC unit has a sound power level of 87 dBA (Carrier 2022).

Parking garage noise would also be generated during project operation. Parking lots are often quiet for long periods of time during which low levels of activity generate only sporadic noise that does not add substantially to overall noise levels in the vicinity. However, parking lots can become noteworthy noise sources during periods of peak activity when many vehicles are arriving and/or leaving within the same hour. Guidance from the Federal Transit Administration (FTA) provides reference noise levels for a parking garage assuming 1,000 peak hour vehicle movements (i.e., vehicles either arriving or departing), which is a higher level of activity than would occur within the proposed parking garage. At 50 feet from the center of the parking garage, the FTA estimates a parking garage with 1,000 vehicle movements generates an hourly noise level of 56.4 dBA L_{EQ}.

4.5.5 Impact Analysis

4.5.5.1 Noise Generation

Threshold a:	*Would the project 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?*

Impact Discussion

Construction Noise

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction. Construction noise would be short-term and would primarily consist of noise from the use of diesel-powered off-road equipment on the project site. Project construction noise generated by the project's anticipated mix of equipment (refer to Table 4.2-6) was analyzed using RCNM at approximately 25 feet from the MHPA and at the nearest residences 0.3 mile (approximately 1,600 feet) to the west. Table 4.5-5, *Construction Equipment Noise Levels*, provides the calculated noise levels from RCNM. The average noise levels consider the standard percent use provided by RCNM and the 12-hour average noise level for comparison with the SDMC standard assumes equipment would be used over a typical 8-hour operating day. Further, these noise levels are considered conservative estimates, as RCNM does not account for topography or intervening development that would attenuate noise levels.

Table 4.5-5
CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Percent Operating Time	dBA L_{EQ} (1-hour) at 25 feet	dBA L_{EQ} (1-hour) at 1,600 feet	dBA L_{EQ} (12-hour) at 1,600 feet
Backhoe	40	79.6	43.5	41.7
Compressor (air)	40	79.7	43.6	41.8
Concrete Saw	20	88.6	52.5	50.7
Crane	16	78.6	42.5	40.7
Dozer	40	83.7	47.6	45.8
Excavator	40	82.8	46.6	44.8
Front End Loader	40	81.2	45.0	43.2
Generator	50	83.6	47.5	45.7
Grader	40	87.0	50.9	49.1
Welder / Torch	40	76.0	39.9	38.1

Source: USDOT 2008
dBA = A-weighted decibels; L_{EQ} = time-averaged noise level

As shown in Table 4.5-5, construction of the project would not result in noise levels exceeding 75 dBA L_{EQ} (12-hour) at 1,600 feet, which is the nearest residential property. Therefore, the project would not conflict with the City's construction noise limits for human receptors.

At the MHPA, construction noise levels would exceed 60 dBA L_{EQ}, which is the applicable limit at nesting sites if nesting coastal California gnatcatcher are identified in the MHPA. The construction noise limit at nesting sites may be increased to 3 dBA above the ambient noise level at these locations but would still be exceeded by proposed construction equipment. Further, the simultaneous use of equipment such as a grader and excavator would generate a combined noise level of 88.4 dBA L_{EQ} at 25 feet. Therefore, project construction would increase ambient noise levels and exceed the applicable noise limits for the MHPA if nesting coastal California gnatcatcher are present.

On-Site Operational Noise Generation

Project operations would generate noise associated with standard stationary equipment, such as HVAC systems, and parking lot operations. Impacts would be considered significant if these noise sources would generate noise levels in excess of 60 dBA L_{EQ} at the northern property line or 75 dBA L_{EQ} at the southern, eastern, or western property lines.

HVAC systems for the office building would be mounted on the building roof top and would be set back at least 70 feet from project site boundaries. At this distance, an HVAC unit with a sound power level of 87 dBA would generate a noise level of approximately 52 dBA L_{EQ} (Carrier 2022). Further, standard parapets around the roof would reduce noise levels from stationary equipment on the building rooftop and HVAC units are anticipated to be spaced such that consideration of noise generated by multiple units at one property line is not required. Stationary equipment associated with operation of the office building is not anticipated to result in noise levels exceeding 60 dBA L_{EQ} at the northern property line or 75 dBA L_{EQ} at the southern, eastern, or western property lines; however, the final project design with proposed mechanical equipment is not yet available.

The parking garage would be set back approximately 65 feet from the northern property line and approximately 50 feet from the western property line. At 50 feet from the center of the parking garage,

the FTA estimates a parking garage with 1,000 vehicle movements generates an hourly noise level of 56.4 dBA L_{EQ} (FTA 2018). Therefore, noise generated by parking lot use at the nearby property lines would be less than the limits of 60 dBA L_{EQ} at the northern property line and 75 dBA L_{EQ} at the western property line.

Off-Site Operational Traffic Noise Generation

As described in Section 4.5.1 above, a doubling of sound energy corresponds to a 3 dBA increase in noise levels, which is also the approximate level of increase required for humans to perceive a change in noise levels. Therefore, in order for project-generated traffic to result in a perceptible (3 dBA) increase in traffic noise levels, the project would need to approximately double traffic volumes on a roadway. Under existing conditions, Balboa Avenue adjacent to the project site carries approximately 21,511 ADT and Ruffin Road adjacent to the project site carries approximately 15,972 ADT. The project would generate 2,540 ADT, which would be split along Balboa Avenue and Ruffin Road (CR Associates 2024a). The project-generated trips would not double traffic volumes on these roadways. Therefore, the project would not generate a noticeable increase in traffic noise levels at any off-site NSLU.

Land Use Compatibility

As shown in Table 4.5-4, the City's General Plan Noise Element considers office land uses, such as the proposed project, compatible with traffic noise levels below 65 CNEL, conditionally compatible with traffic noise levels between 65 and 75 CNEL, and incompatible with traffic noise levels above 75 CNEL. In order to be compatible with exterior noise levels between 65 and 75 CNEL, an office land use would need to attenuate interior noise levels to 50 CNEL.

According to the KMCP PEIR, the project site would be located between the 60 and 70 CNEL traffic noise contours at buildout of the KMCP (refer to KMCP PEIR Figure 5.9-3; City 2020). The Balboa Avenue and Ruffin Road segments adjacent to the project site are each anticipated to generate 70 CNEL at 75 feet from the roadway centerline and 65 CNEL at 220 feet from the roadway centerline. The courtyard proposed at the western side of the proposed addition would be located over 220 feet from the roadway centerlines and shielded from traffic noise; therefore, noise levels within this exterior space would be below 65 CNEL and considered compatible with the office land use. The proposed office building would be set back approximately 125 feet from the Balboa Avenue centerline and approximately 110 feet from the Ruffin Road centerline. Therefore, the office building would be exposed to noise levels between 65 and 70 CNEL and would be required to attenuate interior noise levels to 50 CNEL. Standard building materials reduce exterior noise levels by at least 15 dBA within buildings; therefore, the proposed building has the potential to be exposed to noise levels exceeding 50 CNEL.

In addition, the KMCP PEIR identifies a potential land use compatibility impact related to future construction of the Purple Line of the trolley near the project site. As the trolley line is not an existing source of noise at the project site, potential impacts to the project are discussed in Section 5.0, *Cumulative Impacts*.

Level of Significance Prior to Mitigation

Construction noise impacts would be potentially significant for the MHPA but would be less than significant for residential receptors. Operational noise impacts associated with off-site traffic would be less than significant. On-site noise generation and land use compatibility would result in potentially

significant impacts. Mitigation identified in the District's CIP PEIR, as modified for the proposed project (modifications are shown in ~~strikeout~~/underline format), would be implemented, as identified below.

Mitigation Measures

Mitigation measure BIO-2 would address potentially significant construction noise impacts associated with coastal California gnatcatcher nesting.

NOI-1: Prohibit Exterior Construction Activities Outside of the City of San Diego's Permitted Construction Hours. During construction of the project, the District shall require all contractors to limit exterior construction activities, including material or equipment deliveries and collections, to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, with no such work at any time on Sundays or legal holidays. Except for construction personnel specifically working on interior construction tasks, construction personnel shall not be permitted on the job site outside of the permitted exterior construction hours.

NOI-2: Implement General Best Practices for Construction Noise Abatement. During construction of the project, the District shall require all contractors to adhere to the following noise abatement measures:

- All construction equipment and vehicles using internal combustion engines will be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification.
- All mobile or fixed construction equipment used on the project that is regulated for noise output by a local, state, or federal agency will comply with such regulation while in the course of proposed project activity.
- All construction equipment will be properly maintained and serviced.
- All construction equipment will be operated only when necessary and will be switched off when not in use.
- Construction employees will be trained in the proper operation and use of the equipment to avoid careless or improper operation of equipment that could increase noise levels.
- Electrically powered equipment will be used instead of pneumatic or internal combustion powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas will be located as far as practicable from noise-sensitive receptors.
- Construction site speed limits will be established and enforced during the construction period.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only.
- The contractor will provide advance written notification of construction activities to residences around the construction site. Notification will include a brief overview of the proposed

construction activity and its purpose and schedule. It also will include the name and contact information of the project manager or representative responsible for resolving any noise concerns.

NOI-3: Design and Install Mechanical Systems to Comply with Property Line Noise Limits. During the architectural and engineering design phases of the project, ~~and prior to the issuance of any building permits for the school buildings,~~ an acoustical consultant shall be retained by the District to evaluate the mechanical system design and provide recommendations, as necessary, to ensure that exterior noise levels comply with the City's Municipal Code noise limits ~~at nearby noise-sensitive land uses~~ and MHPA noise limits. Such recommendations may include, but are not limited to, the selection of quieter mechanical units, changes in unit locations, changes to rooftop parapet walls, and acoustical louvers or screens.

NOI-4: Exterior-to-Interior Noise Analysis. During the architectural and engineering design phases of the project, an exterior-to-interior analysis shall be performed for office spaces with facades facing Balboa Avenue or Ruffin Road and shall demonstrate that interior noise levels do not exceed 50 CNEL. The information in the analysis shall include wall heights and lengths, room volumes, window and door tables typical for a building plan, as well as information on any other openings in the building shell. With this specific building plan information, the analysis shall determine the predicted interior noise levels for the planned office spaces. If predicted noise levels are found to exceed 50 CNEL, the analysis shall identify architectural materials or techniques that could be included to reduce noise levels to 50 CNEL in office spaces. Standard measures such as window glazing with appropriate STC ratings, as well as walls with appropriate STC ratings, should be considered. Final plans shall demonstrate that interior noise levels do not exceed 50 CNEL for office facades with a line of sight to Balboa Avenue or Ruffin Road.

Level of Significance After Mitigation

With implementation of mitigation measure BIO-2, construction noise impacts to nesting coastal California gnatcatcher would be less than significant. Mitigation measures NOI-1 and NOI-2 would further reduce construction noise at neighboring land uses and impacts would remain less than significant. With implementation of mitigation measures NOI-3 and NOI-4, the project's on-site noise generation and land use noise exposure would comply with the applicable limits and impacts would be less than significant.

4.5.5.2 Vibration

Threshold b:	*Would the project generate excessive groundborne vibration or groundborne noise levels?*

Impact Discussion

Construction Vibration

Construction of the project would involve the use of heavy equipment with the potential to produce perceptible groundborne vibration. Vibration levels from construction equipment attenuate as they radiate from the source and the District's CIP PEIR includes the distances at which the Caltrans thresholds would be exceeded during the use of construction equipment (District 2021). The piece of construction equipment with the greatest vibration potential is a pile driver, which would not be

required for construction of the proposed project. A hydraulic breaker (also known as a hoe ram) is the piece of construction equipment with the greatest vibration potential that would be used at the project site.

The closest building to the project site is the military facility approximately 65 feet west of the project site boundary and is considered a modern industrial/commercial building, which Caltrans states can be exposed to vibration levels of up to 0.5 in/sec PPV from continuous/frequent intermittent sources, such as those that would be required for project construction. The VSLUs nearest the project site are the residences located 1,600 feet to the west and the applicable Caltrans human annoyance threshold for continuous/frequent intermittent sources is 0.04 in/sec PPV in accordance with District standards.

Table 4.10-16 in the District's CIP PEIR states that the use of a hydraulic breaker would exceed the Caltrans criteria for modern industrial/commercial building damage at 13 feet. Since the nearest structure to the project site boundary is located 65 feet away, the use of a hydraulic breaker on the project site would not result in damage to nearby buildings as a result of vibration-generating construction equipment use.

Table 4.10-17 in the District's CIP PEIR states that the use of a hydraulic breaker would exceed the Caltrans criteria for distinctly perceptible human annoyance at 128 feet. Since the nearest VSLU to the project is located 1,600 feet away, the use of a hydraulic breaker on the project site would not result in substantial human annoyance as a result of vibration-generating construction equipment use. Users of the military facility to the west may be able to perceive vibration from construction equipment when it is operating within 128 feet of the structure; however, these users would not be adversely affected by such vibration as this is not considered a VSLU and the majority of construction activities would occur further than 128 feet from this building.

Operational Vibration

No vibration-generating equipment is proposed for installation on the project site. The project would not result in substantial vibration generation during operations. As described further above, the KMCP PEIR identifies potential future construction of the Purple Line of the trolley as a vibration source near the project site and potential impacts to the project are discussed in Section 5.0, *Cumulative Impacts*.

Level of Significance Prior to Mitigation

Noise impacts related to vibration generation during project construction and operation would be less than significant.

Mitigation Measures

No significant noise impacts related to vibration would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to vibration would remain less than significant.

4.5.5.3 Aircraft Noise

Threshold c:	*For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the project expose people residing or working in the project area to excessive noise levels?*

Impact Discussion

A significant impact would occur if the proposed project would be exposed to aircraft noise levels that are incompatible with the proposed land use, as defined by an adopted ALUCP. Aircraft noise is evaluated based on the noise contours developed by the SDCRAA and provided in the ALUCPs. The project site is within the plan areas for the Montgomery Field ALUCP and MCAS Miramar ALUCP. For the project's proposed office land use, the ALUCPs define noise levels of up to 65 CNEL as compatible, between 65 and 75 CNEL as conditionally compatible, and above 75 CNEL as incompatible (SDCRAA 2010; SDCRAA 2011).

The project site is outside of the 60 CNEL noise contours for both the Montgomery-Gibbs Executive and MCAS Miramar airports (SDCRAA 2010; SDCRAA 2011). Therefore, while occasional aircraft noise may be audible at the project site, aircraft noise levels at the project site would be below 60 CNEL, which is within the compatible exterior noise level range for office land uses.

Level of Significance Prior to Mitigation

Noise impacts related to aircraft noise would be less than significant.

Mitigation Measures

No significant noise impacts related to aircraft noise would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to aircraft noise would remain less than significant.

4.6 Transportation

This section describes the existing conditions and regulatory setting for transportation and presents the results of an assessment of potential transportation impacts associated with construction and operation of the proposed project. Information in this section regarding the project's setting related to transportation facilities was provided in the project's LMA, which is provided as Appendix D to the EIR (CR Associates 2024a). This section also provides the results of an assessment of the project's potential impacts related to VMT and the assessment is contained in Appendix E of the EIR (CR Associates 2024b).

The LMA analyzes the proposed project's impacts utilizing the LOS metric. As discussed in this section and in CEQA Guidelines Appendix G, the LOS analysis is provided as a means to consider the project's consistency with programs addressing the circulation system, including the City General Plan standards, and otherwise is provided for informational purposes only. According to PRC Section 21099(b)(2), following certification of CEQA Guidelines Section 15064.3, which occurred in December 2018, "automobile delay, as described solely by [LOS] or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment." Rather, and as provided in CEQA Guidelines Section 15064.3, VMT is now considered the most appropriate measure of transportation impacts. As such, while the results of the LOS analysis in the LMA are provided in this section, the analysis presented below utilizes VMT as the measure to determine project impacts related to transportation facility operations under CEQA.

4.6.1 Existing Conditions

4.6.1.1 Roadways and Access

The proposed project site is located in the central portion of the City, situated between I-15 and SR 163 and at the intersection of Balboa Avenue and Ruffin Road. Access to the project site is currently provided via one full-access driveway on Ruffin Road at the northeast corner of the site, one full-access driveway on Balboa Avenue at the southwest corner of the site, and three right-in, right-out driveways along Balboa Avenue.

The I-15 exit onto Balboa Avenue is approximately 0.3 mile east of the project site. SR 163 exits onto Mercury Street and Kearny Villa Road, which provide access to Balboa Avenue from the west. The KMCP is a major employment center with limited residential development. As such, freeway segments, interchanges, and key roadways experience congestion during the morning and evening peak periods. More detailed descriptions of the roadways adjacent to the project site are provided below.

Balboa Avenue is a 6-lane east-west roadway with a raised median between Ponderosa Avenue and Viewridge Avenue. It currently has a curb-to-curb width of approximately 87 feet west of Ruffin Road, and 130 feet east of Ruffin Road. Under existing conditions, parking on both sides is prohibited and the posted speed limit is 50 mph.

Ruffin Road is a 4-lane north-south roadway with a striped center-left-turn lane and a posted speed limit of 40 mph between Spectrum Center Boulevard and Ridgehaven Center. Parallel parking is allowed on both sides north of Balboa Avenue and the curb-to-curb width is approximately 92 feet. Parking is prohibited on the west side south of Balboa Avenue and the curb-to-curb width is approximately 86 feet.

Level of Service

The LMA analyzed existing conditions at three intersections and along four street segments based on the number of project-related trips that would be added to these intersections and street segments. Table 4.6-1, *Existing Street Segment Operations*, provides the LOS for the studied segments under existing conditions. As shown in Table 4.6-1, the study area street segments operate at acceptable LOS of B or C under existing conditions.

Table 4.6-1
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Roadway Classification	ADT	LOS E Threshold	V/C	LOS
Ruffin Road					
Spectrum Center Boulevard to Balboa Avenue	4-Lane Collector	15,972	30,000	0.532	C
Balboa Avenue to Ridgehaven Court	4-Lane Collector	14,659	30,000	0.489	C
Balboa Avenue					
Kearny Villa Road to Ruffin Road	4-Lane Major Arterial	21,511	40,000	0.538	C
Ruffin Road to Viewridge Avenue	6-Lane Prime Arterial	25,490	60,000	0.425	B

Source: CR Associates 2024a
ADT = average daily trips; LOS = level of service; V/C = volume/capacity

Table 4.6-2, *Existing Intersection* Operations, provides the existing average delay and LOS for the studied intersections. The four additional intersections analyzed in the LMA are at proposed project driveways that currently do not exist and are therefore not included in this description of existing conditions. As shown in Table 4.6-2, the study area intersections operate at an acceptable LOS D or better under existing conditions, except for the Viewridge Avenue/Balboa Avenue intersection, which operates at LOS E during the PM peak hour due to the high number of southbound left and northbound right turning movements.

Table 4.6-2
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Average Delay (seconds)	LOS
Kearny Villa Road and Balboa Avenue	Signal	AM	16.7	B
		PM	23.0	C
Ruffin Road and Balboa Avenue	Signal	AM	35.1	D
		PM	47.6	D
Viewridge Avenue and Balboa Avenue	Signal	AM	17.5	B
		PM	64.3	E

Source: CR Associates 2024a
LOS = level of service

4.6.1.2 Bicycle Facilities

Class II bicycle lanes are provided near the project site along Balboa Avenue west of Ruffin Road and along both sides of Ruffin Road north and south of Balboa Avenue. A 460-foot portion of the bicycle lane along Balboa Avenue is a Class III bicycle lane. Bicycle facilities along Ruffin Road and Balboa Avenue

west of Ruffin Road are planned to be constructed as Class IV cycle tracks under the KMCP, which builds on the City's Bicycle Master Plan and SANDAG's Regional Bike Plan (City 2020). No bicycle facilities are currently provided on Balboa Avenue east of Ruffin Road, but the KMCP plans for a Class II bicycle lane to be constructed, consistent with the planned designation in the City's Bicycle Master Plan (City 2013).

4.6.1.3 Pedestrian Facilities

Existing pedestrian facilities at and adjacent to the proposed project site include sidewalks along Balboa Avenue and Ruffin Road as well as crosswalks at the intersection of the two streets. No pedestrian facilities are available on the eastern side of Ruffin Road north of Balboa Avenue. The pedestrian features along Balboa Avenue and Ruffin Road are planned as Connector routes in the KMCP (City 2020). Connector route types run along roadways with lower pedestrian activity levels, thus requiring more basic treatments such as landscaped buffers between the sidewalk and roadway, and mandatory features like standard sidewalk widths, Americans with Disabilities Act-compliant curb ramps, and marked crosswalks at signalized intersections with advance stop bars.

4.6.1.4 Public Transportation

There are three bus stops at the intersection of Balboa Avenue and Ruffin Road adjacent to the project site. Local bus services are operated by the San Diego Metropolitan Transit System (MTS) and offer connections to the rest of the City and beyond. The bus stops adjacent to the project site are serviced by Bus Route 928, which operates from Fashion Valley to Kearny Mesa and along Ruffin Road in the project vicinity. Route 928 operates with approximately 30-minute headways on weekdays and approximately one-hour headways on weekends with more limited hours of operation. Bus Route 60 provides service from the Euclid Transit Center to University Town Center and operates along Balboa Avenue in the project vicinity. Bus Route 60 operates with a frequency of approximately 15 to 30-minute headways on weekdays and does not operate on weekends.

4.6.2 Regulatory Setting

4.6.2.1 State

California Department of Transportation

Caltrans is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans has established standards for street traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects. In addition, Caltrans must review proposals to signalize freeway ramp interchanges through their Intersection Control Evaluation process (Caltrans Traffic Operations Policy Directive #13-01).

Assembly Bill 1358 – California Complete Streets Act of 2008

The California Complete Streets Act of 2008 (AB 1358) requires circulation elements as of January 1, 2011, to accommodate the transportation system from a multi-modal perspective, including public transit, walking, and biking.

Senate Bill 743

SB 743, which was codified in PRC Section 21099 on September 27, 2013, required changes to the guidelines implementing CEQA regarding the analysis of transportation impacts. Specifically, SB 743 required the California OPR to amend the CEQA Guidelines to provide an alternative to the traditional traffic metric of LOS for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must promote the reduction of GHG emissions, the development of multi-modal transportation networks, and a diversity of land uses. To that end, OPR published a technical advisory regarding transportation impact analysis in December 2018 (OPR 2018), and the California Natural Resources Agency has certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, generally are no longer the basis for determining a significant environmental effect under CEQA. Local agencies were directed to update their transportation procedures by July 1, 2020 to replace LOS with VMT.

CEQA Guidelines Section 15064.3

Section 15064.3 of the CEQA Guidelines was added as part of the comprehensive updates adopted by the California Resources Agency in December 2018 in response to SB 743. Section 15064.3 of the CEQA Guidelines describes specific considerations for evaluating a project's transportation impacts and identifies VMT as the most appropriate metric for determining transportation impacts. Except for roadway capacity projects, Section 15064.3 stipulates that a project's effect on automobile delay does not constitute a significant environmental impact under CEQA.

4.6.2.2 Local

San Diego Forward: The Regional Plan

As described further in Section 4.4.2.3 of this EIR, the SANDAG Regional Plan is the long-range transportation plan for the County. Transportation patterns throughout the County are guided by the Regional Plan planning framework and implementation actions, which aim implement smart growth principles. The Regional Plan encourages expansion of the transportation network and available transit options, giving residents more affordable and convenient access to their basic needs. The 2021 Regional Plan includes "5 Big Moves" that outline the vision for a multi-modal, safe, and reliable transportation network to be available throughout the County.

SANDAG Regional Bike Plan

SANDAG's Riding to 2050, San Diego Regional Bike Plan supports implementation of the Regional Plan and provides a regional strategy to make bicycling a useful form of transportation for everyday travel in the County (SANDAG 2010). Implementation of the Plan will help the region meet its goals to reduce

GHG emissions and improve mobility. Goals of the Regional Bike Plan include increasing levels of bicycling, improving bicycling safety, encouraging complete streets, supporting GHG emissions reductions, and increasing community support for bicycling.

City of San Diego General Plan Mobility Element

The Mobility Element (City 2015c) of the City's General Plan includes policies regarding traffic flow and transportation facility design. The purpose of the Mobility Element is "to improve mobility through development of a balanced, multi-modal transportation network." The main goals of the Mobility Element pertain to walkable communities, transit first, street and freeway systems, intelligent transportation systems, transportation demand management, bicycling, parking management, airports, passenger rail, goods movement/freight, and regional transportation coordination and financing. Based on direction in the Mobility Element, the City developed the Transportation Study Manual to provide project-level review guidelines and ensure project consistency with the City-wide level of circulation planning in the Mobility Element. According to the Transportation Study Manual, intersection improvements should be made when, within one-half mile of a major transit stop, a project's traffic generation causes an intersection to operate at LOS F or contributes trips to a signal already operating at LOS F. The Transportation Study Manual also states roadways segment improvements identified in a Community Plan should be implemented if a project adds 50 percent or more of the planned capacity of the segment. Otherwise, a project may contribute fair-share fees to such improvements.

City of San Diego Bicycle Master Plan

The City's Bicycle Master Plan (City 2013) provides a framework for improving bicycling to make it a viable travel choice via safe travel networks and improve environmental quality. The 2013 update to the City's Bicycle Master Plan presents a renewed vision closely aligned with the City's General Plan and includes a bicycle network with related bicycle projects, policies, and programs. The recommended bicycle network includes the addition of 595 miles of bicycle facilities for a future network totaling almost 1,090 miles. The types of projects recommended in the Bicycle Master Plan include: bikeways (Class I – Bicycle Path, Class II – Bicycle Lane, Class III – Bicycle Route, Class IV – Cycle Tracks, and Bicycle Boulevards); bicycle parking such as bike racks and on-street bike corrals; end-of-trip facilities; maintenance activities such as road and sign repair; bicycle signal detection installation, signage, and striping for warnings and wayfinding; and multi-modal connection improvements such as providing secure bicycle parking at transit stops.

San Diego Unified School District Traffic Control Specifications

Part 3 of Section 01 50 00, *Temporary Facilities and Controls*, of the District's construction specifications define procedures for temporary traffic controls during construction activities at District facilities. Specifically, the District requires contractors to comply with the requirements of the authorities with jurisdiction over the roadways, protecting existing site improvements, including curbs, pavements, and utilities, and maintaining access for fire-fighting equipment and access to fire hydrants.

4.6.3 Thresholds of Significance

The following significance criteria are based on CEQA Guidelines, Appendix G, and provide the basis for determining the significance of impacts associated with transportation resulting from implementation of

the proposed project. The project would result in a significant impact related to transportation if it would result in any of the following:

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;

b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d. Result in inadequate emergency access?

4.6.4 Methodology and Assumptions

Consistent with the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018) guidance related to retail land uses, the District's CIP PEIR considered a significant impact related to VMT would occur if a project would increase VMT. The guidance regarding retail land uses is considered applicable to school land uses due to their similar VMT characteristics, as both land uses typically redistribute existing vehicle trips rather than generating additional trips or VMT (District 2021). Although the City does not serve as the lead agency for the project, the District has historically relied on the City's impact analysis methodology related to transportation impacts. The VMT assessment prepared for the project relies on the *City of San Diego Transportation Study Manual* (CR Associates 2024b).

Discussion of the LOS-based analysis in the LMA (CR Associates 2024a) is provided below related to the project's consistency with the City's circulation plans for informational purposes; however, changes in LOS would not be considered a significant impact under CEQA.

4.6.5 Impact Analysis

4.6.5.1 Transportation Plans

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

Impact Discussion

The generation of construction vehicular traffic could result in temporary vehicle delays; however, such delays would be brief and infrequent and are not anticipated to substantially alter traffic circulation in the project vicinity. Staging for project construction would occur within the project site and is not expected to impede vehicle circulation in the area. Temporary changes to the circulation system could occur during construction of the project as connections to utilities in adjacent roadways and pedestrian improvements are constructed. Specifically, these are anticipated to include sidewalk and bicycle lane closures, vehicle lane closures, and temporary relocation of the bus stops along the project frontages to alternative locations around the Ruffin Road/Balboa Avenue intersection. Work within rights-of-way requiring temporary transportation facility closures would be subject to City approval of a traffic control plan and traffic control permit. Temporary traffic control measures included in the traffic control plan

would be required on construction document specifications, including placing temporary signage and advanced detour notifications, providing for safe pedestrian and bicycle passage or detour, and protecting existing site improvements to remain. Therefore, construction of the project would not conflict with policies related to circulation for transit, roadway, bicycle, or pedestrian facilities.

Once construction is completed, pedestrian facilities planned for Balboa Avenue and Ruffin Road would be available for use by the community and project driveways would provide access to and from adjacent roadways. The project would result in increased use of transit, roadway, bicycle, and pedestrian facilities in the vicinity of the project as employees commute to and from the proposed office. This increase in use of active and public transportation facilities would not result in changes to the circulation system that would conflict with applicable plans or policies. Rather, the use of the project site as the main District office would align with KMCP and regional goals in the 2021 Regional Plan to focus employment uses where multi-modal transit options are available. As described in Section 4.6.1, the project site is surrounded by roadway, bicycle, pedestrian, and transit facilities, and is considered a mobility hub. Changes to roadway facilities as a result of project-generated trips are discussed below based on LOS. Therefore, operation of the project would be consistent with transportation plans and policies.

Level of Service Analysis

The LMA considered the effects of project-generated trips and trip generation from nearby projects on the existing circulation system at seven intersections and four roadway segments described above. Table 4.6-3, *Street Segment LOS Analysis*, provides the opening year LOS along these roadway segments with and without the addition of project-generated traffic.

Table 4.6-3
STREET SEGMENT LOS ANALYSIS

Street Segment	LOS E Threshold	Opening Year No Project			Opening Year with Project			Project-Generated V/C Change
		ADT	V/C	LOS	ADT	V/C	LOS	
Ruffin Road								
Spectrum Center Boulevard to Balboa Avenue	30,000	16,080	0.536	C	16,461	0.549	C	0.013
Balboa Avenue to Ridgehaven Court	30,000	14,830	0.494	C	15,465	0.516	C	0.022
Balboa Avenue								
Kearny Villa Road to Ruffin Road	40,000	21,710	0.543	C	22,472	0.562	C	0.019
Ruffin Road to Viewridge Avenue	60,00	25,690	0.428	B	26,452	0.441	B	0.013

Source: CR Associates 2024a
LOS = level of service; ADT = average daily trips; V/C = volume/capacity

As shown in Table 4.6-3, the studied roadway segments are projected to operate at a LOS C or better with the addition of project traffic and no exceedance of the planned roadway capacity would occur.

Table 4.6-4, *Intersection LOS Analysis*, provides the opening year LOS at the studied intersections with and without the addition of project-generated traffic. The intersections with project driveways would

either not exist or not be used without construction of the project; therefore, no analysis of these intersections in the without project condition is provided.

Table 4.6-4
INTERSECTION LOS ANALYSIS

Intersection	Control Type	Peak Hour	Opening Year No Project		Opening Year with Project		Project-Generated Change in Delay (seconds)
			Average Delay (seconds)	LOS	Average Delay (seconds)	LOS	
Kearny Villa Road and Balboa Avenue	Signal	AM	16.9	B	17.4	B	0.5
		PM	23.5	C	25.5	C	2.0
Ruffin Road and Balboa Avenue	Signal	AM	35.5	D	36.9	D	1.4
		PM	48.9	D	60.3	E	11.4
Viewridge Avenue and Balboa Avenue	Signal	AM	17.4	B	17.1	B	-0.3
		PM	63.7	E	62.0	E	-1.7
Ruffin Road and Northern Project Driveway	SSSC	AM	--	--	11.2	B	11.2
		PM	--	--	30.4	D	30.4
Ruffin Road and Southern Project Driveway	SSSC	AM	--	--	11.2	B	11.2
		PM	--	--	34.4	D	34.4
Western Project Driveway and Balboa Avenue	SSSC	AM	--	--	14.8	B	14.8
		PM	--	--	11.2	B	11.2
Eastern Project Driveway and Balboa Avenue	SSSC	AM	--	--	16.8	C	16.8
		PM	--	--	12.1	B	12.1

Source: CR Associates 2024a
LOS = level of service; SSSC = side-street stop controlled

As shown in Table 4.6-4, two study intersections would not operate at LOS D or better during the AM and/or PM peak hours with construction of the project. The intersection of Ruffin Road and Balboa Avenue would be degraded from LOS D to LOS E during the PM peak hour with implementation of the Project. According to the LMA, this is consistent with the anticipated LOS at this intersection in the KMCP PEIR analysis, which emphasizes active transportation and does not recommend further enhancements to the intersection. The District could collaborate with the City to adjust signal timing to reflect changes in traffic flow but would not construct intersection improvements. While the intersection of Viewridge Avenue and Balboa Avenue would continue operating at LOS E with project implementation, the project would improve intersection delays slightly by contributing trips to an intersection approach with remaining capacity (eastbound and westbound through movements). Therefore, although there are intersections in the project vicinity that would operate at LOS E with project implementation, no intersection improvements would be required. The project would not generate substantial delays and the project would not conflict with planned circulation operations.

Level of Significance Prior to Mitigation

Transportation impacts related to consistency with transportation plans and policy resulting from project implementation would be less than significant.

Mitigation Measures

No significant transportation impacts related to consistency with transportation plans would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to consistency with transportation plans would remain less than significant.

4.6.5.2 Vehicle Miles Traveled

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

Impact Discussion

The VMT assessment prepared for the project considered whether the project would result in increased regional VMT and was conducted in accordance with the City's Transportation Study Manual. This manual contains screening criteria that, if applicable to a project, indicate that the project would have a less than significant impact related to VMT due to project characteristics and/or location. One of these screening criteria addresses locally serving public facilities, such as the proposed project. The screening criteria reads:

> Locally Serving Public Facility: The project is a locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is a passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.

The project is a government office and is classified as serving the local community. Therefore, according to the City's Transportation Study Manual, the project is not expected to contribute to an increase in regional VMT.

To further support this conclusion, the VMT assessment conducted an analysis using mobility data that synthesizes travel patterns from cell phone and GPS data. The analysis revealed that employees currently commute to the existing District office on Normal Street in the University Heights neighborhood from various communities and cities throughout the County. The most popular origin points for District employees are the Mira Mesa community (north of the existing District office and project site) and the cities of National City and Chula Vista (to the south of the existing District office and project site). With the relocation of employees to the office proposed at the project site, employees from Mira Mesa would have a shorter commuting distance. Employees from the southern parts of the County would be diverted from their current route, which requires traveling northbound along I-805 and then west on I-8 or El Cajon Boulevard. With the proposed relocation to the project site, these employees would simply travel along I-805 to the new site and the change in travel distance would be negligible. The project would redistribute existing trips and VMT without causing an increase in regional VMT.

Level of Significance Prior to Mitigation

Impacts related to VMT increases with implementation of the project would be less than significant.

Mitigation Measures

No significant VMT impact would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to VMT would remain less than significant.

4.6.5.3 Hazardous Design Features

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

Impact Discussion

As described under Threshold a, construction of the project would require temporary vehicle and bicycle lane closures, sidewalk closures, and relocation of bus stops to provide utility connections and pedestrian improvements. The work within rights-of-way would be subject to City approval of a traffic control plan and traffic control permit, which would ensure construction document specifications include measures for appropriate signing, flagging, and directing of traffic. The implementation of these measures would ensure construction activities occurring in the roadway do not result in hazards to users of the circulation system. In addition, the District would coordinate with MTS to relocate the existing bus stops adjacent to the project site to alternative locations near the Ruffin Road/Balboa Avenue intersection.

Access to the project site would be provided via two driveways on Balboa Avenue and two driveways on Ruffin Road. These site access points and on-site circulation elements have been designed in accordance with applicable City standards related to roadway safety and design. In addition, the LMA included a queue analysis for all project driveways and concluded the 95th percentile queue would not extend beyond the available turning storage during either the AM or PM peak hour (CR Associates 2024a). While no hazard would be created, the LMA states vehicles exiting left onto Balboa Avenue from the northern project intersection are likely to experience high delays during peak hours and therefore recommends posting internal signage to route these vehicles to the driveways along Ruffin Road. No geometric design features or incompatible uses would be constructed such that the project would substantially increase hazards due to the project.

Level of Significance Prior to Mitigation

Transportation impacts related to hazardous design features resulting from project implementation would be less than significant.

Mitigation Measures

No significant transportation impacts related to hazardous design features would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to hazardous design features would remain less than significant.

4.6.5.4 Emergency Access

Threshold d: Would the project result in inadequate emergency access?

Impact Discussion

During the construction period, roadway users, including emergency vehicles, may experience temporary delays on roadways surrounding the project site as a result of deliveries and the hauling of construction materials. However, such delays would be infrequent, brief, and temporary. Construction staging would occur within the boundaries of the project site. Temporary lane closures along Balboa Avenue and Ruffin Road necessary to construct the proposed sidewalk alterations and utility connections would be subject to City approval of a traffic control plan and traffic control permit to maintain roadway safety and accessibility for emergency vehicles. Therefore, emergency access, while potentially altered at times, would remain available throughout the project construction period.

The project proposes alterations to the existing configuration of driveways from Balboa Avenue and Ruffin Road onto the project site. Under the proposed project, the site would include two driveways along Balboa Avenue and two driveways along Ruffin Road. On-site circulation would be available along project site boundaries, with drive aisles along the north and west sides of the site providing access to the parking garage and areas on the south and east sides of the site providing access through the surface parking areas. On- site circulation would be designed to provide adequate emergency access and accommodate emergency vehicles, consistent with the City standards for fire truck access.

Level of Significance Prior to Mitigation

Transportation impacts related to emergency access resulting from project implementation would be less than significant.

Mitigation Measures

No significant transportation impacts related to emergency access would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. Impacts related to emergency access would remain less than significant.

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5.0 CUMULATIVE IMPACTS

Cumulative impacts, as distinguished from project-level impacts analyzed in Chapter 4, Environmental Analysis, are impacts on the physical environment that result from the incremental effects of the proposed project in combination with other past, present, and reasonably foreseeable future projects. The intent of this cumulative impacts discussion, as required by CEQA Guidelines Section 15130, is to account for impacts that may not be significant when considering the project on its own, but that may be part of a larger regional trend or that may combine with similar impacts of other projects and be significant when considered together.

5.1 Methodology and Scope of Analysis

According to CEQA Guidelines Section 15130(b), the discussion of cumulative effects "… need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." The evaluation of cumulative impacts is to be based on either:

- The List Method, which includes a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts, including if necessary, those outside the control of the CEQA lead agency; or

- The Plan Method, which uses the projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. This may include projections contained in an adopted or certified prior environmental document for such a plan.

The cumulative impacts assessment for the project presented in this chapter utilizes the Plan Method, based on the KMCP PEIR. Pursuant to CEQA Guidelines Section 15130(d), cumulative impact discussions may rely on previously approved land use documents, including general plans, specific plans, plans for the reduction of GHG emissions, and local coastal plans. Such plans may be incorporated by reference and no further cumulative impact analysis is required when a project is consistent with such plans and the lead agency determines that the regional or area-wide cumulative impacts of the project have already been adequately addressed in a certified EIR for that plan. CEQA Guidelines Section 15130(e) further states that "If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j)."

As such, the cumulative impacts assessment for the proposed project primarily relies on the cumulative impact determinations in the KMCP PEIR, as the KMCP is the applicable land use plan for the project area. The following issues were identified as cumulatively significant in the KMCP PEIR: air quality (consistency with air quality plans and air quality standards); historical, archaeological, and tribal cultural resources; noise (ambient noise increases, noise-land use compatibility, airport noise, and vibration); public services and facilities; public utilities (utilities and solid waste); transportation (VMT for retail land uses); and visual effects and neighborhood character (visual character and quality). Consistent with CEQA Guidelines Section 15130(e), where the significance of cumulative impacts was previously identified for in the KMCP PEIR, and the proposed project is consistent with the KMCP, those impacts do not need to be analyzed further. The proposed project is consistent with the land use assumptions for

the project site in the KMCP and evaluated in the KMCP PEIR, and would add incremental effects to several of the issues identified as having cumulatively considerable impacts upon buildout of the KMCP, as anticipated in the KMCP PEIR. While the KMCP PEIR identified cumulatively considerable impacts for some environmental issues and topics dismissed in Chapter 6, Effects Found Not to be Significant, these issues (cultural resources, public services and facilities, and public utilities) are not carried forward into the project's cumulative analysis because it was determined during preparation of the IS that they would result in no impacts or less than significant impacts on the environment and are expected not to result in a considerable contribution to the significant cumulative impacts identified in the KMCP PEIR for these issues. Based on the noted considerations, the following issue areas identified as having cumulatively significant and unavoidable impacts in the KMCP PEIR are assessed below: Aesthetics, Air Quality, Noise, and Transportation.

Additionally, the issue areas of Biological Resources and Greenhouse Gas Emissions are addressed in the project's cumulative analysis because project implementation would result in potentially significant impacts related to these issues, as identified in Section 4.3, *Biological Resources*, and Section 4.4, *Greenhouse Gas Emissions,* of this EIR.

A cumulative impacts analysis also establishes a geographic scope in which cumulative conditions will be considered, known as the cumulative study area. The cumulative study area depends on the environmental topic under evaluation and can include areas within a specific distance from the project site or a larger geographic area, such as an air basin or planning area. As the following discussion largely relies on the cumulative impact analysis contained in the KMCP PEIR, the KMCP area is the primary cumulative study area addressed herein, though refinements to this cumulative study area are described further where necessary for individual environmental topics evaluated in the following discussions of cumulative impacts.

5.2 Cumulative Impact Analysis

The following discussion evaluates the potential for the proposed project to contribute to a cumulative adverse impact on the environment. If it is determined that the proposed project's contribution to the cumulative effect is considerable, a cumulatively significant impact is assessed, and mitigation is identified, if feasible.

5.2.1 Aesthetics

Impact Analysis

The KMCP PEIR did not identify significant or cumulatively considerable impacts associated with scenic views and vistas or scenic highways because the KMCP area does not have prominent view corridors, designated scenic vistas, iconic visual landmarks, or scenic highways. Impacts related to landmark trees, landform alterations, and light and glare were also not considered cumulatively considerable for buildout of the KMCP given the existing regulatory framework related to these issues. Similarly, and as described further in Section 4.1, *Aesthetics*, the project would have less than significant impacts to aesthetic resources and would comply with applicable policies regulating aesthetic resources surrounding the project site. Thus, the project would not result in significant or cumulatively considerable impacts related to scenic vistas, scenic resources, or light and glare.

Buildout of the KMCP was anticipated to result in substantial changes to neighborhood character as a result of the aggregate shift of the KMCP area from a predominantly lower density, commercial and industrial employment center to also include higher density, mixed-use urban village and employment hub areas. Changes in visual effects and neighborhood character resulting from individual development projects under the KMCP were anticipated to contribute incrementally to cumulative impacts with regard to aesthetics. The overall intensification of the KMCP area is consistent with the City's General Plan City of Villages Strategy, wherein existing urbanized communities would intensify as they are built out to varying degrees, dependent on the respective community plan.

As identified in Section 4.1, the project would result in less than significant impacts to visual character and quality with implementation of mitigation measure AES-1 to provide screening during construction. The project would comply with applicable zoning regulations and the proposed office building would remain consistent with the form of the existing and surrounding buildings. The proposed parking structure would be five levels, which would be a departure from the existing overall development pattern in the project area but would not introduce a new land use or new type of building form that does not currently exist in the project area. The project would result in a moderate level of change to the existing visual condition from public viewpoints and would be visually compatible with surrounding development. Proposed landscaping and architectural design elements would provide an aesthetic improvement based on the added visual interest and increased visual unity, vividness, and intactness of the project site. While the impacts at the project level would be less than significant, the project would contribute to the overall intensification of uses within the KMCP area and the progressive shift from a primarily lower density, commercial and industrial employment center to higher density, mixed-use urban village and employment hub areas, resulting in a significant cumulative impact that is also cumulatively considerable.

Level of Significance Prior to Mitigation

The project would not result in significant cumulative aesthetics impacts related to scenic vistas, scenic resources, and light and glare. The project however would result in a significant cumulative impact related to visual character and quality given the intensification of the project site, and the project's contribution would be cumulatively considerable.

Mitigation Measures

There are no feasible mitigation measures to reduce significant cumulative impacts to visual character and quality to below a level of significance.

Level of Significance After Mitigation

No feasible mitigation is identified. Cumulative impacts to visual character and quality would remain significant and cumulatively considerable, resulting in a significant and unavoidable cumulative impact.

5.2.2 Air Quality

Impact Analysis

The cumulative study area for regional air quality analysis is the SDAB, which is designated as a nonattainment area for ozone, PM_{10}, and $PM_{2.5}$ under state standards and a nonattainment area for

ozone under federal standards. The KMCP PEIR identified significant and cumulatively considerable air quality impacts for buildout of the KMCP, as growth proposed under the KMCP would exceed projections contained in the applicable air quality plans and future development would increase projected emissions that could contribute to existing violations of air quality standards and delay attainment of air quality standards.

The RAQS and Attainment Plan are the most appropriate documents for evaluating the proposed project's cumulative effects because the RAQS and Attainment Plan evaluated air quality emissions for the whole of the SDAB using a future development scenario. As discussed further in Section 4.2.5.1, these plans have been updated since the KMCP PEIR was certified and the project itself would be consistent with the applicable air quality plans. The project also would not exceed the project-level criteria pollutant thresholds established for the SDAB, including those designated as nonattainment areas (refer to Section 4.2.5.2). Therefore, while the proposed project would generate emissions during construction and operation, the proposed project's contribution to air quality emissions would not be cumulatively considerable.

Level of Significance Prior to Mitigation

The proposed project's contribution to cumulative air quality impacts associated with construction and operation would not be cumulatively considerable. Cumulative air quality impacts would be less than significant.

Mitigation Measures

No significant cumulative air quality impacts would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. The proposed project's contribution to cumulative air quality impacts would not be cumulatively considerable. Cumulative air quality impacts would be less than significant.

5.2.3 Biological Resources

Impact Analysis

The KMCP EIR concluded that cumulative impacts to biological resources would be less than significant with buildout of the KMCP. While individual development projects, such as the proposed project, have the potential to contribute to incremental biological resource impacts, the KMCP PEIR concluded that compliance with KMCP policies, the MSCP SAP, VPHCP, ESL Regulations, and the Biology Guidelines would ensure that cumulative impacts from future development would be less than significant.

Consistent with the conclusion of the KMCP PEIR, the project would comply with the existing regulatory framework related to biological resources. Potential impacts to biological resources resulting from the project would be mitigated to a less than significant level in compliance with the applicable regulations. The project would not result in the permanent loss of sensitive species, their habitats, or other sensitive biological resources with implementation of mitigation measures BIO-1 through BIO-4, as identified in

Section 4.3, *Biological Resources*, of this EIR. Therefore, no cumulative loss of biological resources would occur as a result of project implementation in combination with KMCP buildout.

Level of Significance Prior to Mitigation

The proposed project's contribution to cumulative impacts to biological resources would not be cumulatively considerable. Cumulative biological resources impacts would be less than significant.

Mitigation Measures

No significant cumulative impacts to biological resources would result from the implementation of the proposed project. Therefore, no mitigation measures to address cumulative impacts to biological resources are required.

Level of Significance After Mitigation

No mitigation is required. The proposed project's contribution to biological resources impacts would not be cumulatively considerable. Cumulative impacts would be less than significant.

5.2.4 Greenhouse Gas Emissions

Impact Analysis

The geographic scope for cumulative GHG emissions impacts is global because emissions contribute to global climate change. By nature, GHG impacts are cumulative as they are the result of combined worldwide emissions over many years, and additional development would incrementally contribute to this cumulative impact. Cumulatively, there exists a significant impact related to GHG emissions at the global level.

The KMCP PEIR concluded impacts to GHG emissions as a result of KMCP buildout would not be cumulatively considerable because the project would be consistent with the goals and strategy of the City's CAP and City of Villages strategy, which are intended to reduce citywide GHG emissions to achieve regional and statewide goals related to GHG emission reductions.

The analysis of project GHG emission impacts in Section 4.4, *Greenhouse Gas Emissions*, of this EIR also serves as the project's cumulative impact analysis. As discussed therein, the proposed project would contribute GHG emissions to the cumulative condition during construction and operations that would exceed the District's efficiency target. However, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. City policies, plans, and codes are evaluated by the City as needed to ensure that CAP GHG emissions reduction targets are met. If implementation of the proposed project, cumulatively with buildout of the KMCP and other City planning efforts, would be inconsistent with the CAP or other plans/policies for the reduction of GHGs, the City could amend those land use plans to include more aggressive strategies for GHG reduction and to ensure consistency with the adopted CAP. The project would contribute to the City of Villages strategy to place employment land uses within close proximity to transit, thereby reducing mobile source GHG emissions. However, as a result of exceeding the District's screening threshold, the project is considered to have a cumulatively considerable contribution to impacts related to GHG emissions.

Level of Significance Prior to Mitigation

The project would generate GHG emissions that would contribute to significant cumulative impacts on a global scale and the project's contribution would be cumulatively considerable. Cumulative impacts related to GHG emissions would be significant and unavoidable.

Mitigation Measures

Mitigation measures GHG-1 and GHG-2, as identified in Section 4.4 of this EIR would reduce the project's contribution to significant cumulative impacts related to GHG emissions. However, these mitigation measures would not reduce the project's contribution below a level of significance given the lack of jurisdictional control over mobile source GHG emissions.

Level of Significance After Mitigation

The proposed project's contribution to GHG emissions impacts would be cumulatively considerable. Cumulative impacts would be significant and unavoidable.

5.2.5 Noise

Impact Analysis

Noise impacts are limited to the area directly surrounding the project site, as noise attenuates with distance and only has the potential to combine with other noise sources in the immediate vicinity. As such, the cumulative study area for cumulative noise impacts includes the area within 1,500 feet of the project site.

The analysis of noise impacts in the KMCP PEIR is cumulative in nature because the analysis considers noise and vibration impacts associated with buildout of the entire KMCP area, including cumulative traffic associated with buildout of neighboring communities. The KMCP PEIR concluded localized noise impacts related to stationary sources would not be cumulatively considerable; however, buildout of the KMCP area could contribute to cumulatively considerable impacts related to ambient noise increases, land use compatibility (vehicular traffic and trolley noise), airport noise, construction noise, and vibration.

As described in Section 4.5, *Noise*, of this EIR, the project would result in noise exceeding applicable thresholds related to construction and operation (land use compatibility). Mitigation measures NOI-1 through NOI-4 would reduce project impacts to below a level of significance, However, consistent with the KMCP PEIR, the project's contribution to impacts on ambient noise increases would be cumulatively considerable.

As no operational sources of vibration are proposed and the project would not alter airport operations or be within an airport noise contour, the project would not contribute to the cumulative impacts of operational vibration or airport noise in the KMCP area.

At buildout of the KMCP, the installation of the trolley was anticipated to result in significant impacts related to the exposure of sensitive receptors to noise level conflicting with land use compatibility criteria and vibration. At a distance of 50 feet along Ruffin Road, the KMCP PEIR states noise levels from

65 CNEL to over 75 CNEL could be generated by the trolley but would be exceeded by vehicular noise generation. As described in Section 4.5.5, the project could be exposed to vehicular noise that would generate interior noise levels exceeding 50 CNEL and mitigation measure NOI-4 would be required to provide the appropriate attenuation features. This mitigation measure would also reduce potential effects on the project from trolley-generated noise; therefore, reducing potential impacts of the trolley under cumulative conditions below a level of significance. As it relates to trolley vibration, the proposed project is a Category 3 land use, which is a land use primarily used during daytime hours, and the applicable screening distance for significant vibration impacts is 120 feet. The proposed building could be exposed to substantial vibration if the trolley is constructed as planned within Ruffin Road and is within 120 feet of the building. Therefore, cumulative impacts related to vibration exposure would be significant.

While the project's construction noise effects would not exceed the SDMC noise limit, applicable vibration criteria, or occur outside of the allowable hours, construction of the project in combination with nearby construction could result in cumulatively considerable increases in ambient noise and vibration levels. Similarly, the project would not result in significant increases in traffic noise levels but would contribute to the overall vehicle trip increases within the KMCP area, which was identified in the KMCP PEIR as resulting in cumulatively considerable increases in ambient noise levels. Therefore, the project would result in significant cumulative impacts to construction noise, increases in ambient noise levels, and vibration exposure.

Level of Significance Prior to Mitigation

The project's contribution to cumulative noise impacts related to noise generation and vibration would be cumulatively considerable. Cumulative noise impacts would be significant.

Mitigation Measures

Mitigation measures NOI-1 through NOI-4, as identified in Section 4.5, would address significant cumulative noise impacts related to noise generation. There is no feasible mitigation to reduce cumulative impacts related to vibration exposure to below a level of significance.

Level of Significance After Mitigation

Implementation of mitigation measures NOI-1 through NOI-4 would reduce the project's contribution to cumulative noise impacts associated with construction noise, on-site stationary source noise and noise - land use compatibility to a level less than significant if construction activities for related projects within 1,500 feet of project sites within the proposed project were to overlap with proposed project construction or operation. The project's contribution to these noise impacts would not be cumulatively considerable. However, cumulative noise impacts related to vibration exposure would be cumulatively considerable because no feasible mitigation is identified, resulting in a significant and unavoidable cumulative impact.

5.2.6 Transportation

Impact Analysis

The study area for cumulative transportation impacts includes the surrounding transportation network that was evaluated in the project-specific LMA (CR Associates 2024a) that is included as EIR Appendix D.

The KMCP PEIR identified a significant cumulative transportation impact related to VMT for retail land uses given the significant and unavoidable impact identified for this issue area as a result of cumulative traffic increases with KMCP buildout. Cumulative impacts associated with existing plans and policies, hazardous design features, and VMT for residential and employment uses were considered less than significant.

The project does not propose retail land uses but was assessed in accordance with the City's methodology for potential increases in regional VMT. As identified in Section 4.6, *Transportation*, the proposed project would not result in an increase in regional VMT and would not contribute to the cumulatively considerable impact of KMCP buildout on retail VMT (CR Associates 2024b).

Consistent with the conclusions of the KMCP PEIR and as described further in Section 4.6, *Transportation*, the project would be subject to existing transportation plans and design criteria to minimize hazardous design features. In combination with planned development in the project vicinity, the project would not result in roadway changes conflicting with planned street segment or intersection operations. Therefore, the project would not have significant cumulative impacts related to existing plans and policies, hazardous design features, or emergency access.

Level of Significance Prior to Mitigation

The proposed project's contribution to cumulative transportation impacts would not be cumulatively considerable. Cumulative transportation impacts would be less than significant.

Mitigation Measures

No significant cumulative transportation impacts would result from the implementation of the proposed project. Therefore, no mitigation measures are required.

Level of Significance After Mitigation

No mitigation is required. The proposed project's contribution to cumulative transportation impacts would not be cumulatively considerable. Cumulative transportation impacts would be less than significant.

6.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires that an EIR contain a brief statement disclosing the reasons why various possible significant effects of a project were found not to be significant and therefore were not discussed in detail in the EIR. As a result of the environmental scoping process, the impacts associated with the following environmental issue areas were found to not be significant as a result of the proposed project: Agriculture and Forestry Resources; Cultural Resources; Energy; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Population and Housing; Public Services; Recreation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire. A brief explanation indicating the reasons that the effects on these resources would not be significant is provided under each subheading below. The IS prepared during the environmental scoping process is also provided as Appendix A, *CEQA Consistency Analysis.*

6.1 Agriculture and Forestry Resources

The project site is developed with non-agricultural uses and mapped as Urban and Built-Up Land (California Department of Conservation 2018), which do not contain areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is also not zoned for agricultural use or under a Williamson Act contract. The Williamson Act applies to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland or at least 40 acres of land not designated as Prime Farmland. The purpose of the act is to preserve agriculture and open space lands by discouraging premature and unnecessary conversion to urban uses. The project site is zoned as Light Industrial (IL-2-1) and does not allow for agricultural land uses. Further, there are no Williamson Act agricultural preserves within the project area. Therefore, the project would not convert Farmland, conflict with existing zoning for agricultural use, or conflict with a Williamson Act contract. No impact would occur.

The project site is developed with an office building and does not contain forestlands, timberlands, or timberland zoned Timberland Production (City 2020). Moreover, there is no land zoned as forest land or timberland that exists within the project site or within its vicinity. Therefore, the project would not conflict with existing zoning for or cause a rezoning of forest land, timberland, or timberland zoned Timberland Production. No impact would occur.

6.2 Cultural Resources

6.2.1 Historical Resources

The KMCP PEIR included an assessment of built environment resources in the KMCP area with the potential to qualify as eligible historic resources (Appendix G to the KMCP PEIR; City 2020). The existing building on the project site is not one of the 21 potential individual historic resources within the KMCP area identified in the PEIR as being eligible for the San Diego Register, California Register of Historic Resources, or National Register of Historic Places. As the project would not alter a historic resource, the project would have no impact on the significance of historical resources.

6.2.2 Archaeological Resources

The project site is mapped as having low cultural sensitivity in KMCP PEIR Figure 5.5.1 (City 2020) and there are no recorded archaeological resources within the project site. Prior development on the project site, the limited depth of excavation currently proposed, and the low cultural sensitivity of the site indicate that the project would not result in adverse effects to archaeological resources. Impacts would be less than significant.

6.2.3 Human Remains

No religious or sacred sites or human remains are known to occur beneath the project site. If unanticipated human remains are uncovered during project construction, compliance with California H&SC Section 7052 procedures related to such finds would be required. Therefore, impacts to human remains would be less than significant.

6.3 Energy

6.3.1 Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources

The project would not require unusual construction practices that would result in wasteful, inefficient, or unnecessary consumption during construction. The project is consistent with its designated land use and no changes to VMT or fueling requirements are anticipated beyond those assumed to occur in the KMCP area. The proposed building would be constructed to meet current CALGreen and California Energy Code standards for energy efficiency. Therefore, project operation would not result in wasteful, inefficient, or unnecessary consumption of energy resources and impacts would be less than significant.

6.3.2 Conflicts with Adopted Plans

The project is consistent with development patterns planned in the SANDAG Regional Plan, City General Plan, KMCP, and City CAP. The project would be constructed to meet current CALGreen and California Energy Code requirements for building energy efficiency. The project would not conflict with other plans for renewable energy or energy efficiency and impacts would be less than significant.

6.4 Geology and Soils

6.4.1 Seismic Hazards

The project site is located within Geologic Hazard Category 51, which is underlain by terrace deposits and bedrock, and poses nominal geologic hazards (City 2020). The project site is not underlain by active or potentially active earthquake faults (Ninyo & Moore 2019a); therefore, fault rupture is not anticipated to occur at the project site and no adverse effects associated with fault rupture would occur. No impact would occur.

While the project site is not underlain by active or potentially active earthquake faults, it may be subject to ground shaking during earthquakes along active faults in the region. No risk of liquefaction or

landslide has been identified at the project site (Ninyo & Moore 2019a). Construction of the project would be subject to regulations including the CBC and SDMC, which would ensure the proposed structures do not result in substantial hazards in the event of seismic activity. Therefore, impacts would be less than significant.

6.4.2 Soil Erosion

The removal of hardscape on the project site would result in the potential for erosion and topsoil loss. Compliance with NPDES and City requirements related to implementation of construction best management practices BMPs identified in a SWPPP would reduce the potential for substantial erosion or topsoil loss to occur during project construction. Once construction of the project is complete, structures and landscaping on-site would stabilize soils and prevent future erosion and topsoil loss. Therefore, impacts would be less than significant.

6.4.3 Geologic Instability

The geotechnical report prepared for the project did not identify the project site as being geologically unstable (Ninyo & Moore 2019a). Based on the dense deposits underlying the project site and the lack of a shallow groundwater table, liquefaction and settlement are unlikely to occur at the project site. In addition, the site is generally flat and landslides are not anticipated to occur at the site (Ninyo & Moore 2019a). With implementation of site-specific recommendations from the project's geotechnical investigation, as required by the SDMC, and compliance with building codes, the project would not result in landslide, lateral spreading, subsidence, liquefaction, or collapse as a result of the underlying geologic unit. Therefore, impacts would be less than significant.

6.4.4 Expansive Soils

Preliminary testing of soils on the project site indicate that the project site is underlain by soils with very low expansion potential. The project would be constructed in accordance with CBC recommendations for building foundations within these soils. With implementation of site-specific recommendations from geotechnical investigations, as required by the SDMC, and compliance with building codes, impacts related to soil expansion would be less than significant.

6.4.5 Septic Tanks

Sewer infrastructure is available at the project site and connects to the existing building. The proposed project would also connect to the City's sewer infrastructure and no septic tanks or alternative wastewater disposal systems are proposed by the project. Therefore, no impact would occur.

6.4.6 Paleontological Resources

The project site is mapped as having moderate paleontological sensitivity in the KMCP PEIR (KMCP PEIR Figure 7-1; City 2020). SDMC Section 142.0151 requires paleontological monitoring during grading in areas of moderate paleontological sensitivity where grading extends 10 feet or greater in depth and involves 2,000 CY or more of material. The project proposes grading involving 1,820 CY of cut material and 13,807 CY of fill, with maximum cut depths of 10.5 feet. Therefore, the project would be required to

implement paleontological monitoring in accordance with the City's General Grading Guidelines for Paleontological Resources, which would prevent project grading from destroying paleontological resources that may underly the site. As discussed in Section 3.3 of this EIR, the District would implement paleontological monitoring as a standard construction operating procedure. Impacts would be less than significant.

6.5 Hazards and Hazardous Materials

6.5.1 Transport, Use, or Disposal of Hazardous Materials

The project consists of an administrative office campus, which is not a land use that would involve routine handling of hazardous materials, substances, or wastes. Standard cleaning products and maintenance supplies would be used on the site during operation. Construction of the project would also require the use of standard hazardous materials, including fuels, solvents, and coatings. The project would be required to comply with applicable regulations related to hazardous materials, which would prevent significant hazards to the public and environment during use of such materials. As a result, impacts would be less than significant.

6.5.2 Upset and Accident Conditions

As described above, the project would use widely available hazardous materials during construction and operation of the project. The project's office land use would not require large quantities of hazardous materials to be stored on-site or routinely transported. Regardless, the project would be required to comply with applicable regulations related to hazardous materials, which would prevent upset and accident conditions leading to significant hazards. Impacts would be less than significant.

6.5.3 Hazardous Emissions Near Schools

There are no schools within one-quarter mile of the project site. The nearest school is located approximately 0.3 mile to the northeast at the Chinese Bilingual Preschool. The project consists of an administrative office campus, which is not a land use that would involve routine handling of hazardous materials, substances, or wastes. Regardless, the project would be required to comply with applicable regulations related to hazardous materials. No impact would occur.

6.5.4 Hazardous Sites

The project site has a closed Cleanup Program Case listing for petroleum impacted soils as a result of underground storage tanks on-site associated with former fueling and maintenance areas. These soils were tested to determine their potential hazard to proposed development. Testing indicated that petroleum-impacted soils are present at depths from 6.5 to 18 feet below the ground surface and testing for contaminants of concern did not exceed human health screening levels for commercial and industrial land uses (Ninyo & Moore 2019b; Ninyo & Moore 2019c). Therefore, the project would not create a significant hazard to the public or environment based on the presence of hazardous materials. Impacts would be less than significant.

6.5.5 Airport Safety and Noise Hazards

The project site is within Airport Influence Area Review Area 1 and Safety Zones 4 and 6 for the Montgomery-Gibbs Executive Airport and within Airport Influence Area Review Area 2 for MCAS Miramar. Safety Zone 4 is the Outer Approach/Departure Zone and Safety Zone 6 is the Traffic Pattern Zone (SDCRAA 2010; SDCRAA 2011). The project is subject to the land use intensity regulations and other ALUCP policies for these zones to ensure the project would not expose people working in the proposed building to aircraft accidents. Such regulations include a limited floor area ratio within Safety Zone 4, which can be doubled if Risk Reduction Policy Objectives are included in the project. The maximum building height is also restricted within Safety Zone 4 and proposed structures would not exceed the maximum height limit for the site. Compliance with all applicable ALUCP policies would ensure the project does not result in a safety hazard related to nearby airports for people working at the site. The project site is outside of the noise contours for the nearby airports and would not expose people working at the site to excessive noise. Therefore, impacts would be less than significant.

6.5.6 Emergency Plans

According to the KMCP PEIR (City 2020), the San Diego County Operational Area Emergency Plan identifies I-15, SR 52, SR 163, and I-805 as emergency evacuation routes in the vicinity of the KMCP area. The project would be constructed on an existing developed site with a similar use and does not propose components within evacuation routes. On-site access would accommodate emergency response vehicles in accordance with City requirements. The proposed project would not interfere with emergency response or evacuation plans. Impacts would be less than significant.

6.5.7 Wildland Fire Risk

The project site is partially within a Very High Fire Hazard Severity Zone (VHFHSZ) (City 2009). Therefore, the project would be required to comply with the City's brush management regulations (SDMC Section 142.0412) and provide defensible space between the proposed structures and vegetation north of the site. The project would also be constructed in accordance with applicable building code requirements, including the California Fire Code. As such, the project would not expose people of structures to significant risks involving wildland fires. Impacts would be less than significant and no further analysis in the EIR is required.

6.6 Hydrology and Water Quality

6.6.1 Water Quality Standards

The project would be subject to the NPDES Construction General Permit requirement to prepare a SWPPP and implement BMPs during construction. Implementation of such BMPs would ensure the project is compliant with applicable water quality standards. During operation, runoff from the project site would be treated by an on-site biofiltration system in order to comply with the City's stormwater permits and regulations. Therefore, impacts would be less than significant.

6.6.2 Groundwater Supply

The project site consists of a developed lot that is almost entirely covered with impervious surfaces. No substantial change in the amount of impervious surfaces on the site would occur after project implementation and, as such, groundwater recharge conditions would not be substantially affected. Project construction is not anticipated to encounter or impact groundwater, and the project would not require groundwater resources during operation. Therefore, the project would not deplete groundwater supplies, or interfere with groundwater recharge. Impacts would be less than significant.

6.6.3 Drainage Alterations

The project site is currently developed with impervious surfaces that drain to the public stormwater system, and implementation of the project would not result in a substantial change in the site's drainage pattern. The rate and amount of surface runoff from the site would also not change substantially. The project would implement BMPs during the construction period that would prevent substantial erosion or siltation. The project would be subject to NPDES and City requirements related to stormwater treatment and drainage and would provide a stormwater capture and treatment system on-site. The project site is not within a flood hazard area (Federal Emergency Management Agency [FEMA] 2012). Therefore, impacts related to drainage alterations would be less than significant.

6.6.4 Flood, Tsunami, and Seiche Inundation

The project is not within a mapped flood, tsunami, or seiche zone (FEMA 2012; City 2020). Therefore, no project inundation that would risk release of pollutants is anticipated at the site. No impact would occur.

6.6.5 Conflicts with Water Quality and Groundwater Plans

The project is not subject to a sustainable groundwater management plan and would not result in a substantial alteration in impervious surface on the site. The project would comply with the applicable water quality control plan via compliance with NPDES requirements related to stormwater treatment and discharge that prevent water quality degradation in the region. Therefore, impacts would be less than significant.

6.7 Land Use and Planning

6.7.1 Community Division

The project proposes redevelopment of an existing office building consistent with the KMCP land use designation for the project site (City 2020). The site is within an urban area and the project does not propose linear components that would physically divide an established community. No impact would occur.

6.7.2 Conflicts with Land Use Plans, Policies, or Regulations

The proposed project is consistent with the planned land use of Industrial and Technology Park designated in the KMCP for the site. The project would provide employment in proximity to transit stations along Ruffin Road and Balboa Avenue consistent with the overall land use goals of the KMCP. As described throughout this EIR, the project would be required to comply with applicable environmental plans and policies including the MHPA Land Use Adjacency Guidelines, City CAP Regulations, and ALUCP policies. Further discussion of the project's consistency with the MHPA Land Use Adjacency Guidelines, City CAP Regulations, and ALUCP policies are provided in this EIR under the applicable resource sections. Therefore, impacts would be less than significant.

6.8 Mineral Resources

The project site is mapped as Mineral Resource Zone (MRZ)-1 and bordered to the east by an area mapped as MRZ-2 (California Geological Survey 2017). MRZ-1 indicates there is little likelihood for mineral resource presence and MRZ-2 is mapped in areas with known or high likelihood to contain significant mineral resources. Areas with an MRZ-2 classification are already developed or maintained as open space under the KMCP. Existing development within and surrounding the project site prevents the extraction of mineral resources within this area. Therefore, redevelopment within the project site would not result in loss of availability of a known mineral resource. The project site is also not delineated for mineral resource recovery on a local general plan, specific plan, or other land use plan. No impact would occur.

6.9 Population and Housing

6.9.1 Population Growth

The project does not propose a land use that would result in substantial population growth and proposes development consistent with the planned land uses in the KMCP. The additional office space provided by the project would serve the existing District community and would not induce direct or indirect population growth. No impact would occur.

6.9.2 Housing Displacement

The project site contains an existing office building, which would be renovated and expanded by the proposed project. There is no housing on the project site that would need to be replaced as a result of the project. No impact would occur.

6.10 Public Services

The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow. Therefore, the project would not require new or expanded public facilities, including for fire protection, police protection, schools, parks, and other public facilities. No impact would occur.

6.11 Recreation

The proposed project would accommodate District employees but would not create a substantial number of new jobs or additional residences. Therefore, the use of existing recreational facilities would not increase as a result of the proposed project such that physical deterioration of these facilities would occur. The project does not propose recreational facilities and would not require the construction or expansion of recreational facilities. No impact would occur.

6.12 Tribal Cultural Resources

The existing building on the project site is not considered eligible for listing in the San Diego Register, California Register of Historic Resources, or National Register of Historic Places (City 2020), and no impacts to built environment resources would occur. The project site is mapped as having low cultural sensitivity (KMCP PEIR Figure 5.5.1; City 2020) and there are no recorded archaeological resources within the project site, including those of tribal significance. No religious or sacred sites or human remains are anticipated to occur beneath the project site. The project is not anticipated to result in impacts to tribal cultural resources given none are known to occur within the site. Impacts would be less than significant.

6.13 Utilities and Service Systems

6.13.1 New or Expanded Facilities

The project site is served by existing stormwater, sewer, water, and communication utilities. On-site stormwater upgrades proposed by the project include a subsurface stormwater detention vault that would collect on-site flows and convey them to a biofiltration system prior to being discharged to the municipal storm drain system in Balboa Avenue. This stormwater system would accommodate the altered building area on the site; however, no new public utilities would be required as the total runoff from the site would not substantially change from existing conditions. Existing sewer and water connections on the project site would be relocated for the project but would not require upgrades to off-site sewer or water mains. No new communication system improvements would be required to serve the project. The proposed utility upgrades would occur within developed land and the potential environmental impacts have been described throughout this EIR. No impact would occur.

6.13.2 Water Supply

The proposed project is consistent with the land use designation for the site in the KMCP (City 2020). Therefore, the project is consistent with the land use assumptions used in the Water Supply Assessment and would not require water supplies beyond those projected to be used in the KMCP area. The KMCP PEIR concluded sufficient water supplies would be available to serve the planned buildout of the KMCP area under normal, dry, and multiple dry years. The project would also be constructed in accordance with current water efficiency standards for buildings and landscaping and would not use excessive amounts of water. Impacts would be less than significant.

6.13.3 Wastewater Treatment

The project site is served by existing wastewater utilities and discharges to the City's sewer system. Existing sewer connections on the site would be relocated for the project but would not require upgrades to off-site sewer mains or treatment facilities. Impacts would be less than significant.

6.13.4 Solid Waste Generation

As anticipated in the KMCP PEIR, the project proposes an increase in building area which would result in additional generation of solid waste. The project would comply with applicable regulations related to solid waste such as the City's Recycling Ordinance and Construction and Demolition Debris Diversion Deposit Program Ordinance. Given compliance with such regulations, the project would not require new solid waste infrastructure or exceed solid waste standards. Impacts would be less than significant.

6.13.5 Solid Waste Policies

The project would comply with applicable regulations related to solid waste such as the City's Recycling Ordinance and Construction and Demolition Debris Diversion Deposit Program Ordinance. Impacts would be less than significant.

6.14 Wildfire

6.14.1 Emergency Plans

The proposed project is consistent with the land use designation in the KMCP PEIR and involves redevelopment of an existing office building on an existing developed site. The proposed project would not inhibit emergency access to and from the site or impair an adopted emergency response plan. Impacts would be less than significant.

6.14.2 Wildfire Spread

The project site is partially within a VHFHSZ (City 2009) and therefore would be required to comply with the City's brush management regulations (SDMC Section 142.0412) and provide defensible space between the proposed structures and vegetation north of the site. The project would be constructed in accordance with current fire codes and would not exacerbate wildfire risks. Impacts would be less than significant.

6.14.3 Infrastructure Installation

The project would be constructed on an existing developed site with an existing office land use that is served by electrical lines and other utilities. While alterations to paving, water connections, and power line connections are anticipated to be required to serve the proposed project, such modifications would not exacerbate fire risks. Impacts associated with these improvements have also been discussed throughout this EIR as part of the project. Impacts would be less than significant.

6.14.4 Post-fire Hazards

The proposed project is located in an urbanized area on a flat parcel and is not within a designated flood zone. The project would be constructed in accordance with applicable building and engineering codes related to structures, slopes, and drainage. As such, the project is not anticipated to expose people or structures to significant risks in the event of wildlife. Impacts would be less than significant.

7.0 OTHER CEQA-REQUIRED SECTIONS

This chapter includes additional information that is not contained elsewhere in this EIR but is required to be included per State CEQA Guidelines Section 15126. Specifically, discussions of significant irreversible environmental changes that would result from implementation of the proposed project (CEQA Guidelines Section 15126[c]) and growth-inducing impacts of the proposed project (CEQA Guidelines Section 15126[d]) are provided in this chapter. Discussion meeting the requirements of CEQA Guidelines Section 15126 (a), (b), and (e) have been provided in Chapter 4, *Environmental Analysis*, and alternatives to the proposed project are discussed in Chapter 8, *Project Alternatives*, to meet the requirements of CEQA Guidelines Section 15126(f).

7.1 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126(c) requires that an EIR identify significant and irreversible environmental changes which would be caused by a proposed project should it be implemented. CEQA Guidelines Section 15126.2(d) further notes that significant and irreversible environmental changes may occur as a result of the use of nonrenewable resources during the initial and continued phases of a project since a large commitment of such resources makes removal or nonuse thereafter unlikely. Irreversible environmental changes typically fall into one of the following three categories: primary impacts, meaning the use of nonrenewable resources for the project; secondary impacts, such as highway improvements that provide access to a previously inaccessible area thereby committing future generations to similar uses; and environmental accidents resulting in environmental changes. CEQA Guidelines Section 15126.2(d) states that irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The project proposes renovation and new construction of an administrative campus, including construction of a parking garage and new office space. In order to implement the proposed project, existing parking areas would be removed from the lot surrounding the existing building and small areas of the existing building would be demolished. The majority of the existing approximately 150,000-SF office building would remain in place and an approximately 60,000-SF addition would be constructed to the north and northeast. Other improvements associated with the project involve closure of existing vehicular access points in favor of four driveways to serve the proposed project, landscaping, and other utility improvements.

Irreversible uses of resources are typically associated with the environmental topics of agricultural and forestry resources, biological resources, cultural resources, energy, paleontological resources, water quality, mineral resources, tribal cultural resources, and water consumption. As the project site is currently developed, implementation of the project would not result in significant irreversible impacts to agricultural and forestry resources; buried cultural, tribal cultural, or paleontological resources; or mineral resources. Further discussions of project impacts related to these resources are provided in Chapter 6, *Effects Found Not to be Significant*, and Appendix A.

Biological resources are located adjacent to the project site, specifically within the MHPA lands to the north. As identified in Section 4.2, *Biological Resources*, the project has the potential to adversely affect nesting birds in the MHPA and indirectly impact sensitive habitat. Mitigation measures BIO-1 through BIO-4 require preconstruction surveys and other avoidance measures during project construction that would reduce impacts to a less than significant level. In addition, the project would comply with the

MHPA Land Use Adjacency Guidelines. With implementation of the identified mitigation measures, no irreversible environmental changes to biological resources would occur.

The renovations to the existing building associated with the proposed project as well as the construction of new building space and a parking structure would not be reversible. As documented in Section 6.2.1, the existing building does not meet the criteria for listing as a historic structure; therefore, the renovation of this building would not result in irreversible changes to historic built environment resources.

Construction activities associated with the proposed project would require the irreversible consumption of natural resources and energy. Such resources would include lumber and other forest products, sand and gravel, asphalt, steel, copper, other metals, diesel fuel, and electricity. Building materials, while perhaps recyclable in part at a future date, would for practical purposes be considered permanently consumed. Energy derived from nonrenewable sources would be consumed as a result of building operations and transportation uses. However, as the project would modernize an aging building, the proposed building would be more efficient and would comply with current regulations related to building energy efficiency. Energy consumption is discussed in greater detail in Section 6.3. Use of nonrenewable resources for construction and operation of the project would have an incremental effect on the regional consumption of these commodities, and therefore result in long-term, irretrievable losses of non-renewable resources, such as fuel and energy.

No water bodies are located on or adjacent to the site that would be impacted by the project. Further, the project would implement a Storm Water Quality Management Plan (SWQMP) and involves the installation of a subsurface stormwater detention vault and biofiltration system that would treat runoff before being discharged to the municipal storm drain system. Therefore, the project would not result in irreversible changes to water quality. As it relates to water consumption, the project would be constructed in accordance with the most recent water use efficiency regulations. While some water used by the project may be recycled, irretrievable losses of water are anticipated during project construction and operation.

The project site and its surroundings are developed and urban in nature. The project would not involve road or highway improvements that would provide access to previously inaccessible areas. Sidewalk alterations proposed along Balboa Avenue and Ruffin Road frontages would provide improved connectivity in the project area where existing pedestrian access already exists. As such, the project would not result in significant irreversible secondary impacts. In addition, the project would comply with safety and hazardous material regulations and no major environmental accidents or hazards are anticipated to occur as a result of project implementation.

7.2 Growth-Inducing Impacts

CEQA Guidelines Sections 15126(d) requires that an EIR discuss a project's potential impacts related to growth inducement. CEQA Guidelines Section 15126.2(e) further states that an EIR should describe the ways in which a proposed project could directly or indirectly foster economic growth, population growth, or additional housing, and how that growth would affect the surrounding environment. Direct growth inducement would result if a project, for example, involved the construction of new housing. Indirect growth might occur if a project were to establish substantial new permanent employment opportunities that would stimulate the need for additional housing, utilities, and public services. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional

development, such as removing a constraint on a required public service or utility. This section discusses the characteristics and consequences of the project that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

7.2.1 Economic Growth

One criterion by which growth inducement can be measured involves economic growth. Economic growth considerations include a demand for temporary and permanent employees, fostered through the creation of new jobs.

In the short term, project construction would introduce temporary employment opportunities. During project construction periods, demand for various construction trade skills and labor would increase. It is anticipated that this short-term demand would be met by the local labor force and would not result in economic growth inducing effects requiring the importation of labor.

Once the proposed project is in operation, approximately 500 administrative staff from the existing District office would be relocated to the proposed office building. While the proposed project includes capacity for up to 250 additional administrative staff, the District would hire these staff as needed to accommodate the needs of the District. Economic growth within the District service area (primarily the City) is anticipated to continue and has the potential to result in the need for additional District services in the future. However, the construction of the proposed project would not itself create new opportunities for permanent jobs or increase the student population, thereby requiring additional District staff. The ultimate capacity of the office building would not be utilized until or unless these positions are required to serve the District. The project would not result in substantial economic growth.

7.2.2 Housing Growth

The project does not include the construction of housing, nor would it increase the regional population in a manner that would necessitate the construction of additional housing. Housing growth in the KMCP area was anticipated in the KMCP Update; however, the project itself would not provide additional housing units and would not provide new job opportunities that would necessitate the construction of new housing in the project area.

7.2.3 Population Growth

As described above, the project would not directly induce population growth through the creation of new housing and would not provide jobs that would indirectly result in population growth. A project may also indirectly induce growth if it would remove a constraint on a required public service or utility, or if it would involve a precedent-setting action (e.g., an innovation, a change in zoning, a general plan amendment approval).

The project is proposed on a developed site within an urbanized area and the utilities and public services needed to serve the proposed project are readily available in the area. The project would not extend infrastructure such as roadways, water, gas, or electricity into previously undeveloped areas. As such, the project would not remove obstacles to growth. No changes to land use plans are proposed and there are no precedent-setting actions proposed by the project.

7.2.4 Summary of Growth-Inducing Impacts

The project does not propose growth-inducing components, including new housing, job establishment, or the removal of barriers to growth. While the proposed building has the capacity to accommodate an increase in District employment, no growth in employment opportunities would occur as a result of the proposed project. Planned growth in the District service area could result in the use of the additional office capacity in the future. The proposed project would not directly or indirectly induce substantial population growth and would have a negligible effect on regional growth.

8.0 PROJECT ALTERNATIVES

8.1 Overview

This chapter describes and analyzes a range of reasonable alternatives that could feasibly attain most of the basic project objectives while avoiding or substantially lessening one or more of the significant effects of the proposed project. The primary purpose of this chapter is to provide a comparative analysis with enough detail to foster informed decision making and public participation in the environmental review process.

Section 15126.6(a) of the State CEQA Guidelines requires an EIR to analyze a range of project alternatives that would "feasibly attain most of the basic project objectives of the project but which would avoid or substantially lessen any of the significant effects of the project." Alternatives analysis must include a comparative evaluation of a "No Project Alternative," which assumes that none of the Project's features would be constructed or implemented and that the site would continue to exist and operate as it does in its current condition. The factors considered when addressing the feasibility of other potential alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, and whether access to an alternative site can be reasonably acquired or controlled (State CEQA Guidelines Section 15126.6(f)(1)). Alternative locations may be analyzed if the lead agency determines that implementation of a project on an off-site location is possible. The decision to select alternative locations needs to be based on whether off-site locations would avoid or substantially reduce any of the significant effects of the Project. The lead agency may also make the determination that no feasible alternative locations exist, and the reasoning must be disclosed in the alternatives analysis.

Three alternatives to the proposed project are analyzed in this chapter and discussed in terms of their merits relative to the proposed project. A discussion of each alternative is provided below and includes the following:

- No Project Alternative
- Modernize Existing Education Center
- Reuse Existing Building Alternative
- Reduced Project Alternative
- Project Location Alternative

In accordance with State CEQA Guidelines Section 15126.6(a), the project alternatives are assessed relative to their ability to: (1) meet the basic objectives of the project; and (2) avoid or substantially lessen the significant effects of the project. As described in EIR subsection 3.1, *Project Objectives*, the following are the primary project objectives:

1. Use Voter Approved Measures YY and U funds for the design and construction of a new District administrative center;

2. Provide a new, modern administrative center to serve as the main District office to replace the outdated buildings at the existing education center campus at 4100 Normal Street, repair and replace associated aging infrastructure, and support anticipated increases in administrative staff;

3. Consolidate District staff and facilities into a single and more central location with convenient access to freeways and transit services;

4. Provide for the construction of additional employment uses in Kearny Mesa consistent with the KMCP, as well as applicable land use designations and underlying zoning.

CEQA also requires that alternatives be feasible, which is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (PRC Section 21061.1). CEQA Guidelines Section 15126.6(f)(1) states that factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site.

The alternatives should also avoid or substantially lessen one or more significant environmental impacts that would occur under the proposed project. As such, this analysis focuses on the issues discussed in EIR Sections 4.1 through 4.6 because of their potential to result in significant impacts on the environment. Issues discussed in Chapter 6, *Effects Found Not to be Significant*, are not carried forward into this alternatives analysis because it was determined that they would result in less than significant impacts on the environment. Table 8-1, *Summary of Significant Effects of the Proposed Project*, summarizes the environmental impacts of the proposed project that would remain significant and unavoidable and those that would be less than significant with mitigation. As shown, project direct or indirect impacts related to biological resources (sensitive species, sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) and noise (noise generation) would be less than significant with the incorporation of mitigation measures. Cumulative noise impacts related to noise generation would be less than significant with the incorporation of mitigation measures. Significant and unavoidable cumulative impacts on aesthetics (visual character and quality), GHG emissions, and noise (vibration exposure) would occur as a result of the project. All other environmental topics were concluded to result in less than significant impacts in Chapter 4 and less than significant or no impact in Chapter 6.

Table 8-1
SUMMARY OF SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Environmental Topic/Impact	Direct/Indirect Project Impacts	Cumulative Impacts
Aesthetics		
Visual character and quality	SM	SU
Biological Resources		
Sensitive species	SM	--
Sensitive habitats	SM	--
Wetlands	SM	--
Local policies protecting biological resources	SM	--
Conservation plans	SM	--
Greenhouse Gas Emissions		
GHG emissions	SU	SU
Noise and Vibration		
Noise generation	SM	SM
Vibration	--	SU

SM = significant but mitigable impacts; SU = significant and unmitigated impacts

8.2 Selection of Alternatives

8.2.1 Alternatives Considered but Rejected

CEQA Guidelines Section 15126.6(c) requires that an EIR identify alternatives that were considered and rejected as infeasible and briefly explain the reasons for their rejection. There are no alternatives considered but rejected from further study for the project given the ability of the District to acquire new properties for development.

8.2.2 Alternatives Evaluated in Detail

8.2.2.1 No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that the “no project” alternative be evaluated along with its impacts to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The “no project” analysis is required to discuss the existing conditions (at the time the NOP is published), as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

If the project is not a land use or regulatory plan, for example a development project on identifiable property such as the proposed project, the “no project” alternative is the circumstance under which the project does not proceed. Under this Alternative, the discussion would compare the environmental effects of the property remaining in its existing condition against environmental effects which would occur if the project is approved.

Under this alternative, the physical conditions of the project site would remain as they were as the date of the NOP. The project site is currently completely developed with an existing vacant office building, surface parking, and landscaping. District services would continue to be provided at the 4100 Normal Street site where they are currently located.

8.2.2.2 Modernize Existing Education Center Alternative

Under this alternative, the existing District Education Center located at 4100 Normal Street, would be modernized. The existing buildings, which encompass a total of approximately 200,000 SF, would undergo interior renovations and exterior improvements (e.g., repairs and painting) to provide offices and facilities for District administrative uses. Minor demolition to reconfigure and expand the office space to accommodate the proposed services would be required. The services operating from the existing office would remain at the 4100 Normal Street property and no development on the proposed project site would occur. Therefore, conditions at the project site would remain as they were as of the date of the NOP.

8.2.2.3 Reuse Existing Building Alternative

Under this alternative, the existing building would be retained and used for the new District administration center. The existing vacant building, which encompasses a total of approximately 150,000 SF, would undergo interior renovations and minor exterior improvements (e.g., repairs and painting) to provide offices and facilities for District administrative uses. The physical conditions of the project site would generally remain as they are today with potentially some limited improvements to complement the renovated building, such as an outdoor courtyard. Parking would be provided by the existing surface lots and access would be provided via the existing driveways on Balboa Avenue and Ruffin Road.

8.2.2.4 Reduced Project Alternative

This alternative would develop an administrative center similar to the proposed project, but with a 50 percent reduction in building space for the proposed building addition. Instead of the approximately 210,000 SF renovated/expanded building (renovation of the existing 150,000 SF and 60,000-SF addition) that would be included under the proposed project, the Reduced Project Alternative would renovate/develop an approximately 180,000-SF building for District administrative uses, including renovation of the existing 150,000-SF building and a 30,000-SF addition). The parking garage would also be reduced compared to the proposed project. The footprint of the parking garage would be the same, but it would be three levels instead of five. The other components and improvements would be substantially the same as the proposed project, such as the proposed plaza, access driveways, internal access roads, landscaping, hardscape improvements, and utility improvements.

8.2.2.5 Project Location Alternative

CEQA Guidelines provide that off-site alternatives should be considered if development of another site is feasible and would reduce or avoid the significant impacts of the project. Factors that need to be considered when identifying an off-site alternative include the size of the site, its location relative to the greater District boundaries, the General Plan land use designation (or other applicable planning document), and the ability to meet the project objectives. The project is proposed on a 7.8-acre site,

which is owned by the District. The District purchased the site with the intention of constructing a new administrative center. Given none of the District's existing surplus properties are of a size to accommodate consolidation of District services and development of similar office space to the proposed project in addition to their existing uses, implementation of the project at a different site would require acquisition of property of similar size, in a central location with respect to District boundaries, and close to freeway and transit access.

There are a number of properties in the KMCP area that allow office uses similar to the proposed project. In order to avoid the project's potential impacts related to biological resources and vibration resulting from the proposed project site's adjacency to the MHPA and future trolley line, respectively, the Project Location Alternative assumes the project would be constructed at a developed property within the KMCP area that is located adjacent to developed land and more than 120 feet from proposed trolley lines. To construct an administrative center building and provide parking similar to the proposed project, it is assumed that portions of an existing structure would be demolished, an addition would be constructed, interior renovations would occur, and a parking structure would be constructed on the site. Other components and improvements would be similar to the proposed project, including the provision of a plaza, reconfigured driveways, internal access roads, landscaping, hardscape improvements, and utility improvements.

8.2.3 Analysis of Alternatives

This section discusses each of the project alternatives and determines whether each alternative would avoid or substantially reduce any of the significant impacts of the proposed project. This section also identifies additional impacts resulting from the alternatives that would not result from the proposed project (if applicable) and considers the alternatives' respective relationships to the project objectives. A summary comparison of the impacts of the proposed project and the alternatives under consideration is included as Table 8-2, *Comparison of Project and Alternatives Impacts*.

Table 8-2
COMPARISON OF PROJECT AND ALTERNATIVES IMPACTS

Environmental Topic	Proposed Project		No Project Alternative		Modernize Existing Education Center Alternative		Reuse Existing Building Alternative		Reduced Project Alternative		Project Location Alternative	
	Project Impacts	Cumulative Impacts	Project Impacts	Cumulative Impacts	Project Impacts	Cumulative Impacts	Project Impacts	Cumulative Impacts	Project Impacts	Cumulative Impacts	Project Impacts	Cumulative Impacts
Aesthetics	SM	SU	N	N	SM (>)	LTS	SM (<)	LTS	SM (<)	LTS	SM (=)	SU (=)
Air Quality	LTS	LTS	N	N	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (=)	LTS (=)
Biological Resources	SM	LTS	N	N	SM (<)	LTS (<)	SM (<)	LTS (<)	SM (=)	LTS (=)	SM (<)	LTS (=)
Greenhouse Gas Emissions	SU	SU	N	N	LTS (<)	LTS (<)	SU (<)	SU (<)	SU (<)	SU (<)	SU (=)	SU (=)
Noise and Vibration	SM	SM[1]/SU[2]	N	N	SM (>)	SM (>)[1]/ N[2]	SM (=)	SM (=)[1]/ SU (=)[2]	SM (=)	SM (=)[1]/ SU (=)[2]	SM (<)	SM (<)[1]/ SU (=)[2]
Transportation	LTS	LTS	N	N	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (=)	LTS (=)
Historical Resources	LTS	LTS	N	N	SU (>)	SU (>)	LTS (<)	LTS (<)	LTS (<)	LTS (<)	LTS (=)	LTS (=)

[1] Noise impacts related to noise generation.
[2] Noise impacts related to vibration exposure.
SM = significant but mitigable impacts; SU = significant and unmitigated impacts; LTS = less than significant impacts; N = no significant impacts
<= comparatively reduced impact relative to the project (if impact designation is the same and impact varies)
> = comparatively greater impact relative to the project (if impact designation is the same and impact varies)
"=" = same/similar impacts relative to the project

8.2.3.1 No Project Alternative

Aesthetics

The No Project Alternative would retain existing visual conditions at the site. This alternative would not result in the introduction of an expanded office building, multi-level parking garage, and enhanced landscaping. Views from the adjacent roadways would continue to be the developed vacant site. This alternative would avoid the significant unavoidable cumulative impact on visual character and quality that would occur under the proposed project because the existing building would remain at its current size and form and the multi-level parking garage would not be constructed. As such, this alternative would not contribute to the progressive shift in the intensification and modification of the existing visual character of the larger community as the KMCP area is built out. As this alternative would not result in any site improvements that would change the existing visual environment, no impacts to visual resources would occur.

Air Quality

No demolition, grading, construction, or additional development would occur under the No Project Alternative. Therefore, this alternative would not have the potential to increase the existing air pollutant emissions at the project site. This is compared to the project for which impacts would be less than significant with no mitigation required. No new construction or demolition air pollutant emissions or long-term, daily vehicle trip emissions would occur, compared to the project, for which such emissions would occur. No air quality impacts would occur under the No Project Alternative.

Biological Resources

Under this alternative, the project site would remain as it currently exists as an entirely developed site. No development would occur and there would be no impact to biological resources in the adjacent MHPA. The No Project Alternative would avoid potentially significant indirect impacts to biological resources resulting from the project, including sensitive species, sensitive habitat, wetlands, consistency with local policies protecting biological resources, and consistency with habitat conservation plans.

Greenhouse Gas Emissions

Similar to air quality, the No Project Alternative would not result in new GHG emissions because no construction activities or operations would occur. This is compared with the project which is anticipated to have significant and unavoidable GHG emissions impacts associated with construction and operation of the project. It also, however, would not result in implementation of strategies to reduce regional GHG emissions, such as locating District employment uses in a centralized location within a mobility hub.

Noise and Vibration

The No Project Alternative would not result in construction activities or new stationary and mobile noise sources in the vicinity of existing noise-sensitive land uses. Therefore, significant noise impacts during construction and operation that would be associated with these activities under the project would be avoided under this alternative. Additionally, this alternative would avoid the significant and unavoidable cumulative impacts associated with vibration because the site would remain as a vacant developed parcel with an unoccupied building. Therefore, no impact would occur, and no mitigation would be

required. The existing noise conditions on the project site would continue and there would be no new noise sources at the site that could potentially impact off-site uses.

Transportation

As no development is proposed under this alternative, no traffic related to construction or operations would be generated. Similarly, because no development would occur, there would be no associated transportation design hazard or emergency access impacts. While there would be no transportation impacts because no development would occur, the No Project Alternative would not be fully consistent with SANDAG's Regional Plan that encourages employment uses in proximity to transit facilities.

Conclusion

The No Project Alternative would avoid significant and unavoidable cumulative impacts associated with aesthetics (visual character and quality), GHG emissions, and noise and vibration (vibration). It would also avoid significant, but mitigable, impacts related to biological resources (sensitive species, sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) and noise and vibration (noise generation). Because the No Project Alternative would not involve construction, the potentially significant construction noise impact would not occur. Impacts to biological resources also would not occur under this alternative because no construction or operational activities would take place adjacent to the MHPA to the immediate north. Regarding air quality and GHG emissions, no emissions of criteria pollutants or GHG would be generated under this alternative because no construction activities or operations would occur. It would also avoid all other less than significant impacts of the proposed project.

The No Project Alternative would not meet any of the objectives of the proposed project, and the benefits of the proposed project would not be realized under the No Project Alternative. This alternative would leave the site as-is and the proposed project would not be constructed. Therefore, this alternative would not utilize allocated funds for a new, modern, centralized, and consolidated District administrative center to replace the existing outdated building and associated aging infrastructure and to support anticipated increases in administrative staff, as well as provide for additional employment uses in Kearny Mesa.

8.2.3.2 Modernize Existing Education Center Alternative

Aesthetics

This alternative would avoid the significant unavoidable cumulative impact on visual character and quality in the KMCP area that would occur under the proposed project because the existing building would remain at its current size and form and the multi-level parking garage would not be constructed. As such, this alternative would not contribute to the progressive shift in the intensification and modification of the existing visual character of the larger community as the KMCP area is built out. Impacts from lighting related to the MHPA and ALUCP regulations would be avoided but construction-period impacts to visual character would be consistent with those of the proposed project. In addition, permanent visual changes would occur at the 4100 Normal Street site where historic resources would be altered such that the visual character and quality of the site would be reduced; therefore, this alternative would result in significant but mitigable impacts to aesthetic resources but to a greater degree than the proposed project.

Air Quality

This alternative would result in reduced temporary air pollutant emissions when compared to the proposed project because it would not involve expansion of the existing building or construction of the parking garage. Emissions would be generated at the 4100 Normal Street site during the proposed renovations but would be less than the proposed project. Emissions generated by operations would be similar to existing conditions wherein the existing Central Office is operational and the proposed project site is vacant. As a result, the Modernize Existing Education Center Alternative would incrementally reduce less than significant air quality impacts associated with the project.

Biological Resources

Under this alternative, significant but mitigable impacts to sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans would not occur given the 4100 Normal Street site is not located adjacent to the MHPA. Construction activities would occur and compliance with the MBTA to protect nesting birds would be required. Impacts to biological resources would be less than the proposed project but would still be significant and mitigable.

Greenhouse Gas Emissions

The Modernize Existing Education Center Alternative would result in reduced GHG emissions when compared to the project as there would be less construction. Operations would be similar to the existing condition but would reduce energy source GHG emissions as a result of the energy efficiency upgrades that would be implemented. As no net increase in vehicle trips would occur to the existing site, impacts related to GHG emissions would be less than significant. This alternative therefore would avoid the significant and unavoidable GHG emissions impacts resulting from the proposed project.

Noise and Vibration

This alternative would result in similar construction noise and vibration activities when compared to the project but would occur in closer proximity to residential land uses and require the implementation of District CIP PEIR mitigation measures to reduce significant impacts below a level of significance. However, construction noise impacts at the MHPA would be avoided. Noise impacts would still be potentially significant with mitigation required for noise exposure given the traffic noise exposure at 4100 Normal Street (City 2016b). The significant and unavoidable cumulative impacts associated with vibration would not occur under this alternative given the location further away from proposed trolley alignments.

Transportation

Transportation impacts under the Modernize Existing Education Center Alternative would be less than significant given there would not be an increase in trips compared to existing conditions. Site improvements would remain consistent with applicable regulations to provide adequate emergency access and not construct hazardous design features. The 4100 Normal Street site is also within a mobility hub and would therefore be similarly consistent with transportation plans for the region. Overall, less than significant transportation impacts would be associated with both the project and this alternative but would be reduced with this alternative as it is consistent with existing conditions.

Historical Resources

The teacher training school building at the existing education center is a listed historical resource on the National Register of Historic Places given its prior use as the San Diego State Normal School and San Diego State Teachers College (City 2016b). Therefore, construction altering this building for the construction of this alternative has the potential to result in significant impacts to a historic resource. As such, mitigation consistent with the City's Guidelines for treatment of historic resources would be required to reduce impacts to a less than significant level.

Conclusion

The Modernize Existing Education Center Alternative would avoid the significant and unavoidable cumulative impacts associated with aesthetics (visual character and quality), direct and cumulative impacts associated with GHG emissions, and cumulative noise and vibration (vibration) impacts of the project. However, project-level impacts to visual character and quality would be worsened under this alternative given the alterations to historic resources at the 4100 Normal Street site. In addition, these alterations would result in significant but mitigable impacts to cultural resources (historic resources) that would not occur under the proposed project. Significant but mitigable impacts to biological resources (sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) would be avoided and impacts to nesting birds would remain significant but mitigable. Impacts regarding construction noise would be worsened because construction would occur in closer proximity to residential land uses; however, this impact would be mitigable. Noise impacts related to noise – land use compatibility would also remain significant but mitigable. Less than significant impacts associated with both the project and this alternative with respect to air quality and transportation would be lessened for this alternative because of the reduced construction activities and operational consistency with existing conditions.

The Modernize Existing Education Center Alternative would meet Objectives 1 and 2 as it would use bond measure funds to renovate a District administrative center and would modernize the District's administrative center. This alternative would partially meet Objective 3 as it would be located in a mobility hub with access to freeways and transit services; however, no consolidation of District services would occur. Objective 4 would not be met since no employment uses would be created in Kearny Mesa. In summary, this alternative would fulfill two and partially fulfill one of the four project objectives.

8.2.3.3 Reuse Existing Building Alternative

Aesthetics

This alternative would avoid the significant unavoidable cumulative impact on visual character and quality that would occur under the proposed project because the existing building would remain at its current size and form and the multi-level parking garage would not be constructed. As such, this alternative would not contribute to the progressive shift in the intensification and modification of the existing visual character of the larger community as the KMCP area is built out. Impacts related to construction-period visual character and lighting would remain significant and mitigable but would be incrementally reduced by the smaller scale of this alternative.

Air Quality

This alternative would result in reduced temporary air pollutant emissions when compared to the proposed project because it would not involve expansion of the existing building or construction of the parking garage. Some emissions would be generated by the interior renovations, construction of a courtyard, and other minor site improvements, but less when compared to the proposed project. Emissions generated by operations would also be slightly reduced because less cars would be traveling to and from the site given the smaller building. As a result, the Reuse Existing Building Alternative would incrementally reduce less than significant air quality impacts associated with the project.

Biological Resources

Under this alternative, impacts to biological resources would be similar to the proposed project. Construction activities would occur, which could potentially indirectly impact biological resources within the adjacent MHPA. Like the proposed project, this alternative would be subject to the MHPA Land Use Adjacency Guidelines to ensure protection of resources in the adjacent MHPA. Because less construction would occur and farther away from the adjacent MHPA compared to the proposed project, impacts to biological resources would be incrementally less than the proposed project, but would still be significant but mitigable.

Greenhouse Gas Emissions

The Reuse Existing Building Alternative would result in slightly reduced GHG emissions when compared to the project as there would be less construction. Operations would be similar to the proposed project with a small reduction in vehicle trips; however, this alternative would not involve the renovation and expansion of an older building that would be a modern, more energy-efficient building. Impacts related to GHG emissions would be slightly reduced in comparison to the proposed project but would remain significant and unavoidable.

Noise and Vibration

This alternative would result in similar construction noise and vibration activities when compared to the project due to the reduction in construction activities but would still be potentially significant with mitigation required. The significant and unavoidable cumulative impacts associated with vibration would also occur under this alternative due to the existing building's distance from the adjacent roadway and potential future trolley alignment, which could expose building occupants to transportation noise and vibration levels above applicable standards.

Transportation

Transportation impacts under the Reuse Existing Building Alternative would be similar to those identified for the proposed project. This alternative would result in a decrease in traffic compared to the project because the capacity of the existing building would be less than the expanded building under the proposed project. This would result in slightly reduced traffic volumes and VMT. Transportation impacts related to VMT would be less than significant based on the building being a locally serving public facility. Similar to the project, no transportation hazards or emergency access impacts would occur under this alternative. It is anticipated that this alternative would provide similar pedestrian and bicycle amenities on site to benefit employees. Overall, less than significant transportation impacts would be associated

with both the project and this alternative but would be incrementally less with the Reuse Existing Building Alternative.

Conclusion

The Reuse Existing Building Alternative would avoid the significant and unavoidable cumulative impact associated with aesthetics (visual character and quality) but would not avoid significant and unavoidable GHG emissions impacts or cumulative noise and vibration impacts (vibration) of the project. Significant but mitigable impacts to biological resources (sensitive species, sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) would be slightly less than the project impacts, but the required mitigation would be the same. Aesthetics impacts related to construction-period visual character and quality, and light and glare regulations would be slightly reduced from the larger proposed project's impacts but would require the same mitigation. Impacts regarding construction noise would be reduced because less construction would occur, but impacts would be significant but mitigable and mitigation would still be required. Noise impacts related to noise – land use compatibility would also remain significant but mitigable. Less than significant impacts associated with both the project and this alternative with respect to air quality and transportation would be less for this alternative because of the reduced construction activities and smaller building.

The Reuse Existing Building Alternative would meet Objective 1 in that it would use allocated bond measure funds to provide a new District administrative center. It would also partially meet Objective 3 as it would provide a facility to consolidate District staff in a more central location near freeways and transit facilities; however, reuse of the existing building would constrain the capacity of employees to that permitted by the space of the existing building such that additional administrative facilities may be required. This would not wholly provide for a consolidated facility. Additionally, it would meet Objective 4 because it would provide for more employment uses in Kearny Mesa. However, it would not meet Objective 2 to provide a new, modern administrative center to support anticipated increases in administrative staff. In summary, this alternative would fulfill two and partially fulfill one of the four project objectives.

8.2.3.4 Reduced Project Alternative

Aesthetics

The Reduced Project Alternative would avoid the significant unavoidable cumulative impact on visual character and quality that would occur under the proposed project because the existing building would smaller than the proposed project and the multi-level parking garage would be only three levels. The reduction in height from five to three levels would be more visually consistent with existing development patterns and building forms in the project area. As such, this alternative would not contribute to the progressive shift in the intensification and modification of the existing visual character of the larger community as the KMCP area is built out. Impacts related to construction-period visual character and lighting would remain significant and mitigable but be incrementally reduced by the smaller scale of this alternative.

Air Quality

This alternative would result in similar but slightly reduced temporary air pollutant emissions when compared to the proposed project because it would involve construction of smaller structures.

Emissions generated by operations would also be slightly reduced because less cars would be traveling to and from the site given the smaller building. As a result, the Reduced Project Alternative would incrementally reduce less than significant air quality impacts associated with the project.

Biological Resources

Under this alternative, impacts to biological resources would be the same as the proposed project. Construction activities would occur, which could potentially indirectly impact biological resources within the adjacent MHPA. Like the proposed project, this alternative would be subject to the MHPA Land Use Adjacency Guidelines to ensure protection of resources in the adjacent MHPA. Impacts to biological resources would be significant but mitigable.

Greenhouse Gas Emissions

The Reduced Project Alternative would result in slightly reduced GHG emissions when compared to the project as there would be slightly less construction given the smaller building and parking garage. Operations would be similar to the proposed project. Impacts would be significant and unavoidable.

Noise and Vibration

This alternative would result in similar construction noise and vibration activities when compared to the project due to the reduction in construction activities but would still be potentially significant with mitigation required. The significant and unavoidable cumulative impacts associated with vibration would also occur under this alternative due to the renovated and expanded building's distance from the adjacent roadway and potential future trolley alignment, which could expose building occupants to transportation noise and vibration levels above applicable standards.

Transportation

Under the Reduced Project Alternative, transportation impacts would be similar to those identified for the proposed project. This alternative would result in a slight decrease in traffic compared to the project because the capacity of the proposed building would be less than the expanded building under the proposed project. This would result in slightly reduced traffic volumes and VMT. Transportation impacts related to VMT would be less than significant based on the building being a locally serving public facility. Similar to the project, no transportation hazards or emergency access impacts would occur under this alternative. It is anticipated that this alternative would provide similar pedestrian and bicycle amenities on site to benefit employees. Overall, less than significant transportation impacts would be associated with both the project and this alternative but would be incrementally less.

Conclusion

The Reduced Project Alternative would avoid the significant and unavoidable cumulative impact associated with aesthetics (visual character and quality) but would not avoid the significant and unavoidable GHG emissions impact or cumulative noise and vibration impacts (vibration) of the project. Significant but mitigable impacts to aesthetics (visual character and quality, and light and glare) biological resources (sensitive species, sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) would be the same as the project impacts, and the required mitigation would be the same. Impacts regarding construction noise and noise-land use compatibility would generally be the same as the proposed project; impacts would be significant but mitigable and

mitigation would still be required. Less than significant impacts associated with both the project and this alternative with respect to air quality and transportation would be less for this alternative because of the reduced construction activities and smaller buildings.

The Reduced Project Alternative would meet all four of the project objectives but to a lesser degree than the proposed project because of the reduced building capacity associated with a smaller building and the ability to accommodate anticipated increases in District staff.

8.2.3.5 Project Location Alternative

Aesthetics

The Project Location Alternative would have impacts related to aesthetics consistent with the proposed project. This alternative would contribute in the same manner to the significant unavoidable cumulative impact on visual character and quality that would occur under the proposed project because the same structures would be constructed on the alternative site within the KMCP area. As such, construction-period aesthetic impacts would be significant but mitigable and cumulative impacts related to visual character and quality would remain significant and unavoidable. Impacts related to light and glare would be avoided given the alternative location away from the MHPA and airport safety zone.

Air Quality

This alternative would result in air pollutant emissions similar to the proposed project because similar construction and operational activities would occur. Slight changes in construction emissions may occur depending on the need for different building area to be demolished and more or less floor area to be constructed as an addition; however, the intensity of construction activity is anticipated to be generally consistent with that of the proposed project. Air quality impacts for the Project Location Alternative would be less than significant and similar to the impacts of the proposed project.

Biological Resources

Under this alternative, the majority of significant impacts to biological resources would be avoided since the alternative site and its surroundings are developed. Like the proposed project, removal of vegetation and trees could result in significant but mitigable impacts to nesting birds. Impacts to biological resources would be significant but mitigable and reduced substantially from the proposed project.

Greenhouse Gas Emissions

Similar to the discussion of air quality impacts for this alternative, GHG emissions would be substantially the same as for the proposed project given similar construction activity would occur and operations would be the same. Impacts would be significant and unavoidable.

Noise and Vibration

This alternative would avoid the significant and unavoidable cumulative impacts associated with vibration due to the site's distance from the adjacent roadway and potential future trolley alignment. Similar construction noise and vibration activities when compared to the project would occur assuming the alternative site is located away from residential land uses and construction noise impacts at the

MHPA would be avoided. The significant and mitigable impacts associated with land use compatibility would remain given the transportation noise levels in the KMCP area.

Transportation

No substantial change in transportation impacts would occur under the Project Location Alternative. The office building would accommodate the same number of employees and same District services, thereby generating the same number of vehicle trips and VMT. The alternative site would be located in proximity to public transit options and freeways, and this alternative would be consistent with the Regional Plan. Changes in the distribution of trips would occur given the alternative site; however, no change in the significance of transportation impacts is anticipated occur. Impacts related to transportation would be less than significant and similar to those that would occur for the proposed project.

Conclusion

The Project Location Alternative would avoid the significant and mitigable impacts to biological resources within the MHPA (sensitive habitats, wetlands, local policies protecting biological resources, and conservation plans) and impacts to nesting birds would remain the same as the project impacts. This alternative would also avoid the significant and unavoidable cumulative impact associated with vibration exposure. No change to the significant and unavoidable cumulative impacts associated with aesthetics (visual character and quality) or GHG emissions would occur as the components of the alternative would be substantially the same as the proposed project. Impacts regarding noise-land use compatibility would generally be the same as the proposed project and mitigation would still be required. Less than significant impacts associated with air quality and transportation would occur for both the project and this alternative.

The Project Location Alternative would meet all four of the project objectives, given the same project components would be created and the site would remain in close proximity to transit and freeways. The District would need to acquire a new property in order to achieve this alternative but would be able to achieve all four of the project objectives with acquisition of the project site.

8.2.4 Environmentally Superior Alternative

The CEQA Guidelines require the identification of an environmentally superior alternative among the alternatives analyzed in an EIR, which is typically selected based on an ability to avoid or substantially reduce significant environmental effects associated with the project. CEQA Guidelines Section 15126.6(e)(2) also requires that if the No Project Alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on a comparison of the overall environmental impacts for the described alternatives, the No Project Alternative is identified as the environmentally superior alternative. This alternative would not result in any contribution to significant and unmitigable cumulative impacts related to aesthetics or noise and vibration, which would occur with the proposed project. The significant but mitigable impacts to biological resources would also be avoided. The No Project Alternative, however, does not meet any of the project objectives.

Of the remaining alternatives, the environmentally superior alternative is the Reduced Project Alternative. This alternative would meet all of the project objectives, although to a lesser degree than the proposed project. It would also avoid the significant and unmitigable cumulative aesthetics impacts and reduce the severity of the significant and unmitigable cumulative GHG emissions impact.

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10.0 LIST OF PREPARERS

This EIR was prepared by HELIX Environmental Planning of La Mesa, California. The following HELIX staff members and subconsultants contributed to this document. The agencies and organizations listed below were contacted during the preparation of the EIR.

10.1 HELIX Environmental Planning (EIR)

Tim Belzman	Principal Planner
Shelby Bocks	Environmental Planner/Air Quality Specialist/EIR preparer
Molly Ryan	Environmental Planner/EIR preparer
Victor Ortiz	Senior Air Quality Specialist
Julie McCall	Principal Planner/Quality Assurance Review
Rebecca Kress	GIS Specialist
Ana Topete	Word Processing

10.2 CR Associates (Transportation Analysis)

Phuong Ngyuen, PE	Senior Transportation Engineer
Cristian Belmudez	Traffic Engineer

10.3 San Diego Unified School District

Paul Garcia-Craivanu	Civil/Environmental Project Coordinator

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Appendix A

Notice of Preparation and Written Comments

NOTICE OF PREPARATION OF A FOCUSED ENVIRONMENTAL IMPACT REPORT FOR THE G.W. SMITH EDUCATION CENTER PROJECT

October 27, 2023

Introduction: The San Diego Unified School District (District) will be the Lead Agency and will prepare a Focused Environmental Impact Report (EIR) which tiers from the Capital Improvement Program (CIP) Final Program EIR in accordance with the California Environmental Quality Act (CEQA) for the George Walker (G.W.) Smith Education Center Project (Proposed Project). The District is soliciting public and agency input on the scope and content of the environmental information to be contained in the Focused EIR. The project description, location, and possible environmental effects of the proposed project are described below.

Due to the time limits mandated by state law, your comments must be sent no later than 30 days after receiving this notice. Comments regarding the scope of the environmental analysis within the Subsequent EIR will be accepted until November 27, 2023. Comments can be sent electronically via email or through regular mail to the contact information provided below.

Project Title: G.W. Smith Education Center Project

Project Applicant: San Diego Unified School District

Project Location: The District proposes to construct a new administrative campus on a 7.8-acre site located at 9330 Balboa Avenue, San Diego, CA 92123, in the City's Kearny Mesa Community Plan (KMCP) area. The project site is located at the northwest corner of the Balboa Avenue/Ruffin Road intersection on a developed site (Assessor Parcel Number 369-161-06) that contains an existing two-story building encompassing approximately 150,000 square feet (SF) and associated surface parking and landscaping (Figure 3, Project Site Location). The project site is relatively flat at an elevation of approximately 435 feet above mean sea level. Land uses surrounding the project site include open space within the City's Multi-Habitat Planning Area (MHPA) to the north, offices to the east and south, and a military facility to the west.

Project Description: The District is proposing building renovations and construction of a new administrative facilities that would be implemented in two phases. The first phase would entail construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements. The proposed parking garage would be constructed in the northwestern portion of the site and would include five levels with a total area of approximately 180,000 SF to accommodate approximately 500 parking spaces. The administration building would consist of the renovated existing 150,000-SF building with a new approximately 60,000-SF two-story addition on the north side of the existing building and a new entrance on the northeast side of the building. Surface parking lots would be constructed in the southern and eastern portions of the site. Proposed utility improvements include laterals and connections to existing utility infrastructure in adjacent roadways, including water, sewer, electrical, and telecommunications. An on-site stormwater system is proposed that would include a stormwater detention vault in the southwest portion of the site that would collect on-site flows and convey them to a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue.

Probable Environmental Effects: Pursuant to the CEQA Guidelines, 14 CCR Section 15063(a), the District has determined that an EIR is clearly required for the project and has elected to not

prepare an initial study. The District anticipates that the EIR will address the following topic areas: aesthetics, biological resources, energy, noise, transportation and traffic. Based on a preliminary analysis, the District has determined that impacts to the following topics would not be significant and will not be analyzed further in the EIR: agriculture/forestry resources, air quality, cultural resources, geology/soils, greenhouse gas emissions, hazards and hazardous materials, hydrology/water quality, land use/planning, mineral resources, population/housing, public services, recreation, tribal cultural resources, utilities/service systems, and wildfire.

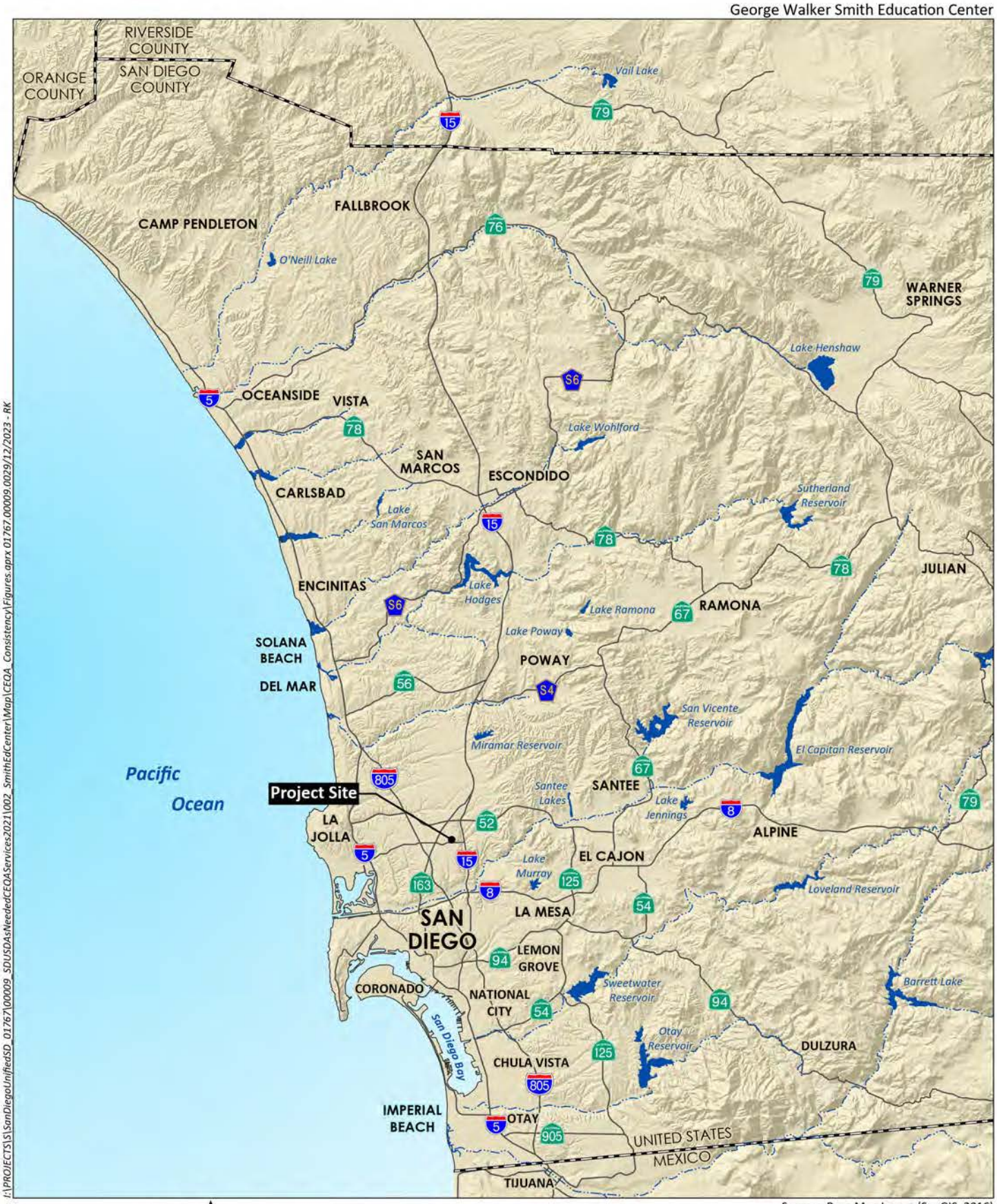
A copy of the NOP is available for review at the following locations:

- San Diego Unified School District (Physical Plant Operations Center Annex, Room 5), 4860 Ruffner Street, San Diego CA 92111; and
- Online at: https://sandiegounified.org/departments/facilities_planning_and_construction/environmental_reviews

Pursuant to State CEQA Guidelines Section 15082(b), comments regarding the scope and content of the environmental analysis must be submitted no later than 30 days after the start of the public review period, from October 27, 2023 until November 27, 2023. Please send your comments no later than November 27, 2023 at 5 p.m. directly to:

Paul Garcia, CEQA Environmental Coordinator
San Diego Unified School District
Facilities Planning & Construction/Annex 5
4860 Ruffner Street
San Diego, CA 92111
or via email to: environmental@sandi.net
(619) 913-2999

George Walker Smith Education Center



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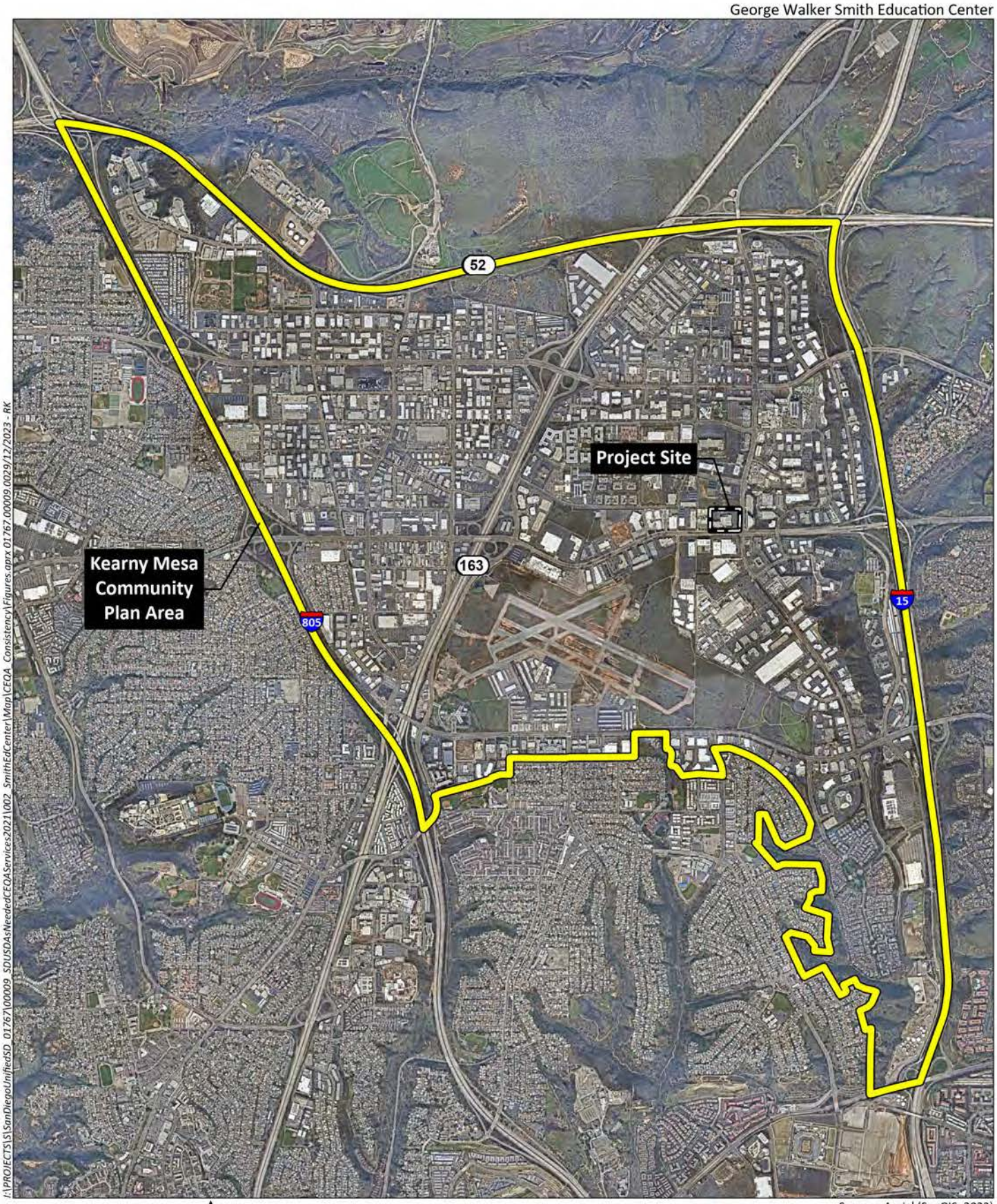
0 8 Miles

Source: Base Map Layers (SanGIS, 2016)

HELIX Environmental Planning

Regional Location

Figure 1



0 3,000 Feet

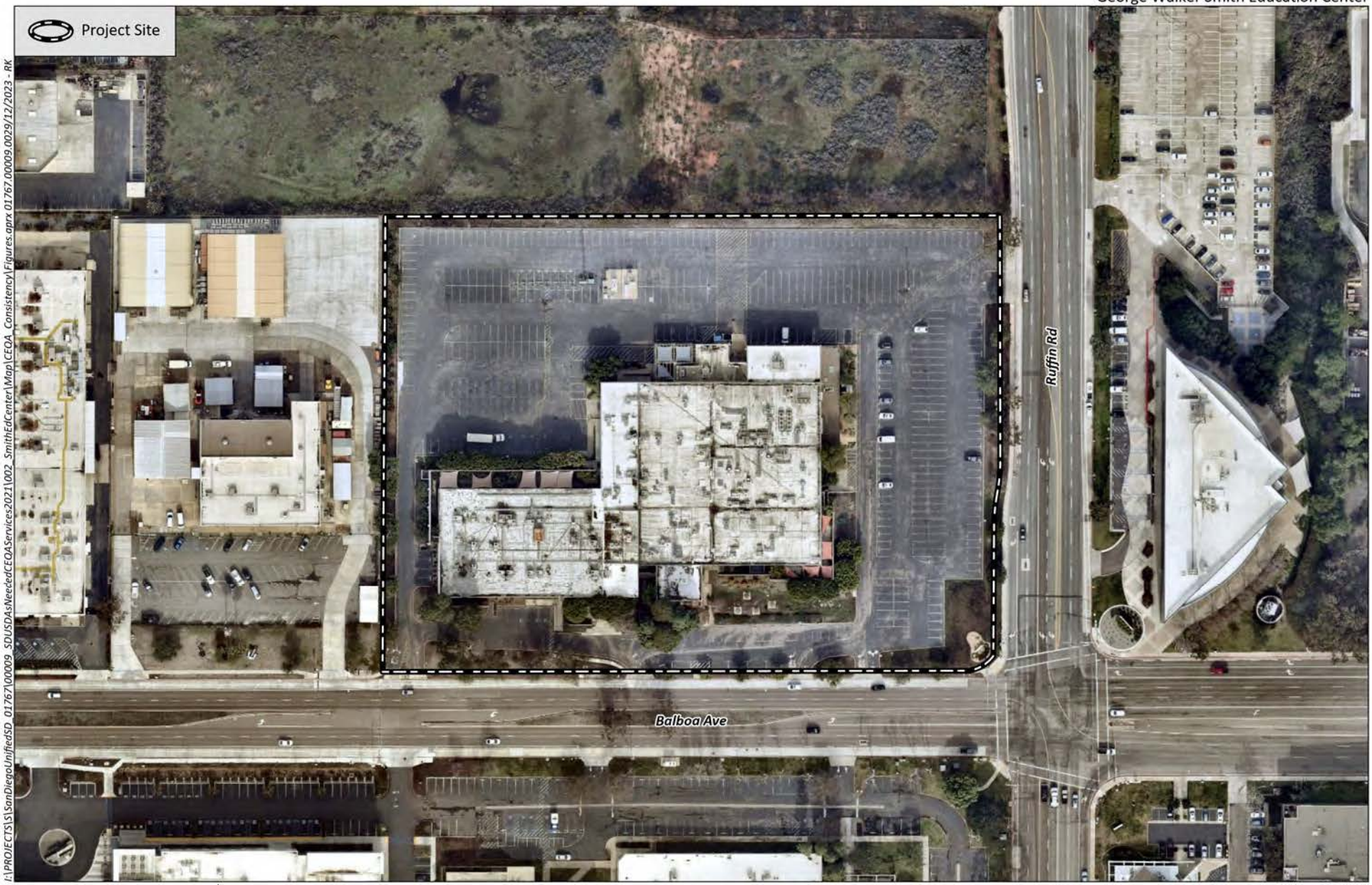
Source: Aerial (SanGIS, 2023)

HELIX Environmental Planning

Kearny Mesa Community Plan Area

Figure 2

George Walker Smith Education Center



Source: Aerial (SanGIS 2023)

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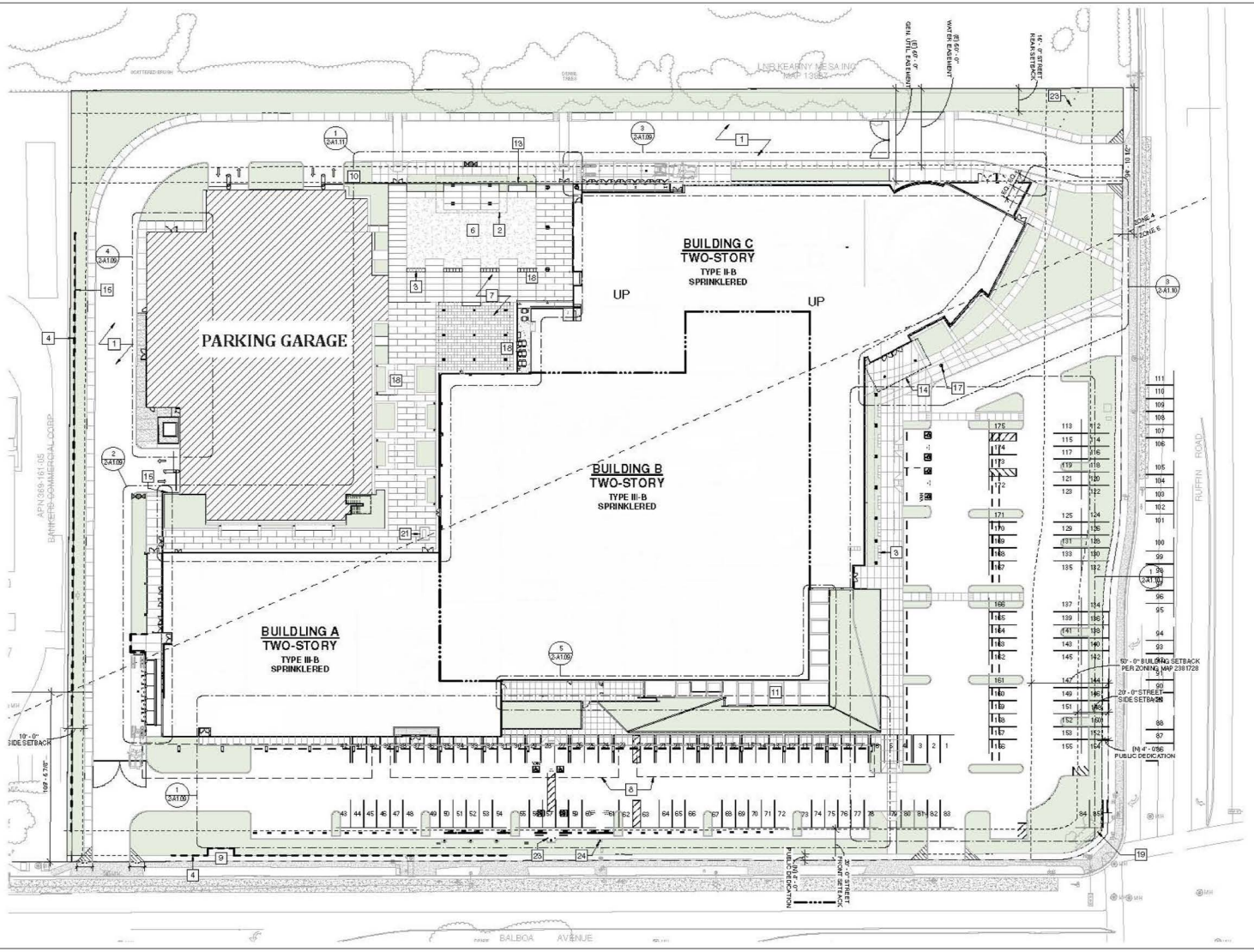
HELIX Environmental Planning

Project Site Location

Figure 3



Source: avrp Studio 2023

HELIX Environmental Planning

Site Plan

Figure 4

Source: avrp Studio 2023

Project Rendering

Figure 5

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

October 31, 2023

Paul Garcia-Craivanu
San Diego Unified School District
4860 Ruffner Street, Annex 5
San Diego, CA 92111

Re: 2023100817, George Walker (G.W.) Smith Education Center Project, San Diego County

Dear Mr. Garcia-Craivanu:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

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Appendix B

Initial Study

HELIX Environmental Planning

G.W. Smith Education Center Project

Initial Study

December 2023 | 01767.00009.003

Prepared for:

San Diego Unified School District
4860 Ruffner Street
San Diego, CA 92111

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

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Table of Contents

Acronyms and Abbreviations

ALUCP	Airport Land Use Compatibility Plan
BMP	best management practice
CAP	Climate Action Plan
CBC	California Building Code
CEQA	California Environmental Quality Act
City	City of San Diego
CY	cubic yards
District	San Diego Unified School District
EIR	Environmental Impact Report
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
IS	Initial Study
KMCP	Kearny Mesa Community Plan
MHPA	Multi-Habitat Planning Area
MRZ	Mineral Resource Zone
NPDES	National Pollutant Discharge Elimination System
SDMC	San Diego Municipal Code
SF	square feet
SWPPP	Storm Water Pollution Prevention Plan
VMT	vehicle miles traveled
VPHCP	Vernal Pool Habitat Conservation Plan

1.0 Introduction

The San Diego Unified School District (District), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this initial study (IS) to evaluate the potential environmental impacts associated with the George Walker (G.W.) Smith Education Center (project). The purpose of the IS is to focus the scope of the environmental analysis for the Environmental Impact Report (EIR). The content and format of this report are designed to meet the requirements of CEQA. This IS identifies the potentially significant environmental impacts of the proposed project to support the decision to prepare an EIR.

1.1 Initial Study Information Sheet

1.	Project title:	G.W. Smith Education Center Project
2.	Lead agency name and address:	San Diego Unified School District 4100 Normal Street, San Diego, CA 92103
3.	Contact person and phone number:	Paul Garcia-Craivanu (619) 913-2999
4.	Project location:	9330 Balboa Ave, San Diego, CA 92123
5.	Project sponsor's name and address:	See Item 2
6.	General plan designation:	Industrial and Technology Park
7.	Zoning:	Light Industrial (IL-2-1)

8. Description of project:

The District proposes to construct a new administrative campus on a 7.8-acre site located at 9330 Balboa Avenue in the Kearny Mesa Community Plan (KMCP) area in the City of San Diego (City). The project proposes building renovations and construction of a new administrative campus that would be implemented in two phases. The first phase would entail construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements. The proposed parking garage would be constructed in the northwestern portion of the site and would include five levels with a total area of approximately 180,000 square feet (SF) to accommodate approximately 500 parking spaces. The administration building would consist of the renovated existing 150,000-SF building with a new approximately 60,000-SF two-story addition on the north side of the existing building and a new entrance on the northeast side of the building. Surface parking lots would be constructed in the southern and eastern portions of the site.

Access would be provided via two driveways along Balboa Avenue and two driveways along Ruffin Road. An access road to the proposed parking garage would be provided along the northern and western portions of the site. Landscaping would be installed along the roadway frontages, within the surface parking lots, and around the new administrative building and parking garage. Hardscape improvements would be provided at building entrances, along pedestrian walkways, and at outdoor gathering spaces.

A new monument sign would be installed in the southeast corner of the site adjacent to the roadway. Retaining walls would also be constructed along portions of the southern and western perimeters of the site.

Proposed utility improvements include laterals and connections to existing utility infrastructure in adjacent roadways, including water, sewer, electrical, and telecommunications. An on-site stormwater system is proposed that would include a stormwater detention vault in the southwest portion of the site that would collect on-site flows and convey them to a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue.

Project construction would occur in two phases for an overall construction duration of 20 months. The first phase is anticipated to begin in February 2024 with a completion date of March 2025 for an estimated duration of 14 months. Construction of the second phase is expected to start in December 2024 and finish in September 2025, for an estimated duration of 10 months. Grading would require 1,820 cubic yards (CY) of cut material and 13,807 CY of fill, resulting in an import of 11,987 CY. Maximum cut depths would be 10.5 feet and maximum fill heights would be 5 feet. Manufactured slopes would have a maximum 2:1 gradient ratio.

9. Surrounding land uses and setting:

Land uses surrounding the project site include open space within the City's Multi-Habitat Planning Area (MHPA) to the north, offices to the east and south, and a military office facility to the west. The Montgomery-Gibbs Executive Airport is located approximately 0.4 mile southwest of the project site.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement:

    - Office of the Division of State Architect (California Code of Regulations Title 24 compliance)
    - City of San Diego (Public right-of-way and traffic control permits)
    - Regional Water Quality Control Board (RWQCB; National Pollutant Discharge Elimination System permit)
    - Federal Aviation Administration (FAA; Determination of No Hazard)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Outreach to Native American tribes traditionally and culturally affiliated with the project area will occur during the environmental scoping and review process.

1.2 Environmental Factors Potentially Affected

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

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

1.3 Determination

On the basis of this initial evaluation:

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

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

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

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

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

Signature	Date
Printed Name	For

2.0 Environmental Initial Study Checklist

The lead agency has defined the column headings in the environmental checklist as follows:

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

B. "Less Than Significant with Mitigation Incorporated" applies where the inclusion of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." All mitigation measures are described, including a brief explanation of how the measures reduce the effect to a less than significant level. Mitigation measures from earlier analyses may be cross-referenced.

C. "Less Than Significant Impact" applies where the project does not create an impact that exceeds a stated significance threshold.

D. "No Impact" applies where a project does not create an impact in that category. "No Impact" answers do not require an explanation if they are adequately supported by the information sources cited by the lead agency which show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project specific screening analysis).

The explanation of each issue identifies the significance criteria or threshold used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significance. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [CEQA Guidelines Section 15063(c)(3)(D)]. Where appropriate, the discussion identifies the following:

a) Earlier Analyses Used. Identifies where earlier analyses are available for review.

b) Impacts Adequately Addressed. Identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Incorporated," describes the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

I. Aesthetics

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:					
a)	Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☒	☐	☐	☐
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

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

Potentially Significant Impact. The project's proposed parking structure would be taller than the existing building on the site and could result in a substantial adverse effect on a scenic vista. This is considered a potentially significant impact and impacts to scenic vistas will be analyzed in the EIR.

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

Potentially Significant Impact. Though the proposed project is not located adjacent to a scenic highway, potential impacts to scenic resources have not been evaluated. As such, impacts to scenic resources are considered potentially significant and will be further evaluated in the EIR.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Potentially Significant Impact. The project's proposed parking structure would be taller than the existing building on the site and has the potential to degrade the existing visual character or quality of public views of the site and its surroundings. In addition, the project is in an urbanized area and conflicts with zoning regulations have not been evaluated. Impacts to visual character and quality and the project's consistency with zoning regulations will be analyzed in the EIR.

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

Potentially Significant Impact. The project proposes a new parking structure and building addition that would require new exterior lighting. In addition, headlights associated with use of the parking structure may generate a new source of light on the site. Impacts to day or nighttime views as a result of new sources of light and glare are considered potentially significant and will be analyzed in the EIR.

II. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non- forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the Final EIR (FEIR) prepared for the KMCP Update (City 2020), the KMCP area does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is developed with non-agricultural uses and mapped as Urban and Built-Up Land (California Department of Conservation 2018). Therefore, the project would not convert Farmland to a non-agricultural use. No impact would occur and no further analysis in the EIR is required.

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

No Impact. The Williamson Act applies to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland or at least 40 acres of land not designated as Prime Farmland. The purpose of the act is to preserve agriculture and open space lands by discouraging premature and unnecessary conversion to urban uses. The project site is zoned as Light Industrial (IL-2-1) and does not allow for agricultural land uses. As described in the KMCP FEIR (City 2020), no agriculturally zoned areas or lands under Williamson Act contracts are located in the KMCP area, including the project site. The proposed project would not result impacts to agricultural zoning and no further analysis in the EIR is required.

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

No Impact. The project site is developed with an office building and does not contain forestlands, timberlands, or timberland zoned Timberland Production. Moreover, there is no land zoned as forest land or timberland that exists within the project site or within its vicinity (City 2020). Therefore, the project would not conflict with existing zoning for or cause a rezoning of forest land, timberland, or timberland zoned Timberland Production. The proposed project would have no impact to forest land or timberlands and no further analysis in the EIR is required.

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

No Impact. As there are no forest lands within the KMCP area (City 2020), which includes the project site, the project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur and no further analysis in the EIR is required.

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

No Impact. The project site is developed and is not used for agricultural or forest land purposes under existing conditions. No impact would occur and no further analysis in the EIR is required.

III. Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

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

Potentially Significant Impact. The project would result in new office space with new vehicle trips that would generate emissions during construction and operation. The project's consistency with the assumptions contained in the applicable air quality plans has not been assessed. In addition, proposed project emissions will be quantified in a study for the EIR. Impacts are considered potentially significant and will be addressed in the EIR.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?

Potentially Significant Impact. Project-specific emissions have not been assessed and will be quantified in a study for the proposed project EIR. Impacts are considered potentially significant and will be addressed in the EIR.

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

Potentially Significant Impact. The project would result in new sources of emissions during both construction and operation. Some pollutant emissions are hazardous and the project has the potential to expose sensitive receptors to substantial pollutant concentrations. Impacts are considered potentially significant and will be addressed in the EIR.

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

Potentially Significant Impact. The project's potential odor-generating activities during construction and operation have not been evaluated. Impacts are considered potentially significant and will be addressed in the EIR.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☒	☐	☐	☐

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Potentially Significant Impact. While the project site is completely developed and is not anticipated to support special status species, it is adjacent to MHPA land and could therefore impact a candidate, sensitive, or special status species or its habitat. Impacts are considered potentially significand and will be analyzed in the EIR.

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

Potentially Significant Impact. While the project site is completely developed and does not contain sensitive vegetation communities, it is adjacent to MHPA land and could therefore impact sensitive habitat. Impacts are considered potentially significant and will be analyzed in the EIR.

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

Potentially Significant Impact. While the project site is completely developed and does not contain wetlands, it is adjacent to a portion of the MHPA that contains vernal pools (City 2019). Therefore, the project could adversely affect state or federally protected wetlands. Impacts are considered potentially significand and will be analyzed in the EIR.

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

Potentially Significant Impact. The proposed project is adjacent to MHPA land and could therefore impact wildlife movement. Impacts are considered potentially significand and will be analyzed in the EIR.

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

Potentially Significant Impact. The proposed project is adjacent to MHPA land and street trees. Therefore, the project could conflict with local policies or ordinances protecting biological resources. Impacts are considered potentially significand and will be analyzed in the EIR.

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

Potentially Significant Impact. The proposed project is adjacent to MHPA land, which is conservation land established under the City's local habitat conservation plan, the Multiple Species Conservation Program Subarea Plan. Impacts are considered potentially significant and will be analyzed in the EIR.

V. Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. The KMCP FEIR included an assessment of built environment resources in the KMCP area with the potential to qualify as eligible historic resources (Appendix G to the KMCP FEIR; City 2020). The existing building on the project site is not one of the 21 potential individual historic resources within the KMCP area identified in the FEIR as being eligible for the San Diego Register, California Register of Historic Resources, or National Register of Historic Places. As the project would not alter a historic resource, the project would have no impact to the significance of historical resources and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site is mapped as having low cultural sensitivity in the KMCP (FEIR Figure 5.5.1; City 2020) and there are no recorded archaeological resources within the project site. Prior development on the project site and the limited depth of excavation currently proposed makes it unlikely that archaeological resources would be disturbed by the project. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. No religious or sacred sites or human remains are known to occur beneath the project site. If unanticipated human remains are uncovered during project construction, compliance with California Health and Safety Code Section 7052 procedures related to such finds would be required. Therefore, impacts to human remains would be less than significant and no further analysis in the EIR is required.

VI. Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

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

Less Than Significant Impact. The project would require the use of energy for equipment fueling during construction, vehicle trips during construction and operation, and operational building electricity use for heating, cooling, lighting, and other operations. The project would not require unusual construction practices that would result in wasteful, inefficient, or unnecessary consumption during construction. As the project is consistent with its designated land use, vehicle miles traveled (VMT) increases beyond those assumed to occur in the KMCP area are not anticipated and energy required to fuel project-generated trips would not increase from those anticipated in the KMCP FEIR. The proposed building would be required to be constructed to meet current CALGreen and California Energy Code standards for energy efficiency. Thus, project operation would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project is proposed within a transit priority area, which is consistent with development patterns planned in the San Diego Association of Governments Regional Plan, City General Plan, KMCP, and City Climate Action Plan (CAP). The project would be constructed to meet current CALGreen and California Energy Code requirements for building energy efficiency, including the provision of photovoltaic systems on-site. The project would not conflict with other plans for renewable energy or energy efficiency. Impacts would be less than significant and no further analysis in the EIR is required.

VII. Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

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

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

No Impact. The project site is not underlain by active or potentially active earthquake faults; therefore, fault rupture is not anticipated to occur at the project site and no adverse effects associated with fault

rupture would occur (Ninyo & Moore 2019a). No impact would occur and no further analysis in the EIR is required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is located within Geologic Hazard Category 51, which is underlain by terrace deposits and bedrock, and poses nominal geologic hazards (City 2020). While the project site is not underlain by active or potentially active earthquake faults, it may be subject to ground shaking during earthquakes along active faults in the region. Construction of the project would be subject to regulations including the California Building Code (CBC) and San Diego Municipal Code (SDMC), which would ensure the proposed structures do not result in substantial hazards in the event of earthquakes. Impacts would be less than significant and no further analysis in the EIR is required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Based on the dense deposits underlying the project site and the lack of a shallow groundwater table, liquefaction is unlikely to occur at the project site (Ninyo & Moore 2019a). Further, construction of the project would be subject to regulations including the CBC and SDMC, which would require construction methods appropriate for the underlying geology, thereby minimizing the potential for substantial hazards related to ground failure and liquefaction. Impacts would be less than significant and no further analysis in the EIR is required.

iv. Landslides?

No Impact. The project site is located within Geologic Hazard Category 51, which is underlain by terrace deposits and bedrock, and poses nominal geologic hazards. The site is also relatively flat and not located within an area that is anticipated to be susceptible to landslides (Ninyo & Moore 2019a). The project also does not propose creation of substantial slopes. No impact would occur and no further analysis in the EIR is required.

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

Less Than Significant Impact. The removal of hardscape on the project site would result in the potential for erosion and topsoil loss. Compliance with National Pollutant Discharge Elimination System (NPDES) and City requirements related to implementation of construction best management practices (BMPs) identified in a Storm Water Pollution Prevention Plan (SWPPP) would reduce the potential for substantial erosion or topsoil loss to occur during project construction. Once construction of the project is complete, structures and landscaping on-site would stabilize soils and prevent future erosion and topsoil loss. Impacts would be less than significant and no further analysis in the EIR is required.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. The geotechnical report prepared for the project did not identify the project site as being geologically unstable (Ninyo & Moore 2019a). Based on the dense deposits underlying the project site and the lack of a shallow groundwater table, liquefaction and settlement are unlikely to occur at the project site. In addition, the site is generally flat and landslides are not anticipated to occur at the site (Ninyo & Moore 2019a). With implementation of site-specific

recommendations from the project's geotechnical investigation, as required by the SDMC, and compliance with building codes, the project would not result in landslide, lateral spreading, subsidence, liquefaction, or collapse as a result of the underlying geologic unit. Impacts would be less than significant and no further analysis in the EIR is required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Preliminary testing of soils on the project site indicated that the project site is underlain by soils with very low expansion potential. The project would be constructed in accordance with CBC recommendations for building foundations within these soils. With implementation of site-specific recommendations from geotechnical investigations, as required by the SDMC, and compliance with building codes, impacts related to geologic instability would be less than significant. No further analysis in the EIR is required.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Sewer infrastructure is available at the project site and connects to the existing building. The proposed project would also connect to the City's sewer infrastructure and no septic tanks or alternative waste water disposal systems are proposed by the project. Therefore, no impact would occur and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site is mapped as having moderate paleontological sensitivity in the KMCP FEIR (KMCP FEIR Figure 7-1; City 2020). SDMC Section 142.0151 requires paleontological monitoring during grading in areas of moderate paleontological sensitivity where grading extends 10 feet or greater in depth and involves 2,000 CY or more of material. The project proposes grading involving 1,820 CY of cut material and 13,807 CY of fill, with maximum cut depths of 10.5 feet. Therefore, the project would be required to implement paleontological monitoring in accordance with the City's General Grading Guidelines for Paleontological Resources, which would prevent project grading from destroying paleontological resources that may underly the site. Impacts would be less than significant and no further analysis in the EIR is required.

VIII. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

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

Potentially Significant Impact. Project-specific greenhouse gas (GHG) emissions and the project's consistency with the City's CAP have not been evaluated. Impacts are therefore considered potentially significant and the project's consistency with the City's CAP will be analyzed in the proposed project EIR.

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

Potentially Significant Impact. The project's consistency with applicable plan, policies, and regulations related to GHG emissions has not been evaluated. Impacts are therefore considered potentially significant and consistency with the applicable plans, including the City's CAP, will be analyzed in the proposed project EIR.

IX. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

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

Less Than Significant Impact. The project consists of an administrative office campus, which is not a land use that would involve routine handling of hazardous materials, substances, or wastes. Standard cleaning products and maintenance supplies would be used on the site during operation. Construction of the project would also require the use of standard hazardous materials, including fuels, solvents, and coatings. The project would be required to comply with applicable regulations related to hazardous materials, which would prevent significant hazards to the public and environment during use of such materials. Impacts would be less than significant and no further analysis in the EIR is required.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. As described above, the project would use widely available hazardous materials during construction and operation of the project. The project's office land use would not require large quantities of hazardous materials to be stored on-site or routinely transported. Regardless, the project would be required to comply with applicable regulations related to hazardous materials, which would prevent upset and accident conditions leading to significant hazards. Impacts would be less than significant and no further analysis in the EIR is required.

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

No Impact. There are no schools within one-quarter mile of the project site. The nearest school is located approximately 0.3 mile to the northeast at the Chinese Bilingual Preschool. The project consists of an administrative office campus, which is not a land use that would involve routine handling of hazardous materials, substances, or wastes. Regardless, the project would be required to comply with applicable regulations related to hazardous materials. No impact would occur and no further analysis in the EIR is required.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. The project site has a closed Cleanup Program Case listing for petroleum impacted soils as a result of underground storage tanks on-site associated with former fueling and maintenance areas. These soils were tested to determine their potential hazard to proposed development. Testing indicated that petroleum-impacted soils are present at depths from 6.5 to 18 feet below the ground surface and testing for contaminants of concern did not exceed human health screening levels for commercial and industrial land uses (Ninyo & Moore 2019b; Ninyo & Moore 2019c). Therefore, the project would not create a significant hazard to the public or environment based on the presence of hazardous materials. Impacts would be less than significant and no further analysis in the EIR is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The project site is within Airport Influence Area Review Area 1 and Safety Zones 4 and 6 for the Montgomery-Gibbs Executive Airport and within Airport Influence Area Review Area 2 for Marine Corps Air Station Miramar. Safety Zone 4 is the Outer Approach/Departure Zone and Safety Zone 6 is the Traffic Pattern Zone (San Diego International Airport 2023). The project is subject to the land use intensity regulations and other Airport Land Use Combability Plan (ALUCP) policies for these zones to ensure the project would not expose people working in the proposed building to aircraft accidents. Such regulations include a limited floor area ratio within Safety Zone 4, which can be doubled if Risk Reduction Policy Objectives are included in the project. The maximum building height is also restricted within Safety Zone 4 and proposed structures would not exceed the maximum height limit for the site. Compliance with all applicable ALUCP policies would ensure the project does not result in a safety hazard related to nearby airports for people working at the site. The project site is outside of the noise contours for the nearby airports and would not expose people working at the site to excessive noise. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. According to the KMCP FEIR (City 2020), the San Diego County Operational Area Emergency Plan identifies I-15, SR 52, SR 163, and I-805 as emergency evacuation routes in the vicinity of the KMCP area. The project would be constructed on an existing developed site with a similar use and does not propose components within evacuation routes. On-site access would accommodate

emergency response vehicles in accordance with City requirements. The proposed project would not interfere with emergency response or evacuation plans. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site is partially within a Very High Fire Hazard Severity Zone (City 2009). Therefore, the project would be required to comply with the City's brush management regulations (SDMC Section 142.0412) and provide defensible space between the proposed structures and vegetation north of the site. The project would also be constructed in accordance with applicable building code requirements, including the California Fire Code. As such, the project would not expose people of structures to significant risks involving wildland fires. Impacts would be less than significant and no further analysis in the EIR is required.

X. Hydrology and Water Quality

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

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

Less Than Significant Impact. The project would be subject to the NPDES Construction General Permit requirement to prepare a SWPPP and implement BMPs during construction. Implementation of such BMPs would ensure the project is compliant with applicable water quality standards. During operation, runoff from the project site would be treated by an on-site biofiltration system in order to comply with the City's stormwater permits and regulations. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site consists of a developed lot that is almost entirely covered with impervious surfaces. No substantial change in the amount of impervious surfaces on the site would occur after project implementation and, as such, groundwater recharge conditions would not be substantially affected. Project construction is not anticipated to encounter or impact groundwater, and the project would not require groundwater resources during operation. Therefore, the project would not deplete groundwater supplies, or interfere with groundwater recharge. Impacts would be less than significant and no further analysis in the EIR is required.

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

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The project site is currently developed with impervious surfaces that drain to the public stormwater system and implementation of the project would not result in a substantial change in the site's drainage pattern. As previously described, the project would implement BMPs during the construction period that would prevent substantial erosion or siltation. The project would be subject to NPDES and City requirements related to stormwater treatment and drainage and would provide a stormwater capture and treatment system on-site. Therefore, the project would not result in substantial erosion or siltation. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site is currently developed with impervious surfaces and implementation of the project would result in a similar area of impervious surfaces. Therefore, the rate and amount of surface runoff from the site would not change substantially. In addition, the project would provide a stormwater capture and treatment system in accordance with City requirements, thus preventing substantial off-site runoff. Impacts would be less than significant and no further analysis in the EIR is required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff?

Less Than Significant Impact. The project site is currently developed with impervious surfaces and implementation of the project would result in a similar area of impervious surfaces contributing a similar quantity of runoff to the City stormwater system. Existing regulations, including the Construction General Permit, Industrial Stormwater General Permit, City Stormwater Standards Manual, the City's Jurisdictional Runoff Management Plan, and the Municipal Separate Storm Sewer System permit, protect water quality during both construction and operation. The project would be subject to these requirements related to stormwater treatment and drainage and would not contribute polluted runoff. Impacts would be less than significant and no further analysis in the EIR is required.

iv. Impede or redirect flood flows?

No Impact. The project site is not within a flood hazard area (Federal Emergency Management Agency [FEMA] 2012). Therefore, flood flows would not be impeded or redirected by the proposed project. No impact would occur and no further analysis in the EIR is required.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. The project is not within a mapped flood, tsunami, or seiche zone (FEMA 2012; City 2020). Therefore, no project inundation that would risk release of pollutants is anticipated at the site. No impact would occur and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project is not subject to a sustainable groundwater management plan and would not result in a substantial alteration in impervious surface on the site. The project would comply with the applicable water quality control plan via compliance with NPDES requirements related to stormwater treatment and discharge that prevent water quality degradation in the region. Impacts would be less than significant and no further analysis in the EIR is required.

XI. Land Use and Planning

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Would the project physically divide an established community?

No Impact. The project proposes redevelopment of an existing office building consistent with the KMCP land use designation for the project site (City 2020). The site is within an urban area and the project does not propose linear components that would physically divide an established community. No impact would occur and no further analysis in the EIR is required.

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

Less Than Significant Impact. The proposed project is consistent with the planned land use of Industrial and Technology Park designated in the KMCP for the site. The project would provide employment in proximity to transit stations along Ruffin Road and Balboa Avenue consistent with the overall land use goals of the KMCP. As described throughout this IS, the project would be required to comply with applicable environmental plans and policies including the MHPA Land Use Adjacency Guidelines, City CAP Regulations, and ALUCP policies. Further discussion of the project's consistency with the MHPA Land Use Adjacency Guidelines, City CAP Regulations will be provided in the EIR under the applicable resource sections. Impacts would be less than significant and no further analysis in the EIR is required.

XII. Mineral Resources

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

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The project site is mapped as Mineral Resource Zone (MRZ)-1 and bordered to the east by an area mapped as MRZ-2 (California Geological Survey 2017). MRZ-1 indicates there is little likelihood for mineral resource presence and MRZ-2 is mapped in areas with known or high likelihood to contain significant mineral resources. Areas with an MRZ-2 classification are already developed or maintained as open space under the KMCP. Existing development within and surrounding the project site prevents the extraction of mineral resources within this area. Therefore, redevelopment within the project site would not result in loss of availability of a known mineral resource. No impact would occur and no further analysis in the EIR is required.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The project site is not delineated for mineral resource recovery on a local general plan, specific plan, or other land use plan. No impact would occur and no further analysis in the EIR is required.

XIII. Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐

a) Would the project 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?

Potentially Significant Impact. Construction and operation of the project would require the use of noise-generating equipment. Resulting noise levels have not been evaluated and the project has the potential to generate increases in the ambient noise level or conflict with a City regulation related to

noise. Impacts are considered potentially significant and potential increases in ambient noise levels will be analyzed in the EIR.

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. The project would require vibration-generating equipment during construction, the effect of which has not been assessed. Impacts are considered potentially significant and will be analyzed in the EIR.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Potentially Significant Impact. As previously described, the project site is not within noise contours for the nearby airports. Therefore, the project is not anticipated to result in the exposure of people residing or working in the project area to excessive noise. However, this impact is considered potentially significant and further analysis will be included in the proposed project EIR.

XIV. Population and Housing

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

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project does not propose a land use that would result in substantial population growth and proposes development consistent with the planned land uses in the KMCP. The additional office space provided by the project would serve the existing District community and would not induce direct or indirect population growth. No impact would occur and no further analysis in the EIR is required.

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

No Impact. The project site contains an existing office building, which would be expanded by the proposed project. There is no housing on the project site that would need to be replaced as a result of the project. No impact would occur and no further analysis in the EIR is required.

XV. Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

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

a) Fire protection?

No Impact. The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow and require new or expanded public facilities including fire protection. No impact would occur and no further analysis in the EIR is required.

b) Police protection?

No Impact. The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow and require new or expanded public facilities including police protection. No impact would occur and no further analysis in the EIR is required.

c) Schools?

No Impact. The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow and require new or expanded public facilities including schools. No impact would occur and no further analysis in the EIR is required.

d) Parks?

No Impact. The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow and require new or expanded public facilities including parks. No impact would occur and no further analysis in the EIR is required.

e) Other public facilities?

No Impact. The project would accommodate District employees but would not create a substantial number of new jobs such that population in the KMCP area would grow and require new or expanded public facilities not previously mentioned. No impact would occur and no further analysis in the EIR is required.

XVI. Recreation

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

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project would accommodate District employees but would not create a substantial number of new jobs or any additional residences. The use of existing recreational facilities would not increase as a result of the proposed project. No impact would occur and no further analysis in the EIR is required.

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

No Impact. The project does not propose recreational facilities or population growth necessitating the construction or expansion of recreational facilities. No impact would occur and no further analysis in the EIR is required.

XVII. Transportation

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

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

Potentially Significant Impact. Impacts to circulation are not currently known and therefore considered potentially significant. A study of project impacts to the circulation system will be conducted and included in the proposed project EIR.

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

Potentially Significant Impact. CEQA Guidelines Section 15064.3(b) requires an assessment of VMT as the applicable transportation metric. A study of project VMT and its consistency with VMT anticipated in the KMCP FEIR will be conducted. Impacts are considered potentially significant and further analysis will be included in the proposed project EIR.

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

Potentially Significant Impact. Impacts to circulation, including an evaluation of the design of site access points, are not currently known and therefore considered potentially significant. A study of such impacts will be conducted and included in the proposed project EIR.

d) Would the project result in inadequate emergency access?

Potentially Significant Impact. The project is not anticipated to result in inadequate emergency access, as it would be constructed in accordance with applicable requirements. However, this impact is considered potentially significant and further analysis will be included in the proposed project EIR.

XVIII. Tribal Cultural Resources

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

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

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. The existing building on the project site is not one of the 21 potential individual historic resources within the KMCP area identified in the FEIR as being potentially eligible for listing in the San Diego Register, California Register of Historic Resources, or National Register of Historic Places (City 2020). No other resources meeting the definition of historical resources is known to occur on the project site. No impact would occur and no further analysis in the EIR is required.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant Impact. The project site is mapped as having low cultural sensitivity (as identified in KMCP FEIR Figure 5.5.1;City 2020) and there are no recorded archaeological resources within the project site, including those of tribal significance. No religious or sacred sites or human remains are anticipated to occur beneath the project site. The project is not anticipated to result in impacts to tribal cultural resources given none are anticipated to occur within the site. Impacts would be less than significant and no further analysis in the EIR is required.

XIX. Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

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

No Impact. The project site is served by existing stormwater, sewer, water, and communication utilities. On-site stormwater upgrades proposed by the project include a subsurface stormwater detention vault

that would collect on-site flows and convey them to a biofiltration system prior to being discharged to the municipal storm drain system in Balboa Avenue. This stormwater system would accommodate the altered building area on the site; however, no new public utilities would be required as the total runoff from the site would not substantially change from existing conditions. Existing sewer and water connections on the project site would be relocated for the project but would not require upgrades to off-site sewer or water mains. No new communication system improvements would be required to serve the project. The proposed utility upgrades would occur within developed land and the potential environmental impacts have been described throughout this Initial Study. No impact would occur and no further analysis in the EIR is required.

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

Less Than Significant Impact. The proposed project is consistent with the land use designation for the site in the KMCP (City 2020). Therefore, the project is consistent with the land use assumptions used in the Water Supply Assessment and would not require water supplies beyond those projected to be used in the KMCP area. The KMCP FEIR concluded sufficient water supplies would be available to serve the planned buildout of the KMCP area under normal, dry, and multiple dry years. The project would also be constructed in accordance with current water efficiency standards for buildings and landscaping and would not use excessive amounts of water. Impacts would be less than significant and no further analysis in the EIR is required.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The project site is served by existing wastewater utilities and discharges to the City's sewer system. Existing sewer connections on the site would be relocated for the project but would not require upgrades to off-site sewer mains or treatment facilities. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. As anticipated in the KMCP FEIR, the project proposes an increase in building area which would result in additional generation of solid waste. The project would comply with applicable regulations related to solid waste such as the City's Recycling Ordinance and Construction and Demolition Debris Diversion Deposit Program Ordinance. Given compliance with such regulations, the project would not require new solid waste infrastructure or exceed solid waste standards. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project would comply with applicable regulations related to solid waste such as the City's Recycling Ordinance and Construction and Demolition Debris Diversion Deposit Program Ordinance. Impacts would be less than significant and no further analysis in the EIR is required.

XX. Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

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

Less Than Significant Impact. The proposed project is consistent with the land use designation in the KMCP FEIR and involves redevelopment of an existing office building on an existing developed site. The proposed project would not inhibit emergency access to and from the site or impair an adopted emergency response plan. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project site is partially within a Very High Fire Hazard Severity Zone (City 2009). Therefore, as identified in the KMCP FEIR, the project would be required to comply with the City's brush management regulations (SDMC Section 142.0412) and provide defensible space between the proposed structures and vegetation north of the site. The project would be constructed in accordance with current fire codes and would not exacerbate wildfire risks. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The project would be constructed on an existing developed site with an existing office land use that is served by electrical lines and other utilities. While alterations to paving, water connections, and power line connections are anticipated to be required to serve the proposed project, such modifications would not exacerbate fire risks. Impacts associated with these improvements have also been discussed throughout this IS as part of the project. Impacts would be less than significant and no further analysis in the EIR is required.

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

Less Than Significant Impact. The proposed project is located in an urbanized area on a flat parcel and is not within a designated flood zone. The project would be constructed in accordance with applicable building and engineering codes related to structures, slopes, and drainage. As such, the project is not anticipated to expose people or structures to significant risks in the event of wildlife. Impacts would be less than significant and no further analysis in the EIR is required.

XXI. Mandatory Findings of Significance

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

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

Potentially Significant Impact. As described in Section IV, the project site is adjacent to MHPA lands and has the potential to degrade biological resources, including fish and wildlife populations, plant and animal communities, and rare or endangered species. Therefore, impacts are considered potentially significant and further analysis of impacts related to biological resources will be provided in the EIR.

The project site has low cultural resources sensitivity and does not contain a historical structure. The project would be required to implement paleontological monitoring in accordance with the City's General Grading Guidelines for Paleontological Resources, which would prevent project grading from destroying paleontological resources that may underly the site. As such, no important examples of the major periods of California history or prehistory would be eliminated by the project and no further discussion of this topic will be provided in the EIR.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?

Potentially Significant Impact. As potentially significant individual impacts of the project have been identified, the project has the potential to result in cumulatively considerable impacts. A discussion of the project's potential to result in cumulatively considerable impacts will be included in the EIR.

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

Potentially Significant Impact. Potentially significant impacts related to air quality and noise have been identified in this IS; therefore, the project is considered to have potential to result in adverse effects on human beings. These topics will be discussed further in the EIR. No significant impacts related to geologic hazards, hazardous materials, or wildfire have been identified and no additional analysis related to these issues will be provided in the EIR.

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4.0 Preparers

HELIX Environmental Planning, Inc.

Tim Belzman, Principal Planner/Project Manager
Shelby Bocks, Environmental Planner
Molly Ryan, Environmental Planner

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Appendix C

Air Quality Assessment

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February 21, 2024 01767.00009.003

Mr. Paul Garcia
San Diego Unified School District
Facilities Planning and Construction Management
4860 Ruffner Street, Annex Room 5
San Diego, CA 92111

Subject: Air Quality Assessment for the G.W. Smith Education Center Project

Dear Mr. Garcia:

HELIX Environmental Planning, Inc. (HELIX) assessed air pollutant emissions resulting from the construction and operations of the George Walker (G.W.) Smith Education Center Project (project) for comparison with the thresholds contained in the Final Program Environmental Impact Report (PEIR) for the San Diego Unified School District (District) capital improvement program (CIP). This letter summarizes the findings of the assessment and provides the project-level emissions information necessary to make a determination of the project's potential impacts under the California Environmental Quality Act (CEQA).

PROJECT LOCATION AND DESCRIPTION

The proposes to construct a new administrative campus, the G.W. Smith Education Center (project), on a 7.8-acre site located at 9330 Balboa Avenue in the City of San Diego's (City's) Kearny Mesa community. The project site is located at the northwest corner of the Balboa Avenue/Ruffin Road intersection on a developed site (Assessor Parcel Number 369-161-06) that contains an existing two-story building encompassing approximately 150,000 square feet (SF) and associated surface parking and landscaping. The project site is relatively flat, with an elevation of approximately 435 feet above mean sea level. The site is designated Industrial and Technology Park in the Kearny Mesa Community Plan and is zoned Light Industrial (IL-2-1).

The project would be implemented in two phases. The first phase would entail the construction of a parking garage and site infrastructure improvements, and the second construction phase would redevelop and renovate the existing on-site building and construct other site improvements. The proposed parking garage would be constructed in the northwestern portion of the site and include five levels with a total area of approximately 180,000 SF to accommodate approximately 500 parking spaces. The administration building would consist of the renovated existing 150,000-SF building with a new

approximately 60,000-SF two-story addition on the north side of the existing building and a new entrance on the northeast side of the building. Surface parking lots would be constructed in the southern and eastern portions of the site.

Access would be provided via two driveways along Balboa Avenue and two driveways along Ruffin Road. An access road to the proposed parking garage would be provided along the northern and western portions of the site. Landscaping would be installed along the roadway frontages, within the surface parking lots, and around the new administrative building and parking garage. Hardscape improvements would be provided at building entrances, along pedestrian walkways, and at outdoor gathering spaces. A new monument sign would be installed in the southeast corner of the site adjacent to the roadway. Retaining walls would also be constructed along portions of the southern and western perimeters of the site.

Proposed utility improvements include laterals and connections to existing utility infrastructure in adjacent roadways, including water, sewer, electrical, and telecommunications. An on-site stormwater system is proposed that would include a stormwater detention vault in the southwest portion of the site that would collect on-site flows and convey them to a biofiltration system that would treat runoff before being discharged to the municipal storm drain system in Balboa Avenue.

Project construction is anticipated to begin in May 2024 and finish in December 2026, for an estimated duration of approximately 32 months. Grading would require 1,820 cubic yards (CY) of cut material and 13,807 CY of fill, resulting in an import of 11,987 CY. Maximum cut depths would be 10.5 feet, and maximum fill heights would be 5 feet. Manufactured slopes would have a maximum 2:1 gradient ratio.

METHODOLOGY AND ASSUMPTIONS

Criteria pollutant and ozone precursor emissions were assessed using the California Emissions Estimator Model (CalEEMod), Version 2022.1. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs.

The model calculates emissions of carbon monoxide (CO), particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$), sulfur dioxide (SO_2), and the ozone precursors volatile organic compounds (VOCs) and oxides of nitrogen (NO_X). The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2022). The input data and subsequent emission estimates for the project are discussed below. CalEEMod output files for the project are included in Attachment A to this letter.

Construction Emissions

Construction Phases

The construction schedule was determined based on input provided by the District and supplemented with CalEEMod defaults where appropriate. As shown in Table 1, *Anticipated Construction Schedule*, project development is assumed to start in May 2024 and is projected to end in December 2026.

The quantity, duration, and intensity of construction activity have an effect on the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. If a less intensive buildout schedule is followed during project construction, actual emissions could be less than those forecasted as fewer daily emissions would occur over a longer time interval.[1] In addition, if construction is delayed or occurs over a longer time period, and, therefore, occurs at a later date, emissions could be reduced because of a more modern and cleaner-burning construction equipment fleet mix than incorporated in CalEEMod. A complete listing of the assumptions used in the analysis and model output is provided in Attachment A to this letter.

Table 1
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period Start	Construction Period End	Construction Period Number of Working Days
Site Preparation	5/1/2024	5/1/2025	262
Grading	5/15/2024	5/15/2025	262
Demolition	2/1/2025	2/28/2025	20
Building Construction	3/1/2025	12/1/2026	457
Architectural Coating	6/1/2026	12/1/2026	132

Source: CalEEMod (assumptions and output data are provided in Attachment A).

Construction Equipment

Construction would require heavy equipment for the various construction phases. Construction equipment estimates are based on default values in CalEEMod. Table 2, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

[1] For example, if one piece of equipment takes five days to complete a task, the daily emissions would be less than if five pieces of equipment work to complete the same task in one day.

Table 2
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Site Preparation	Rubber-Tired Dozers	3
	Tractors/Loaders/Backhoes	4
Grading	Graders	1
	Excavators	1
	Tractors/Loaders/Backhoes	3
	Rubber Tired Dozer	1
Demolition	Rubber Tired Dozers	2
	Excavators	3
	Concrete/Industrial Saw	1
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Source: CalEEMod (further assumptions, including equipment horsepower, are provided in Appendix A).

Construction Vehicle Trips

Worker commute trips and vendor delivery trips were modeled based on CalEEMod defaults. Worker trips are anticipated to vary between 15 and 143 trips per day, depending on construction activity. Vendor delivery trips would entail approximately 64 trips per day during building construction. Based on the CalEEMod default haul truck capacities, exporting of materials during site preparation would require 303 loads (606 trips), importing of soil during grading would require 749 loads (1,498 trips), and exporting demolition debris would require 701 loads (1,402 trips). The CalEEMod default worker, vendor, and haul trip distances were used in the model.

Modeled Best Management Practices

The project would incorporate best management practices during construction to reduce emissions of fugitive dust. San Diego Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control states that no airborne dust shall be visible beyond the property line for more than three minutes in any 60-minute period. To ensure compliance with Rule 55, modeling included the application of water at a minimum of twice per day and limiting speeds on unpaved surfaces. Based on CalEEMod defaults, the fugitive PM_{10} and $PM_{2.5}$ control efficiency for watering two times per day is 61 percent.

Operational Emissions

Operational impacts were estimated using CalEEMod. Operational sources of emissions include area, energy, and mobile sources. Operational emissions were calculated for the earliest anticipated full year of operation—2027.

Area Sources

Area sources include emissions from landscaping equipment, the use of consumer products, and the reapplication of architectural coatings for maintenance. Emissions associated with area sources were estimated using the CalEEMod default values.

Energy Sources

Direct emissions from the burning of natural gas may result from furnaces, hot water heaters, and appliances. The project's energy use was modeled using CalEEMod defaults.

Mobile Sources

Operational emissions from mobile sources are associated with project-related vehicle trip generation and trip length. The project would generate 2,540 average daily trips based on the Institute of Transportation Engineers trip generation rate for School District Office land uses (Institute of Transportation Engineers 2021). Default trip lengths in CalEEMod for the land use type were applied to these trips. The emissions reduction measure for projects within one-half mile of a high-frequency transit station was applied to project emissions with the default modal split given the location of a high-frequency transit station adjacent to the project site.

SIGNIFICANCE CRITERIA

Thresholds used to evaluate potential air quality impacts are the same thresholds used in the Final PEIR prepared for the District CIP. Per the PEIR:

> *While SDAPCD has not developed specific thresholds of significance to evaluate construction and operation criteria pollutant impacts within CEQA documents, SDAPCD's Regulation II, Rules 20.2 and 20.3 (new source review for non-major and major stationary sources, respectively), outline AQIA [Air Quality Impact Analysis] trigger levels for criteria pollutants generated by new or modified sources. In addition, the County of San Diego recommends Screening Level Thresholds that are largely based off the AQIA trigger levels. Therefore, the District considers these AQIA trigger levels suitable for making a determination as to the significance of a project's construction and operational emissions for CEQA purposes.*

The applicable screening thresholds from PEIR Table 4.2-5 are reproduced below in Table 3, *Criteria Pollutant Significance Thresholds*.

Table 3
CRITERIA POLLUTANT SIGNIFICANCE THRESHOLDS

Air Contaminant	Emission Rate (Pounds/Day)
Volatile Organic Compounds (VOCs)	75
Nitrogen Oxides (NO_X)	250
Carbon Monoxide (CO)	550
Sulfur Oxides (SO_X)	250
Respirable Particulate Matter (PM_{10})	100
Fine Particulate Matter ($PM_{2.5}$)	55

Source: District 2021

AIR QUALITY IMPACT ANALYSIS

The project's construction and operation emissions were estimated using CalEEMod, as described above. Complete model outputs are provided in Attachment A.

The results of the modeling for project construction activities are shown in Table 4, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the applicable thresholds. As shown in Table 4, the maximum daily emissions would not exceed the thresholds, and construction impacts would be less than significant.

Table 4
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Construction Activity	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	3.72	36.26	33.87	0.05	9.46	5.46
Grading	1.97	18.87	19.77	0.03	3.84	2.17
Demolition	2.56	29.09	23.03	0.06	6.32	1.91
Building Construction	1.77	13.14	20.64	0.03	2.07	0.81
Architectural Coating	7.98	0.95	2.37	<0.01	0.26	0.08
Maximum Daily Emissions[1]	**9.62**	**77.90**	**72.72**	**0.14**	**19.27**	**9.22**
Screening Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (complete model outputs are provided in Attachment A).

[1] Maximum Daily Emissions for all pollutants except VOC would occur when Site Preparation, Grading, and Demolition activities occur concurrently. Maximum Daily Emissions for VOC would occur during concurrent Building Construction and Architectural Coating activities.

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides ; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SDAPCD = San Diego Air Pollution Control District

Operational emission modeling results are shown in Table 5, *Maximum Daily Operational Emissions*. The data are presented as the maximum anticipated daily emissions during summer and winter for comparison with the applicable thresholds. As shown in Table 5, the maximum daily emissions would not exceed the thresholds, and operational impacts would be less than significant.

Table 5
MAXIMUM DAILY OPERATIONAL EMISSIONS

Emission Category	Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Mobile	8.67	5.98	63.78	0.16	14.08	3.65
Area	7.56	0.14	16.96	<0.01	0.03	0.02
Energy	0.10	1.81	1.52	0.01	0.14	0.14
Winter						
Mobile	8.49	6.57	60.03	0.15	14.08	3.65
Area	4.77	0.00	0.00	0.00	0.00	0.00
Energy	0.10	1.81	1.52	0.01	0.14	0.14
Total Maximum Daily Emissions[1]	**16.33**	**8.38**	**82.26**	**0.17**	**14.25**	**3.81**
Screening Thresholds	*75*	*250*	*550*	*250*	*100*	*55*
Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (complete model outputs are provided in Attachment A).
[1] Totals may not sum due to rounding.
VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides;
PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter;
SDAPCD = San Diego Air Pollution Control District

SUMMARY

Air quality modeling for construction and operation of the project was completed using the latest available version of CalEEMod. Modeling estimates conclude the project is not anticipated to result in emissions during construction or operation that exceed applicable screening thresholds; therefore, the project would not substantially contribute to an existing or projected air quality violation.

Sincerely,

Victor Ortiz
Senior Air Quality Specialist

Attachments:

Attachment A Modeling Output

REFERENCES

California Air Pollution Control Officers Association (CAPCOA). 2022. CalEEMod version 2022.1. User's Guide Available at: https://www.caleemod.com/user-guide.

Institute of Transportation Engineers. 2021. Trip Generation Manual, 11th Edition. September.

San Diego Unified School District (District). 2021. Capital Improvement Program Final Program Environmental Impact Report. July.

GW Smith Education Center Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	GW Smith Education Center
Construction Start Date	5/1/2024
Operational Year	2027
Lead Agency	SDUSD
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.8
Location	9330 Balboa Ave, San Diego, CA 92123, USA
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6900
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Government Office Building	210	1000sqft	7.80	210,000	68,000	—	—	—
Unenclosed Parking with Elevator	180	1000sqft	0.00	180,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-3	Provide Transit-Oriented Development
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.31	9.62	61.8	70.5	0.11	2.55	12.5	15.0	2.35	5.78	8.13	—	14,492	14,492	0.61	0.46	11.6	14,657
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.51	9.61	77.9	72.7	0.14	3.11	16.2	19.3	2.87	6.35	9.22	—	17,725	17,725	0.81	1.00	0.36	18,042
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.19	3.95	25.9	25.5	0.04	1.15	5.12	6.27	1.06	2.54	3.60	—	5,895	5,895	0.26	0.27	2.93	5,984
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.72	4.73	4.65	0.01	0.21	0.93	1.14	0.19	0.46	0.66	—	976	976	0.04	0.04	0.48	991

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.79	5.69	55.1	53.6	0.08	2.45	10.9	13.3	2.25	5.38	7.63	—	9,158	9,158	0.38	0.17	2.53	9,221
2025	8.31	6.96	61.8	70.5	0.11	2.55	12.5	15.0	2.35	5.78	8.13	—	14,492	14,492	0.61	0.46	11.6	14,657
2026	2.27	9.62	13.2	22.5	0.04	0.42	1.86	2.28	0.39	0.45	0.84	—	5,694	5,694	0.24	0.30	9.40	5,800
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.79	5.69	55.1	53.4	0.08	2.45	10.9	13.3	2.25	5.38	7.63	—	9,140	9,140	0.38	0.17	0.07	9,201
2025	9.51	7.76	77.9	72.7	0.14	3.11	16.2	19.3	2.87	6.35	9.22	—	17,725	17,725	0.81	1.00	0.36	18,042
2026	2.22	9.61	13.4	21.6	0.04	0.42	1.86	2.28	0.39	0.45	0.84	—	5,606	5,606	0.24	0.31	0.24	5,704
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.19	2.67	25.9	25.1	0.04	1.15	5.12	6.27	1.06	2.54	3.60	—	4,287	4,287	0.18	0.08	0.51	4,316
2025	2.96	2.47	21.5	25.5	0.04	0.84	3.90	4.74	0.78	1.60	2.38	—	5,895	5,895	0.26	0.27	2.93	5,984
2026	1.38	3.95	8.46	13.5	0.02	0.27	1.13	1.40	0.25	0.28	0.53	—	3,570	3,570	0.15	0.20	2.55	3,636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.58	0.49	4.73	4.58	0.01	0.21	0.93	1.14	0.19	0.46	0.66	—	710	710	0.03	0.01	0.08	715
2025	0.54	0.45	3.92	4.65	0.01	0.15	0.71	0.87	0.14	0.29	0.43	—	976	976	0.04	0.04	0.48	991
2026	0.25	0.72	1.54	2.47	< 0.005	0.05	0.21	0.26	0.05	0.05	0.10	—	591	591	0.03	0.03	0.42	602

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.79	5.69	55.1	53.6	0.08	2.45	10.9	13.3	2.25	5.38	7.63	—	9,158	9,158	0.38	0.17	2.53	9,221
2025	8.31	6.96	61.8	70.5	0.11	2.55	12.5	15.0	2.35	5.78	8.13	—	14,492	14,492	0.61	0.46	11.6	14,657
2026	2.27	9.62	13.2	22.5	0.04	0.42	1.86	2.28	0.39	0.45	0.84	—	5,694	5,694	0.24	0.30	9.40	5,800
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.79	5.69	55.1	53.4	0.08	2.45	10.9	13.3	2.25	5.38	7.63	—	9,140	9,140	0.38	0.17	0.07	9,201
2025	9.51	7.76	77.9	72.7	0.14	3.11	16.2	19.3	2.87	6.35	9.22	—	17,725	17,725	0.81	1.00	0.36	18,042
2026	2.22	9.61	13.4	21.6	0.04	0.42	1.86	2.28	0.39	0.45	0.84	—	5,606	5,606	0.24	0.31	0.24	5,704
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.19	2.67	25.9	25.1	0.04	1.15	5.12	6.27	1.06	2.54	3.60	—	4,287	4,287	0.18	0.08	0.51	4,316
2025	2.96	2.47	21.5	25.5	0.04	0.84	3.90	4.74	0.78	1.60	2.38	—	5,895	5,895	0.26	0.27	2.93	5,984
2026	1.38	3.95	8.46	13.5	0.02	0.27	1.13	1.40	0.25	0.28	0.53	—	3,570	3,570	0.15	0.20	2.55	3,636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.58	0.49	4.73	4.58	0.01	0.21	0.93	1.14	0.19	0.46	0.66	—	710	710	0.03	0.01	0.08	715
2025	0.54	0.45	3.92	4.65	0.01	0.15	0.71	0.87	0.14	0.29	0.43	—	976	976	0.04	0.04	0.48	991
2026	0.25	0.72	1.54	2.47	< 0.005	0.05	0.21	0.26	0.05	0.05	0.10	—	591	591	0.03	0.03	0.42	602

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.0	17.5	8.78	91.3	0.19	0.30	15.9	16.2	0.29	4.04	4.33	185	21,042	21,227	20.1	0.93	56.1	22,065
Mit.	12.7	16.3	7.93	82.3	0.17	0.29	14.0	14.2	0.27	3.54	3.81	185	18,434	18,619	19.8	0.82	49.2	19,406

% Reduced	10%	7%	10%	10%	12%	6%	12%	12%	5%	12%	12%	—	12%	12%	2%	12%	12%	12%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	14.6	9.30	70.0	0.18	0.27	15.9	16.2	0.26	4.04	4.30	185	20,160	20,346	20.2	0.97	1.95	21,142
Mit.	9.48	13.4	8.38	61.6	0.16	0.26	14.0	14.2	0.25	3.54	3.79	185	17,652	17,838	19.8	0.85	1.77	18,589
% Reduced	12%	8%	10%	12%	12%	6%	12%	12%	6%	12%	12%	—	12%	12%	2%	12%	9%	12%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.17	13.1	7.16	58.8	0.13	0.25	11.2	11.5	0.24	2.85	3.09	185	15,289	15,474	19.9	0.76	17.7	16,216
Mit.	8.24	12.2	6.51	52.7	0.12	0.24	9.85	10.1	0.23	2.50	2.72	185	13,389	13,574	19.6	0.67	15.5	14,277
% Reduced	10%	6%	9%	10%	11%	5%	12%	12%	5%	12%	12%	—	12%	12%	2%	12%	12%	12%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	2.39	1.31	10.7	0.02	0.05	2.05	2.10	0.04	0.52	0.56	30.7	2,531	2,562	3.30	0.13	2.92	2,685
Mit.	1.50	2.23	1.19	9.62	0.02	0.04	1.80	1.84	0.04	0.46	0.50	30.7	2,217	2,247	3.24	0.11	2.57	2,364
% Reduced	10%	6%	9%	10%	11%	5%	12%	12%	5%	12%	12%	—	12%	12%	2%	12%	12%	12%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.8	9.89	6.83	72.8	0.18	0.13	15.9	16.1	0.13	4.04	4.17	—	18,288	18,288	0.83	0.69	55.6	18,569
Area	3.02	7.56	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0

Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,648	2,648	0.55	0.05	—	2,677
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	14.0	17.5	8.78	91.3	0.19	0.30	15.9	16.2	0.29	4.04	4.33	185	21,042	21,227	20.1	0.93	56.1	22,065
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.6	9.69	7.50	68.5	0.17	0.13	15.9	16.1	0.13	4.04	4.17	—	17,476	17,476	0.88	0.73	1.44	17,716
Area	—	4.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,648	2,648	0.55	0.05	—	2,677
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	10.8	14.6	9.30	70.0	0.18	0.27	15.9	16.2	0.26	4.04	4.30	185	20,160	20,346	20.2	0.97	1.95	21,142
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.48	6.84	5.29	48.9	0.12	0.10	11.2	11.3	0.09	2.85	2.94	—	12,571	12,571	0.62	0.51	17.2	12,756
Area	1.49	6.15	0.07	8.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.4	34.4	< 0.005	< 0.005	—	34.5
Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,648	2,648	0.55	0.05	—	2,677
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	9.17	13.1	7.16	58.8	0.13	0.25	11.2	11.5	0.24	2.85	3.09	185	15,289	15,474	19.9	0.76	17.7	16,216
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.36	1.25	0.96	8.92	0.02	0.02	2.05	2.07	0.02	0.52	0.54	—	2,081	2,081	0.10	0.09	2.84	2,112
Area	0.27	1.12	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72
Energy	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	438	438	0.09	0.01	—	443
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0

Waste	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	1.67	2.39	1.31	10.7	0.02	0.05	2.05	2.10	0.04	0.52	0.56	30.7	2,531	2,562	3.30	0.13	2.92	2,685

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.44	8.67	5.98	63.8	0.16	0.12	14.0	14.1	0.11	3.54	3.65	—	16,024	16,024	0.73	0.60	48.7	16,270
Area	3.02	7.56	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0
Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,304	2,304	0.30	0.02	—	2,317
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	12.7	16.3	7.93	82.3	0.17	0.29	14.0	14.2	0.27	3.54	3.81	185	18,434	18,619	19.8	0.82	49.2	19,406
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.28	8.49	6.57	60.0	0.15	0.12	14.0	14.1	0.11	3.54	3.65	—	15,313	15,313	0.77	0.64	1.26	15,523
Area	—	4.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,304	2,304	0.30	0.02	—	2,317
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	9.48	13.4	8.38	61.6	0.16	0.26	14.0	14.2	0.25	3.54	3.79	185	17,652	17,838	19.8	0.85	1.77	18,589
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	6.55	5.99	4.63	42.8	0.11	0.08	9.85	9.93	0.08	2.50	2.58	—	11,014	11,014	0.54	0.45	15.0	11,177
Area	1.49	6.15	0.07	8.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.4	34.4	< 0.005	< 0.005	—	34.5
Energy	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,304	2,304	0.30	0.02	—	2,317
Water	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Waste	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	8.24	12.2	6.51	52.7	0.12	0.24	9.85	10.1	0.23	2.50	2.72	185	13,389	13,574	19.6	0.67	15.5	14,277
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.20	1.09	0.85	7.82	0.02	0.02	1.80	1.81	0.01	0.46	0.47	—	1,824	1,824	0.09	0.07	2.49	1,851
Area	0.27	1.12	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72
Energy	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	381	381	0.05	< 0.005	—	384
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0
Waste	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	1.50	2.23	1.19	9.62	0.02	0.04	1.80	1.84	0.04	0.46	0.50	30.7	2,217	2,247	3.24	0.11	2.57	2,364

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	3.88	3.88	—	0.59	0.59	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.21	0.21	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	0.01	0.01	136
Vendor	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	0.00
Hauling	0.39	0.10	6.85	2.50	0.03	0.09	1.30	1.39	0.09	0.36	0.45	—	5,042	5,042	0.28	0.79	0.28	5,286
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.54
Vendor	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	0.00
Hauling	0.02	0.01	0.38	0.14	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	—	276	276	0.02	0.04	0.26	290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.23	1.23	< 0.005	< 0.005	< 0.005	1.25
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.7	45.7	< 0.005	0.01	0.04	48.0

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	3.88	3.88	—	0.59	0.59	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.21	0.21	—	0.03	0.03	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	0.01	0.01	136
Vendor	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	0.00
Hauling	0.39	0.10	6.85	2.50	0.03	0.09	1.30	1.39	0.09	0.36	0.45	—	5,042	5,042	0.28	0.79	0.28	5,286
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.54
Vendor	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	0.00
Hauling	0.02	0.01	0.38	0.14	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	—	276	276	0.02	0.04	0.26	290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.23	1.23	< 0.005	< 0.005	< 0.005	1.25
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.7	45.7	< 0.005	0.01	0.04	48.0

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.08	1.75	17.2	15.8	0.02	0.77	—	0.77	0.71	—	0.71	—	2,539	2,539	0.10	0.02	—	2,548
Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.89	1.89	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.15	2.88	< 0.005	0.14	—	0.14	0.13	—	0.13	—	420	420	0.02	< 0.005	—	422
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.86	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	169	169	0.01	0.01	0.68	172
Vendor	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	0.00
Hauling	0.01	< 0.005	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	169	169	0.01	0.03	0.36	178
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.76	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	160	160	0.01	0.01	0.02	162
Vendor	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	0.00
Hauling	0.01	< 0.005	0.24	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	169	169	0.01	0.03	0.01	178
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	77.3	77.3	< 0.005	< 0.005	0.14	78.5
Vendor	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	0.00
Hauling	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.2	81.2	< 0.005	0.01	0.08	85.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.0
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	14.1

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.08	1.75	17.2	15.8	0.02	0.77	—	0.77	0.71	—	0.71	—	2,539	2,539	0.10	0.02	—	2,548
Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.89	1.89	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.15	2.88	< 0.005	0.14	—	0.14	0.13	—	0.13	—	420	420	0.02	< 0.005	—	422
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.34	0.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.86	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	169	169	0.01	0.01	0.68	172
Vendor	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	0.00
Hauling	0.01	< 0.005	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	169	169	0.01	0.03	0.36	178
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.76	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	160	160	0.01	0.01	0.02	162
Vendor	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	0.00
Hauling	0.01	< 0.005	0.24	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	169	169	0.01	0.03	0.01	178
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.37	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	77.3	77.3	< 0.005	< 0.005	0.14	78.5
Vendor	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	0.00
Hauling	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	81.2	81.2	< 0.005	0.01	0.08	85.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.02	13.0
Vendor	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	0.00

Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	14.1

3.5. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	7.49	7.15	0.01	0.32	—	0.32	0.30	—	0.30	—	1,254	1,254	0.05	0.01	—	1,258

Dust From Material Movement	—	—	—	—	—	—	1.82	1.82	—	0.93	0.93	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.37	1.30	< 0.005	0.06	—	0.06	0.05	—	0.05	—	208	208	0.01	< 0.005	—	208
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.81	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	166	166	0.01	0.01	0.62	169
Vendor	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	0.00
Hauling	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.36	174
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.71	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	157	157	0.01	0.01	0.02	159
Vendor	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	0.00
Hauling	0.01	< 0.005	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.01	174
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	37.5	37.5	< 0.005	< 0.005	0.06	38.0
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.3	39.3	< 0.005	0.01	0.04	41.2

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.20	6.20	< 0.005	< 0.005	0.01	6.29
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.51	6.51	< 0.005	< 0.005	0.01	6.83

3.6. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.93	0.78	7.49	7.15	0.01	0.32	—	0.32	0.30	—	0.30	—	1,254	1,254	0.05	0.01	—	1,258
Dust From Material Movement	—	—	—	—	—	—	1.82	1.82	—	0.93	0.93	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.37	1.30	< 0.005	0.06	—	0.06	0.05	—	0.05	—	208	208	0.01	< 0.005	—	208
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.81	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	166	166	0.01	0.01	0.62	169
Vendor	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	0.00
Hauling	0.01	< 0.005	0.22	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.36	174
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.71	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	157	157	0.01	0.01	0.02	159
Vendor	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	0.00
Hauling	0.01	< 0.005	0.23	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.01	174
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	37.5	37.5	< 0.005	< 0.005	0.06	38.0

Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.3	39.3	< 0.005	0.01	0.04	41.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.20	6.20	< 0.005	< 0.005	0.01	6.29
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.51	6.51	< 0.005	< 0.005	0.01	6.83

3.7. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	8.24	8.51	0.01	0.38	—	0.38	0.35	—	0.35	—	1,337	1,337	0.05	0.01	—	1,342
Dust From Material Movement	—	—	—	—	—	—	1.25	1.25	—	0.60	0.60	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.50	1.55	< 0.005	0.07	—	0.07	0.06	—	0.06	—	221	221	0.01	< 0.005	—	222
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	0.01	0.01	0.58	147
Vendor	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	0.00
Hauling	0.03	0.01	0.57	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	420	420	0.02	0.07	0.90	441
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	0.01	0.01	0.02	139
Vendor	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	0.00

Hauling	0.03	0.01	0.58	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	420	420	0.02	0.07	0.02	440
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	62.5	62.5	< 0.005	< 0.005	0.11	63.4
Vendor	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	0.00
Hauling	0.01	< 0.005	0.26	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.18	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.02	10.5
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.4	31.4	< 0.005	0.01	0.03	33.0

3.8. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969

Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	8.24	8.51	0.01	0.38	—	0.38	0.35	—	0.35	—	1,337	1,337	0.05	0.01	—	1,342
Dust From Material Movement	—	—	—	—	—	—	1.25	1.25	—	0.60	0.60	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.50	1.55	< 0.005	0.07	—	0.07	0.06	—	0.06	—	221	221	0.01	< 0.005	—	222
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.74	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	0.01	0.01	0.58	147
Vendor	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	0.00
Hauling	0.03	0.01	0.57	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	420	420	0.02	0.07	0.90	441
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.06	0.06	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	0.01	0.01	0.02	139
Vendor	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	0.00
Hauling	0.03	0.01	0.58	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	420	420	0.02	0.07	0.02	440
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	62.5	62.5	< 0.005	< 0.005	0.11	63.4
Vendor	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	0.00
Hauling	0.01	< 0.005	0.26	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.18	199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.02	10.5
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.4	31.4	< 0.005	0.01	0.03	33.0

3.9. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.30	4.73	0.01	0.19	—	0.19	0.18	—	0.18	—	782	782	0.03	0.01	—	785
Dust From Material Movement	—	—	—	—	—	—	0.73	0.73	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.78	0.86	< 0.005	0.03	—	0.03	0.03	—	0.03	—	129	129	0.01	< 0.005	—	130
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.69	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	0.01	< 0.005	0.53	144
Vendor	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	0.00
Hauling	0.03	0.01	0.54	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	411	411	0.02	0.06	0.89	432

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	0.01	0.01	136
Vendor	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	0.00
Hauling	0.03	0.01	0.56	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	411	411	0.02	0.06	0.02	431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.06	36.3
Vendor	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	0.00
Hauling	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	109	109	0.01	0.02	0.10	114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.02
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.9

3.10. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.30	4.73	0.01	0.19	—	0.19	0.18	—	0.18	—	782	782	0.03	0.01	—	785
Dust From Material Movement	—	—	—	—	—	—	0.73	0.73	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.78	0.86	< 0.005	0.03	—	0.03	0.03	—	0.03	—	129	129	0.01	< 0.005	—	130
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.69	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	142	142	0.01	< 0.005	0.53	144

Vendor	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	0.00
Hauling	0.03	0.01	0.54	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	411	411	0.02	0.06	0.89	432
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	0.01	0.01	136
Vendor	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	0.00
Hauling	0.03	0.01	0.56	0.20	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	411	411	0.02	0.06	0.02	431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.06	36.3
Vendor	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	0.00
Hauling	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	109	109	0.01	0.02	0.10	114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.93	5.93	< 0.005	< 0.005	0.01	6.02
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.9

3.11. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.58	0.44	6.61	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,355	1,355	0.06	0.05	5.08	1,376
Vendor	0.14	0.06	2.13	0.99	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,600	1,600	0.07	0.23	4.15	1,673
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.57	0.49	5.79	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,279	1,279	0.07	0.05	0.13	1,296
Vendor	0.13	0.06	2.21	1.02	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,601	1,601	0.07	0.23	0.11	1,670
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.37	0.34	0.29	3.52	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	773	773	0.04	0.03	1.31	784
Vendor	0.08	0.04	1.31	0.60	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	958	958	0.04	0.14	1.08	1,001
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.22	130
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	159	159	0.01	0.02	0.18	166
Hauling	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	0.00

3.12. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	6.25	7.81	0.01	0.26	—	0.26	0.24	—	0.24	—	1,436	1,436	0.06	0.01	—	1,441

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.14	1.43	< 0.005	0.05	—	0.05	0.04	—	0.04	—	238	238	0.01	< 0.005	—	239
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.58	0.44	6.61	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,355	1,355	0.06	0.05	5.08	1,376
Vendor	0.14	0.06	2.13	0.99	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,600	1,600	0.07	0.23	4.15	1,673
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.57	0.49	5.79	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,279	1,279	0.07	0.05	0.13	1,296
Vendor	0.13	0.06	2.21	1.02	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,601	1,601	0.07	0.23	0.11	1,670
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.29	3.52	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	773	773	0.04	0.03	1.31	784
Vendor	0.08	0.04	1.31	0.60	0.01	0.01	0.24	0.26	0.01	0.07	0.08	—	958	958	0.04	0.14	1.08	1,001
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	128	128	0.01	< 0.005	0.22	130
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	159	159	0.01	0.02	0.18	166
Hauling	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	0.00

3.13. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.46	8.50	0.02	0.25	—	0.25	0.23	—	0.23	—	1,572	1,572	0.06	0.01	—	1,577
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.18	1.55	< 0.005	0.05	—	0.05	0.04	—	0.04	—	260	260	0.01	< 0.005	—	261
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.52	0.40	6.17	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,327	1,327	0.06	0.05	4.65	1,348
Vendor	0.12	0.05	2.02	0.95	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,570	1,570	0.06	0.23	3.83	1,643
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.45	5.45	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,254	1,254	0.07	0.05	0.12	1,270
Vendor	0.12	0.05	2.11	0.97	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,571	1,571	0.06	0.23	0.10	1,640
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.29	3.60	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	829	829	0.04	0.03	1.31	841
Vendor	0.08	0.03	1.37	0.63	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	1,030	1,030	0.04	0.15	1.09	1,076
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	0.01	0.01	0.22	139
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	170	170	0.01	0.02	0.18	178
Hauling	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	0.00

3.14. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	6.46	8.50	0.02	0.25	—	0.25	0.23	—	0.23	—	1,572	1,572	0.06	0.01	—	1,577
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.18	1.55	< 0.005	0.05	—	0.05	0.04	—	0.04	—	260	260	0.01	< 0.005	—	261
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.52	0.40	6.17	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,327	1,327	0.06	0.05	4.65	1,348
Vendor	0.12	0.05	2.02	0.95	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,570	1,570	0.06	0.23	3.83	1,643
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.45	5.45	0.00	0.00	1.21	1.21	0.00	0.28	0.28	—	1,254	1,254	0.07	0.05	0.12	1,270

Vendor	0.12	0.05	2.11	0.97	0.01	0.02	0.41	0.43	0.02	0.11	0.13	—	1,571	1,571	0.06	0.23	0.10	1,640
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.29	3.60	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	829	829	0.04	0.03	1.31	841
Vendor	0.08	0.03	1.37	0.63	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	1,030	1,030	0.04	0.15	1.09	1,076
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	0.01	0.01	0.22	139
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	170	170	0.01	0.02	0.18	178
Hauling	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	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134

Architect Coatings	—	7.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Architectural Coatings	—	2.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.99	7.99	< 0.005	< 0.005	—	8.02
Architectural Coatings	—	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.08	1.23	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	265	265	0.01	0.01	0.93	270
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.09	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	251	251	0.01	0.01	0.02	254
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	91.5	91.5	< 0.005	< 0.005	0.14	92.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.02	15.4
Vendor	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	0.00
Hauling	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	0.00

3.16. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134

Architectural	—	7.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.31	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.3	48.3	< 0.005	< 0.005	—	48.4
Architectural Coatings	—	2.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.99	7.99	< 0.005	< 0.005	—	8.02
Architectural Coatings	—	0.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.08	1.23	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	265	265	0.01	0.01	0.93	270
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.09	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	251	251	0.01	0.01	0.02	254
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.40	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	91.5	91.5	< 0.005	< 0.005	0.14	92.8
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.02	15.4
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	10.8	9.89	6.83	72.8	0.18	0.13	15.9	16.1	0.13	4.04	4.17	—	18,288	18,288	0.83	0.69	55.6	18,569
Unenclosed Parking with Elevator	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	0.00
Total	10.8	9.89	6.83	72.8	0.18	0.13	15.9	16.1	0.13	4.04	4.17	—	18,288	18,288	0.83	0.69	55.6	18,569

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	10.6	9.69	7.50	68.5	0.17	0.13	15.9	16.1	0.13	4.04	4.17	—	17,476	17,476	0.88	0.73	1.44	17,716
Unenclosed Parking with Elevator	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	0.00
Total	10.6	9.69	7.50	68.5	0.17	0.13	15.9	16.1	0.13	4.04	4.17	—	17,476	17,476	0.88	0.73	1.44	17,716
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	1.36	1.25	0.96	8.92	0.02	0.02	2.05	2.07	0.02	0.52	0.54	—	2,081	2,081	0.10	0.09	2.84	2,112
Unenclosed Parking with Elevator	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	0.00
Total	1.36	1.25	0.96	8.92	0.02	0.02	2.05	2.07	0.02	0.52	0.54	—	2,081	2,081	0.10	0.09	2.84	2,112

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	9.44	8.67	5.98	63.8	0.16	0.12	14.0	14.1	0.11	3.54	3.65	—	16,024	16,024	0.73	0.60	48.7	16,270
Unenclosed Parking with Elevator	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	0.00
Total	9.44	8.67	5.98	63.8	0.16	0.12	14.0	14.1	0.11	3.54	3.65	—	16,024	16,024	0.73	0.60	48.7	16,270
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	9.28	8.49	6.57	60.0	0.15	0.12	14.0	14.1	0.11	3.54	3.65	—	15,313	15,313	0.77	0.64	1.26	15,523
Unenclosed Parking with Elevator	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	0.00
Total	9.28	8.49	6.57	60.0	0.15	0.12	14.0	14.1	0.11	3.54	3.65	—	15,313	15,313	0.77	0.64	1.26	15,523
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	1.20	1.09	0.85	7.82	0.02	0.02	1.80	1.81	0.01	0.46	0.47	—	1,824	1,824	0.09	0.07	2.49	1,851
Unenclosed Parking with Elevator	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	0.00
Total	1.20	1.09	0.85	7.82	0.02	0.02	1.80	1.81	0.01	0.46	0.47	—	1,824	1,824	0.09	0.07	2.49	1,851

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	431	431	0.32	0.04	—	450
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	62.7	62.7	0.05	0.01	—	65.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	493	493	0.36	0.04	—	515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	431	431	0.32	0.04	—	450
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	62.7	62.7	0.05	0.01	—	65.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	493	493	0.36	0.04	—	515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	71.3	71.3	0.05	0.01	—	74.5

Unenclos Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	10.4	10.4	0.01	< 0.005	—	10.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	81.7	81.7	0.06	0.01	—	85.3

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Governm ent Office Building	—	—	—	—	—	—	—	—	—	—	—	—	86.1	86.1	0.06	0.01	—	90.0
Unenclos ed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	62.7	62.7	0.05	0.01	—	65.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	149	149	0.11	0.01	—	155
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Governm ent Office Building	—	—	—	—	—	—	—	—	—	—	—	—	86.1	86.1	0.06	0.01	—	90.0
Unenclos ed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	62.7	62.7	0.05	0.01	—	65.5

Total	—	—	—	—	—	—	—	—	—	—	—	—	149	149	0.11	0.01	—	155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	14.3	14.3	0.01	< 0.005	—	14.9
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	10.4	10.4	0.01	< 0.005	—	10.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	24.6	24.6	0.02	< 0.005	—	25.7

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Unenclosed Parking with Elevator	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
Total	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government Office Building	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Unenclosed Parking with Elevator	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
Total	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	357	357	0.03	< 0.005	—	358
Unenclosed Parking with Elevator	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
Total	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	357	357	0.03	< 0.005	—	358

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161

Unenclosed Parking with Elevator	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
Total	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Unenclosed Parking with Elevator	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
Total	0.20	0.10	1.81	1.52	0.01	0.14	—	0.14	0.14	—	0.14	—	2,155	2,155	0.19	< 0.005	—	2,161
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	357	357	0.03	< 0.005	—	358
Unenclosed Parking with Elevator	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
Total	0.04	0.02	0.33	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	357	357	0.03	< 0.005	—	358

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.02	2.79	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0
Total	3.02	7.56	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.27	0.25	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72

Total	0.27	1.12	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.02	2.79	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0
Total	3.02	7.56	0.14	17.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	69.8	69.8	< 0.005	< 0.005	—	70.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.27	0.25	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72
Total	0.27	1.12	0.01	1.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.69	5.69	< 0.005	< 0.005	—	5.72

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380

Unenclosed	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Governm Office Building	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	79.9	35.8	116	8.22	0.20	—	380
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	5.92	19.2	1.36	0.03	—	63.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368

Unenclosed	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Governm Office Building	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	368
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	17.4	0.00	17.4	1.74	0.00	—	61.0

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.51	0.51
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation																		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	2/1/2025	2/28/2025	5.00	20.0	—
Site Preparation	Site Preparation	5/1/2024	5/1/2025	5.00	262	—
Grading	Grading	5/15/2024	5/15/2025	5.00	262	—
Building Construction	Building Construction	3/1/2025	12/1/2026	5.00	457	—
Architectural Coating	Architectural Coating	6/1/2026	12/1/2026	5.00	132	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	70.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	2.31	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	5.72	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	143	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	63.9	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	28.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	70.2	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT

Site Preparation	Hauling	2.31	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.63	HHDT,MHDT
Grading	Hauling	5.72	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	143	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	63.9	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	28.6	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	315,000	105,000	10,800

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	5,611	—
Site Preparation	—	4,840	438	0.00	—
Grading	11,987	—	292	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government Office Building	0.00	0%
Unenclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	540	0.03	< 0.005

2025	0.00	540	0.03	< 0.005
2026	0.00	45.1	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	2,541	0.00	0.00	662,475	22,559	0.00	0.00	5,881,341
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government Office Building	2,226	0.00	0.00	580,464	19,766	0.00	0.00	5,153,258
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0	0.00	315,000	105,000	10,800

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	3,484,859	45.1	0.0330	0.0040	6,724,835
Unenclosed Parking with Elevator	507,240	45.1	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government Office Building	696,972	45.1	0.0330	0.0040	6,724,835
Unenclosed Parking with Elevator	507,240	45.1	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	41,718,534	1,016,203
Unenclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government Office Building	41,718,534	1,016,203
Unenclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	195	—
Unenclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government Office Building	195	—
Unenclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	8.91	annual days of extreme heat
Extreme Precipitation	2.80	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	8.11	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	33.5
AQ-DPM	90.0
Drinking Water	29.0
Lead Risk Housing	8.29
Pesticides	32.4
Toxic Releases	33.2
Traffic	78.7
Effect Indicators	—
CleanUp Sites	95.4
Groundwater	90.7
Haz Waste Facilities/Generators	98.9
Impaired Water Bodies	0.00
Solid Waste	99.3
Sensitive Population	—
Asthma	48.3
Cardio-vascular	20.6
Low Birth Weights	61.7
Socioeconomic Factor Indicators	—

Education	26.9
Housing	67.7
Linguistic	48.7
Poverty	18.9
Unemployment	13.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	65.78981137
Employed	68.92082638
Median HI	67.35531888
Education	—
Bachelor's or higher	77.67226999
High school enrollment	19.96663673
Preschool enrollment	67.90709611
Transportation	—
Auto Access	82.44578468
Active commuting	41.78108559
Social	—
2-parent households	53.53522392
Voting	63.04375722
Neighborhood	—
Alcohol availability	73.3478763
Park access	60.25920698
Retail density	96.62517644

Supermarket access	29.34684974
Tree canopy	11.66431413
Housing	—
Homeownership	46.58026434
Housing habitability	49.36481458
Low-inc homeowner severe housing cost burden	24.90696779
Low-inc renter severe housing cost burden	76.10676248
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	63.35172591
Arthritis	81.7
Asthma ER Admissions	51.4
High Blood Pressure	90.0
Cancer (excluding skin)	49.7
Asthma	76.7
Coronary Heart Disease	83.6
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	87.3
Life Expectancy at Birth	18.5
Cognitively Disabled	82.5
Physically Disabled	57.4
Heart Attack ER Admissions	87.0
Mental Health Not Good	67.2
Chronic Kidney Disease	85.5
Obesity	80.7
Pedestrian Injuries	99.6
Physical Health Not Good	84.3

Stroke	84.7
Health Risk Behaviors	—
Binge Drinking	10.6
Current Smoker	62.2
No Leisure Time for Physical Activity	71.9
Climate Change Exposures	—
Wildfire Risk	1.3
SLR Inundation Area	0.0
Children	7.3
Elderly	70.8
English Speaking	36.9
Foreign-born	50.7
Outdoor Workers	88.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.4
Traffic Density	86.9
Traffic Access	72.8
Other Indices	—
Hardship	26.3
Other Decision Support	—
2016 Voting	65.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	53.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule provided by SDUSD.
Land Use	Lot acreage provided by SDUSD. Landscape area assumed to include 20% of site area.
Operations: Vehicle Data	School District Office ITE code indicates 5.08 trips per employee (2,540 total for project), converted to 12.1 trips per 1,000 sf for the project building. Default trip lengths maintained.
Construction: Dust From Material Movement	Vegetation export and soil import quantities provided by SDUSD.

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Appendix D

Local Mobility Analysis

TO:	Tim Belzman; Helix Environmental Planning, Inc.
FROM:	Phuong Nguyen, PE; CR Associates Cristian Belmudez; CR Associates Jesus Martinez; CR Associates
DATE:	March 5, 2024
RE:	SDUSD GW Smith Education Center Phase 2 – Local Mobility Analysis Technical Memorandum

The purpose of this technical memorandum is to evaluate the effects of the George Walker Smith Education Center project (the "Project") on the surrounding transportation network and identify mobility improvements recommended to accommodate project traffic.

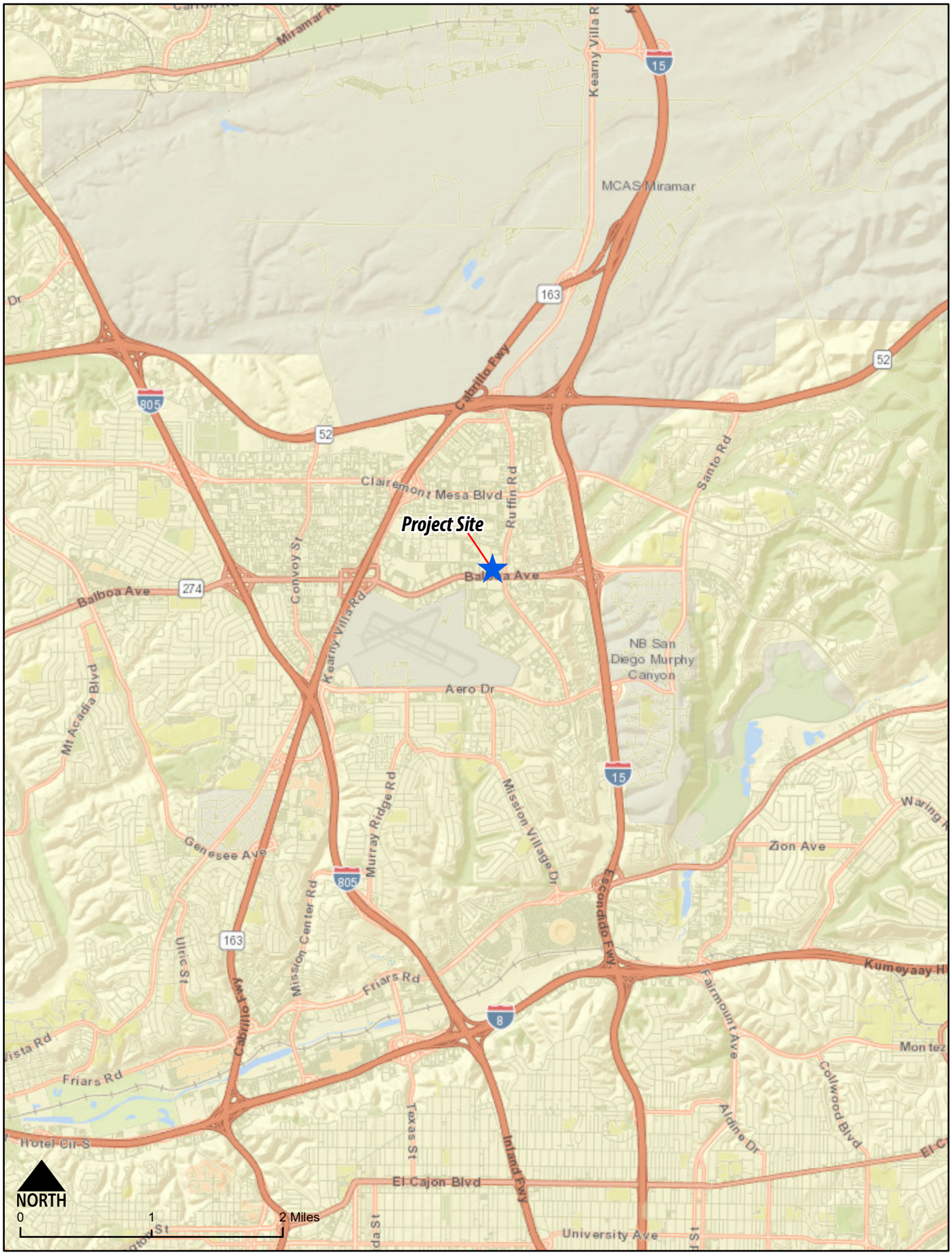
Project Description

The Project is located at 9330 Balboa Avenue within the Kearny Mesa Community Plan in the City of San Diego. The Project proposes to redevelop and renovate an existing 150,000 square foot (SF) building, including a new approximately 60,000 SF two-story addition. The Project also proposes constructing a five-level parking garage with 500 parking spaces. Construction of the Project is expected to start December 2024 and finish September 2025.

Access to the project site will be provided via the following four (4) project driveways:

- *Project Driveway #1* – This existing driveway is located along the west side of Ruffin Road approximately 480 feet north of Balboa Avenue. This driveway will provide full access to the proposed parking garage and the Project site.
- *Project Driveway #2* – This new driveway will be located on the west side of Ruffin Road approximately 400 feet north of Balboa Avenue. This driveway will provide full access to the surface parking lot on the southeast corner of the Project site.
- *Project Driveway #3* – This existing driveway is located on the north side of Balboa Avenue approximately 650 feet west of Ruffin Road. This driveway will provide full access to the surface parking lot on the southeast corner of the Project site.
- *Project Driveway #4* – This existing driveway is located on the north side of Balboa Avenue approximately 140 feet west of Ruffin Road. This driveway will provide full access to the proposed parking garage and the Project site.

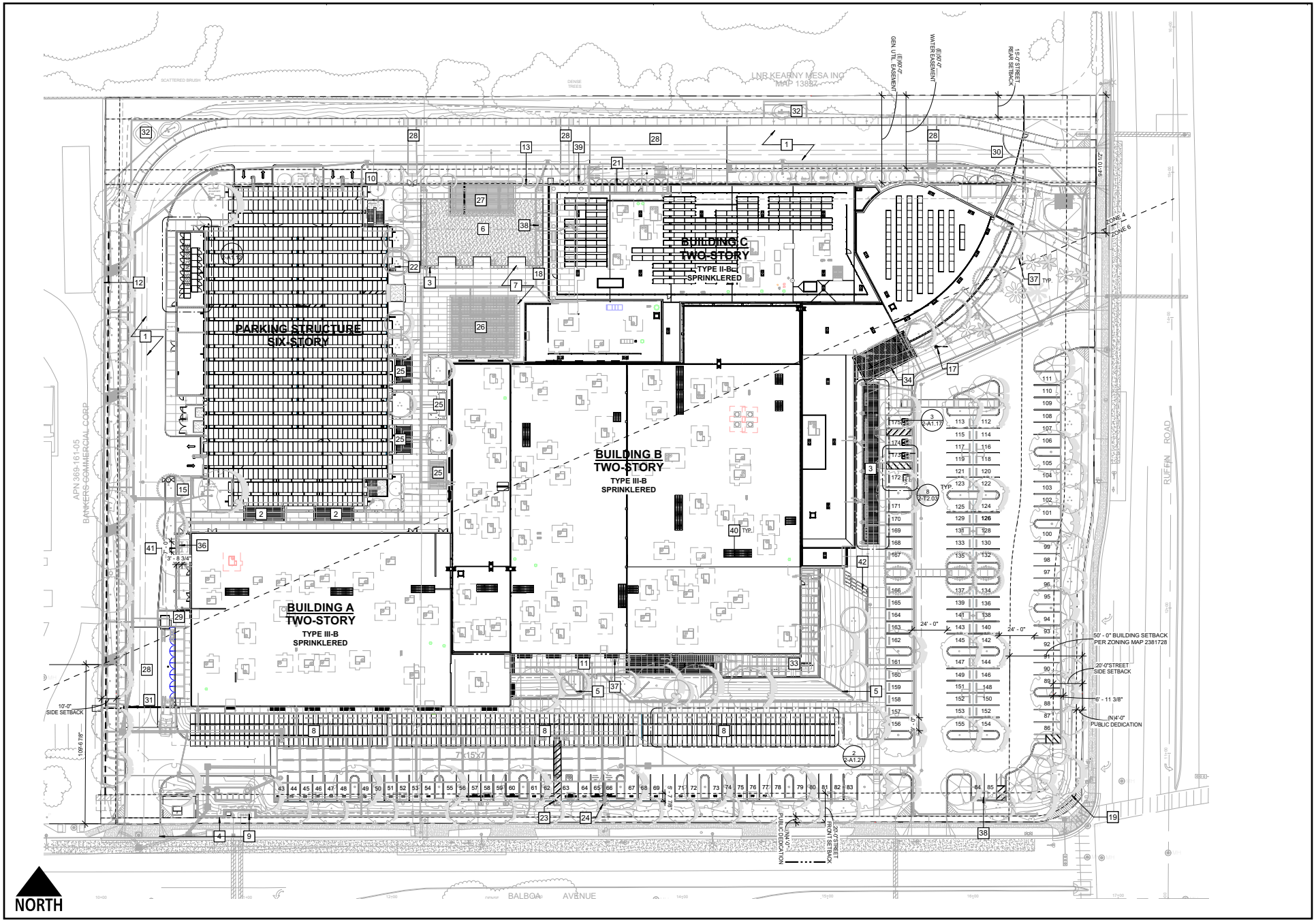
It should be noted two existing driveways will be removed. **Figure 1** shows the project location. **Figure 2** displays the project site plan.



SDUSD GW Smith Education Center
Local Mobility Analysis

C+R

Figure 1
Project Regional Location



SDUSD GW Smith Education Center
Local Mobility Analysis Technical Memorandum

C+R

Figure 2
Project Site Plan

Project Trip Generation

Consistent with the requirements for traffic studies conducted within the City of San Diego, the City of San Diego Trip Generation Manual and SANDAG's (not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region were reviewed and neither source has trip generation rates for a school district office. The Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, which is typically referenced when local sources are unavailable, defines a School District Office as follows:

> *"A school district office is an administrative office building that provides services and support to parents, students, and the community. A school district office typically offers centralized services for multiple schools in a district including staff training, purchasing, technology services, strategic planning, public information, student transportation, and student assessments."*

While the description is consistent with the typical operations of a school district office, upon deeper review, the ITE source data reflects sampling sites significantly smaller than both the existing Central Office and the proposed project site. None of the sample sites served more than 20,000 students or operated with more than 200 employees.

The Project proposes moving the services presently housed at the Central Office at 4100 Normal Street in the City of San Diego to this new consolidated location. This includes relocating the approximately 500 employees currently working at the existing Central Office to the new proposed location. The existing Central Office was surveyed to estimate the existing trip rate per employee. The trip rate was calculated based on three days of parking lot occupancy counts, conducted on November 15, December 5, and December 6, 2024, during hours of operation. Parked vehicles were assumed to amount to two trips (one inbound, one outbound) and as a conservative approach no credits for carpooling were applied. Parking counts ranged from 84 to 130 parked vehicles, with a maximum daily trip generation of 260 trips or 0.52 trips per employee.

ITE's trip generation rate for a School District Office is nearly ten times higher (5.08 trips per employee). The existing Central Office, as well as the Project after relocation is complete, serves over 121,000 students with approximately 500 employees on-site. This indicates that the smaller school district offices sampled in ITE serve additional functions, whereas the existing Central Office and the Project primarily provide administrative support while other services are served directly at schools or online. However, as a highly conservative approach, the trip rates from ITE were utilized. **Table 1** displays the Project's trip generation based on this assumption.

Table 1 - Project Trip Generation

Land Use	Units	Trip Rate	ADT	AM Peak Hour					PM Peak Hour				
				%	Trips	Split	In	Out	%	Trips	Split	In	Out
School District Office	500 Employees	5.08/Employee	2,540	16%	415	76:24	315	100	14%	360	17:83	61	299

Source: CR Associates (2024); San Diego Unified School District (2024)

As shown, the Project is anticipated to generate approximately 2,540 average daily trips (ADT), with 415 AM peak hour trips (315 inbound, 100 outbound) and 360 PM peak hour trips (61 inbound, 299 outbound).

Project Trip Distribution and Assignment

The project trip distribution was manually developed based on the geographical location of the Project, the characteristics of the proposed and surrounding land uses, and by using big data from Replica HQ[1] to capture existing travel patterns within the project study area. Based upon the project trip distribution patterns, daily and AM/PM peak hour project trips were assigned to the adjacent roadway network. **Figure 3** and **Figure 4** display the project trip distribution and trip assignment, respectively.

Project Study Area

The following roadway segments and intersections were included as part of the project study area:

Roadway Segments

- Ruffin Road, between Spectrum Center Boulevard and Balboa Avenue
- Ruffin Road, between Balboa Avenue and Ridgehaven Center
- Balboa Avenue, between Kearny Villa Road and Ruffin Road
- Balboa Avenue, between Ruffin Road and Viewridge Avenue

Intersections

1. Kearny Villa Road & Balboa Avenue (Signalized)
2. Ruffin Road & Balboa Avenue (Signalized)
3. Viewridge Avenue & Balboa Avenue (Signalized)

Figure 5 displays the project study area.

[1] Replica is a data provider that produces large-scale models to represent mobility throughout the United States. For more information, please visit the following: https://replicahq.com/

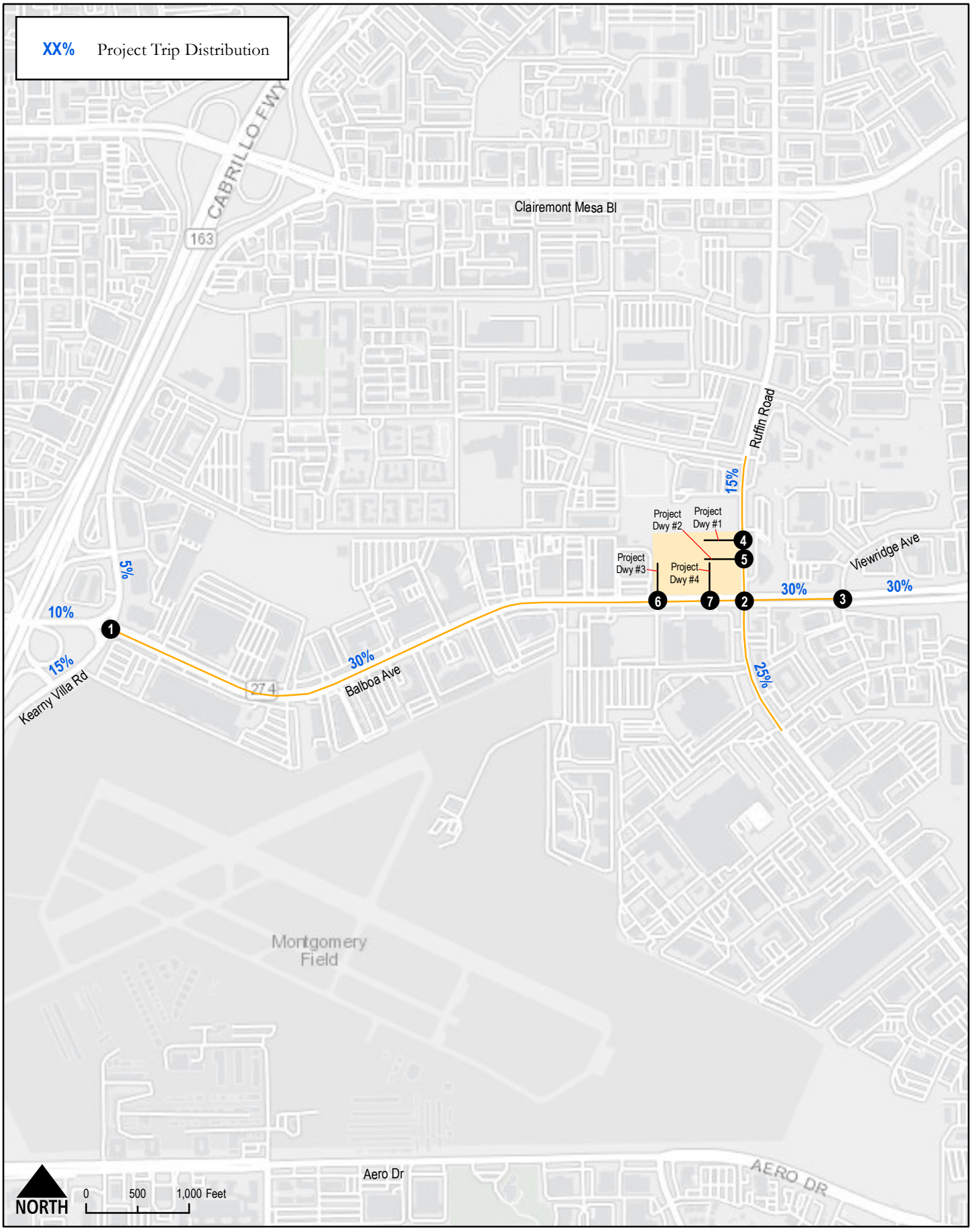


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Figure 3
Project Trip Distribution

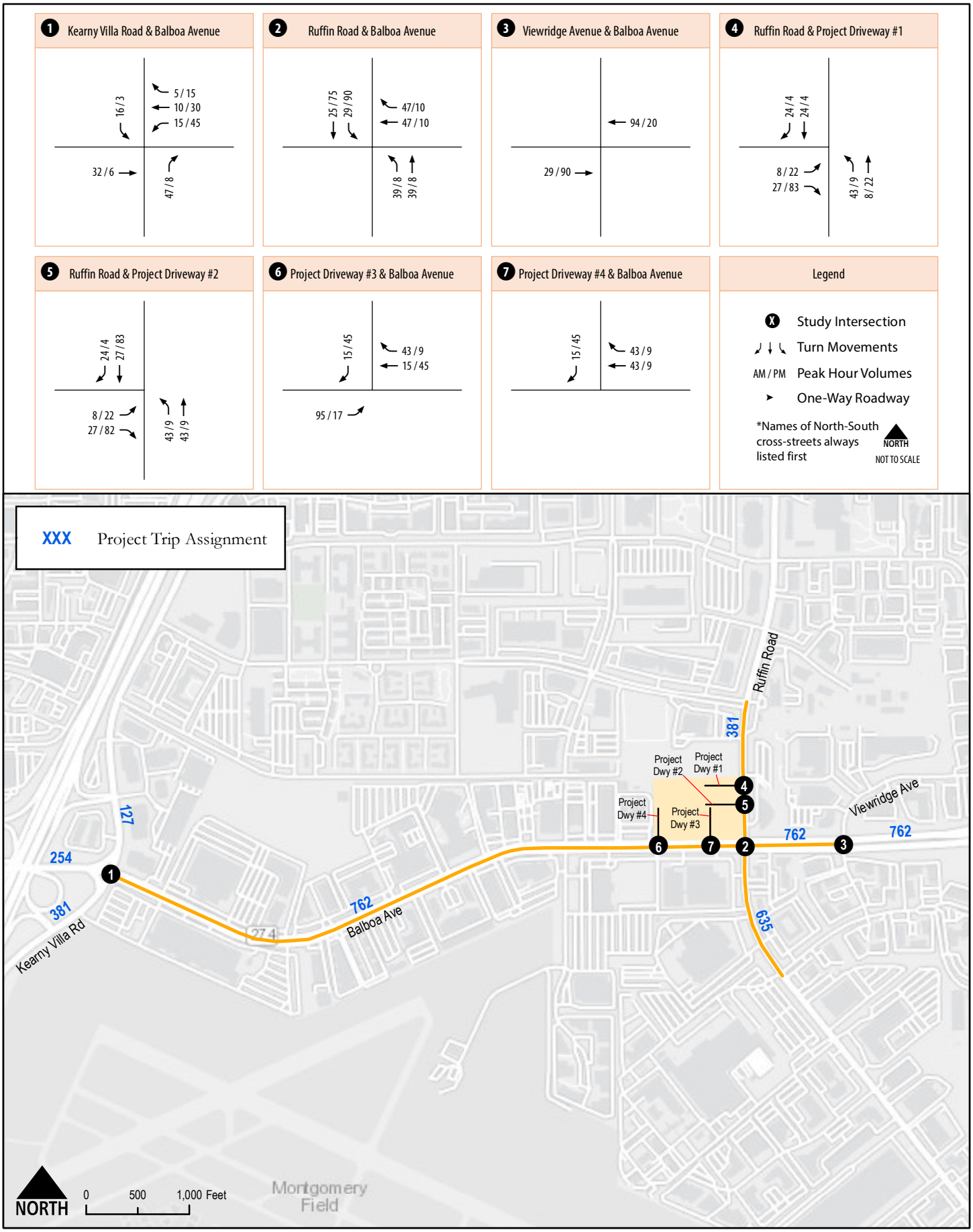

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Figure 4
Project Trip Assignment

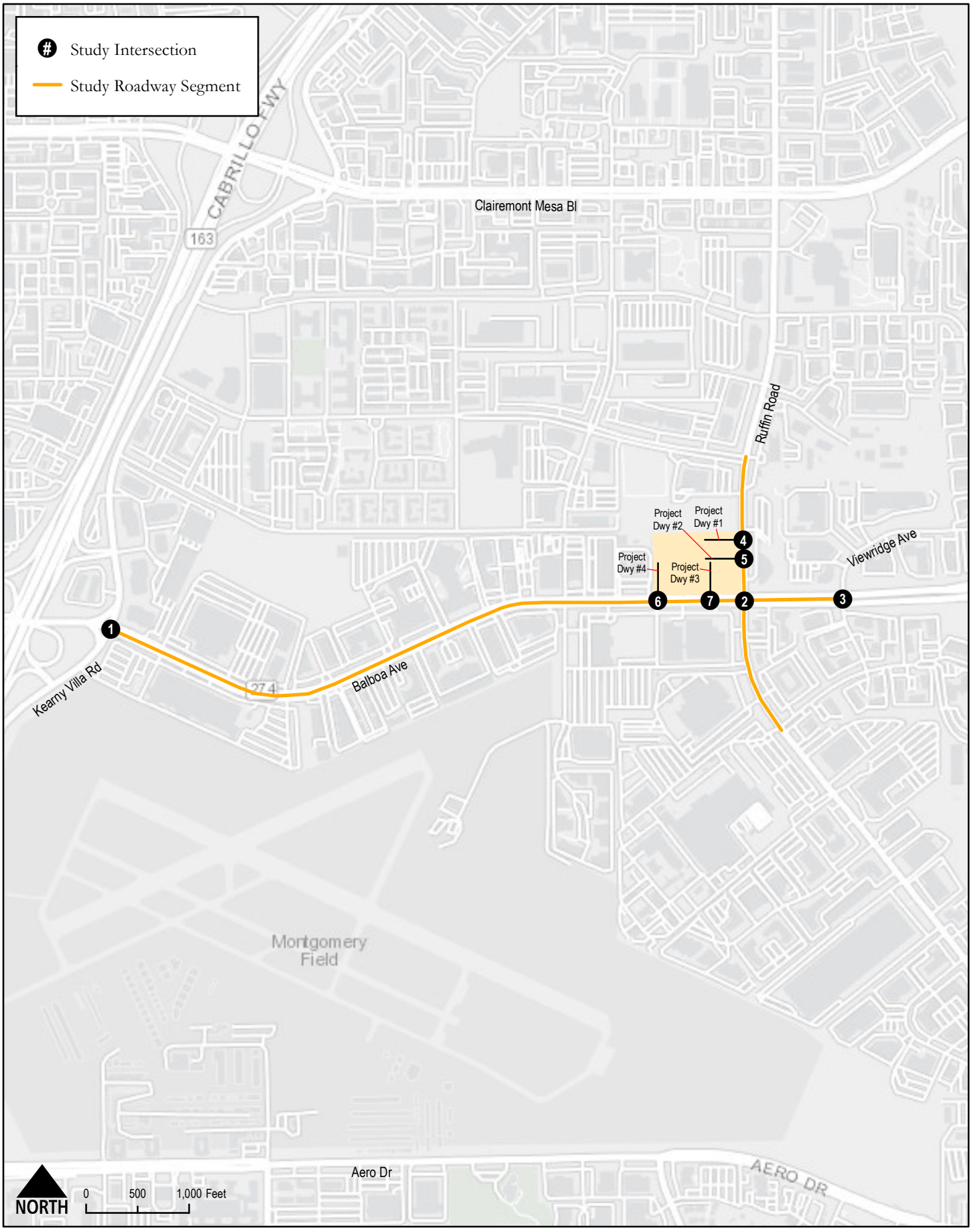

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Figure 5
Project Study Area

Existing Conditions

Vehicular Facilities

Ruffin Road is a 4-lane north-south roadway with a striped center-left-turn lane and a posted speed limit of 40 miles per hour (mph) between Spectrum Center Boulevard and Ridgehaven Center. Parallel parking is allowed on both sides north of Balboa Avenue and the curb-to-curb width is approximately 92 feet. Parking is prohibited on the west side south of Balboa Avenue and the curb-to-curb width is approximately 86 feet. There are currently Class II bike lanes in each direction. The Kearny Mesa Community Plan Update (2020) (KM CPU) identifies Ruffin Road as a 4-Lane Collector with Two-Way Left-Turn Lane.

Balboa Avenue is a 6-lane east-west roadway with a raised median between Ponderosa Avenue and Viewridge Avenue. It currently has a curb-to-curb width of approximately 87 feet west of Ruffin Road, and 130 feet east of Ruffin Road. Under existing conditions, parking on both sides is prohibited, there is only a Class II bike lane west of Ruffin Road, and the posted speed limit is 50 miles per hour (mph). The KM CPU identifies Balboa Avenue as a 4-Lane Major Arterial, west of Ruffin Road, and 6-Lane Prime Arterial, east of Ruffin Road.

Pedestrian Facilities

Pedestrian facilities within a 1/2-mile walkshed of the Project were observed. **Table 2** summarizes existing sidewalk deficiencies identified in the vicinity of the Project (missing sidewalk, significant deterioration, and major obstructions).

Table 2 - Existing Pedestrian Facilities

Roadway	Segment	North/East Side		South/West Side	
		Type	Conditions	Type	Conditions
Ruffin Road	Spectrum Center Boulevard to Balboa Avenue	Missing	N/A	Non-Contiguous	No obstructions and no significant sidewalk deterioration
Ruffin Road	Balboa Avenue to Ridgehaven Court	Non-Contiguous	No obstructions and no significant sidewalk deterioration	Intermittently Non-Contiguous	No obstructions and no significant sidewalk deterioration
Balboa Avenue	Kearny Villa Road to Ruffin Road	Contiguous	No obstructions and no significant sidewalk deterioration	Intermittently Non-Contiguous	No obstructions and no significant sidewalk deterioration
Balboa Avenue	Ruffin Road to Viewridge Avenue	Non-Contiguous	No obstructions and no significant sidewalk deterioration	Non-Contiguous	No obstructions and no significant sidewalk deterioration

Source: CR Associates (2024)

Bicycle Facilities

Bicycle facilities surrounding the project site were observed. **Table 3** summarizes the bicycle facilities located in the vicinity of the Project, including their present conditions and planned classifications per the City of San Diego Bicycle Master Plan (2013).

Table 3 - Existing Bicycle Facilities

Roadway	Segment	Existing		Ultimate Classification
		Facility	Conditions	
Ruffin Road	North of Balboa Avenue	Class II	Present on both sides	Class II
Ruffin Road	South of Balboa Avenue	Class II	Present on both sides	Class II

Balboa Avenue	Kearny Villa Road to Ruffin Road	Class II/III	Class III only 460 ft west of Ruffin Road.	Class II or III
Balboa Avenue	Ruffin Road to Viewridge Avenue	None	N/A	Class II or III

Source: CR Associates (2024)

Transit Facilities

Descriptions of the MTS routes serviced by these stops are provided below:

- ***MTS Bus Route 928*** – (Fashion Valley – Kearny Mesa) – Within the Project vicinity, this route operate along Ruffin Road. On weekdays, this route operates with a frequency of approximately 30-minute headways between the hours of 5:25 AM and 9:37 PM. On Saturdays, this route operates with a frequency of approximately 1-hour headways between the hours of 7:05 AM and 9:05 PM. On Sundays, this route operates with a frequency of approximately 1-hour headways between the hours of 9:05 AM and 6:05 PM.
- ***MTS Bus Route 60*** – (Euclid Transit Center – UTC) – Within the Project vicinity, this route operates along Balboa Avenue. On weekdays, this route operates with a frequency of approximately 15 to 30-minute headways. This route does not operate on weekends.

Transit amenities available at the transit stops near the Project that service the routes listed above are provided in **Table 4.**

Table 4 – Existing Transit Facilities

Amenity	Transit Stop		
	Ruffin Road & Balboa Avenue (Stop No. 99103)	Balboa Avenue & Ruffin Road (Stop No. 10176)	Balboa Avenue & Ruffin Road (Stop No. 11307)
MTS Route	X	X	X
Direction	Southbound	Eastbound	Westbound
Sign and Pole	X	X	X
Built-in Sign		X	
Expanded Sidewalk			X
Bench	X	X	X
Shelter		X	
Route Designations			
Timetable			
Route Map		X	
System Map		X	
Trash Receptacle		X	
Lighting		X	

Source: CR Associates (2024)

Existing Traffic Conditions

This section provides a summary of traffic operations under Existing Conditions, including LOS results for the study roadway segments and intersection.

Transportation Network

Roadway segment and intersection geometrics under Existing conditions are displayed in **Figure 6.**

Traffic Volumes

Existing traffic counts were conducted on Tuesday November 2, 2024, and February 15, 2024, by Counts Unlimited, Inc. Daily roadway segment and peak hour intersection turning movement volumes under Existing Conditions are displayed in **Figure 7**.

Roadway Segment Analysis

Table 5 displays roadway segment LOS analysis results for study roadway segments under Existing Conditions.

Table 5 – Roadway Segment LOS Results – Existing Conditions

Roadway	Segment	Functional Classification	Capacity	ADT	V/C	LOS
Ruffin Road	North of Balboa Avenue	4-Lane Collector w/ TWLTL	30,000	15,972	0.532	C
Ruffin Road	South of Balboa Avenue	4-Lane Collector w/ TWLTL	30,000	14,659	0.489	C
Balboa Avenue	Kearny Villa Road to Ruffin Road	4-Lane Major Arterial	40,000	21,511	0.538	C
Balboa Avenue	Ruffin Road to Viewridge Avenue	6-Lane Prime Arterial	60,000	25,490	0.425	B

Source: CR Associates (2024)

Notes:
V/C = Volume / Capacity.

As shown, all study roadway segments currently operate at LOS C or better under Existing Conditions.

Intersection Analysis

Table 6 displays intersection LOS and average vehicle delay results for the study intersection under Existing Conditions. LOS calculation worksheets for Existing Conditions are provided in **Attachment A**.

Table 6 – Peak Hour Intersection LOS Results – Existing Conditions

ID	Intersection	Control Type	Peak Hour	Avg. Delay (sec.)	LOS
1	Kearny Villa Road & Balboa Avenue	Signal	AM	16.7	B
			PM	23.0	C
2	Ruffin Road & Balboa Avenue	Signal	AM	35.1	D
			PM	47.6	D
3	Viewridge Avenue & Balboa Avenue	Signal	AM	17.5	B
			PM	64.3	**E**

Source: CR Associates (2024)

As shown, only the study intersection of Viewridge Avenue & Balboa Avenue currently operates at substandard LOS E during the PM peak hour. This is primarily due to the high number of southbound left and northbound right turns.

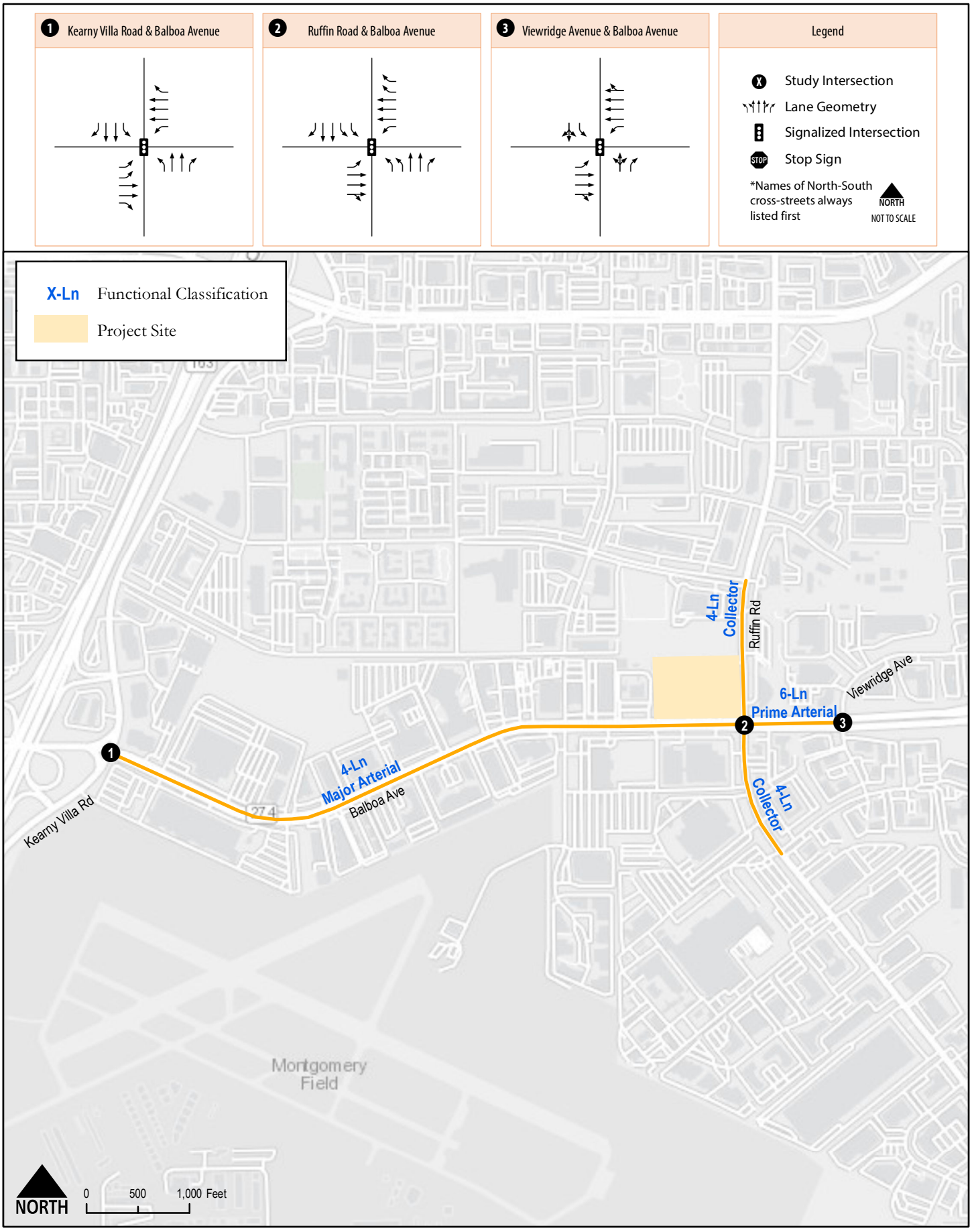

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Figure 6
Functional Classifications and Intersection Geometrics
Existing Conditions

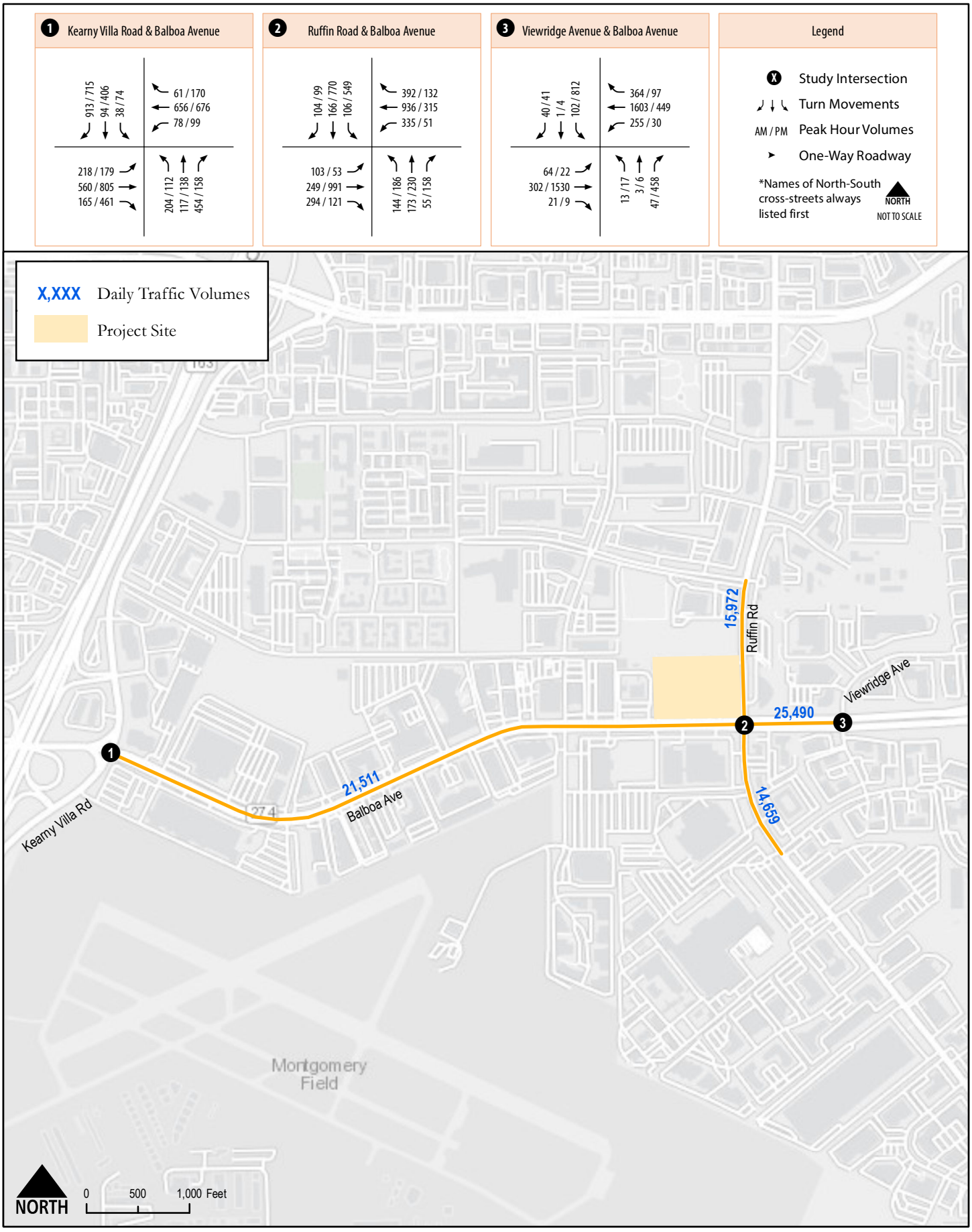

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Figure 7
Traffic Volumes
Existing Conditions

Opening Year 2025 Conditions

This section provides a summary of traffic operations under Opening Year 2025 without and with Project Conditions, including LOS results for the study roadway segment. The "without Project" scenario establishes the near-term baseline conditions to compare against the "with Project" scenario.

Cumulative Project Traffic

Several developments are currently under construction or planned to be completed prior to the Project's opening year. The City of San Diego Open DSD maps were utilized to search projects in the vicinity that are anticipated to contribute traffic near the project study area. These projects were assumed to be complete by the Project's opening year and their associated traffic was assigned to study roadway segments and intersection, similar to the Project's trip distribution and assignment. **Table 7** displays the trip generation for cumulative projects. **Figure 8** displays cumulative project locations. **Figure 9** displays the cumulative project trip assignment. **Attachment B** includes relevant excerpts of each cumulative project, as well cumulative project trip generation calculations.

Table 7 – Cumulative Projects Trip Generation

PTS#	Cumulative Project	ADT	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
203962	Mission Valley Christian Church	597	29	44	64	42
585542	Marijuana Production Facility	60	29	2	8	21
Total		**657**	**58**	**46**	**72**	**63**

Source: CR Associates (2024)

Transportation Network

Per the KM CPU, the study roadway segments are built to their ultimate classifications. The Project will construct four (4) new project driveways, including two along Ruffin Road and two along Balboa Avenue, and does not propose any other off-site improvements. Therefore, roadway segment functional classifications and intersection geometrics under Opening Year 2025 conditions were assumed to be identical to Existing conditions.

Traffic Volumes

Daily roadway segment and peak hour intersection turning movements volumes under Opening Year 2025 without Project conditions were developed by adding the cumulative project trip assignment from Figure 9 to the existing traffic volumes, shown previously in Figure 7. Traffic volumes under Opening Year 2025 without Project conditions are displayed in **Figure 10.**

Traffic volumes under Opening Year 2025 with Project conditions were developed by adding the Project's trip assignment, shown previously in Figure 4, to the traffic volumes under Opening Year 2025 without Project conditions. Traffic volumes under Opening Year 2025 with Project conditions are displayed in **Figure 11.**

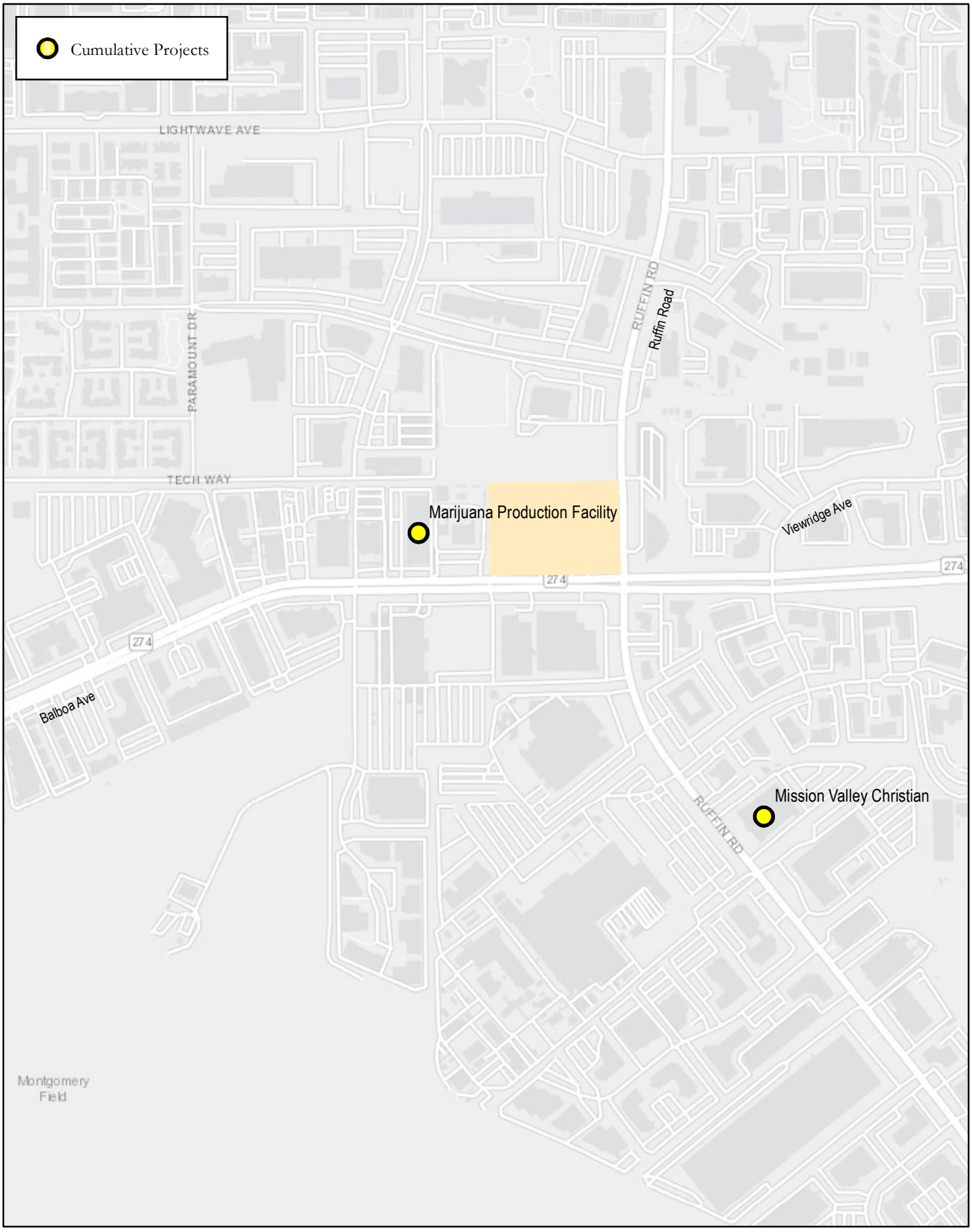

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Figure 8
Cumulative Project Locations

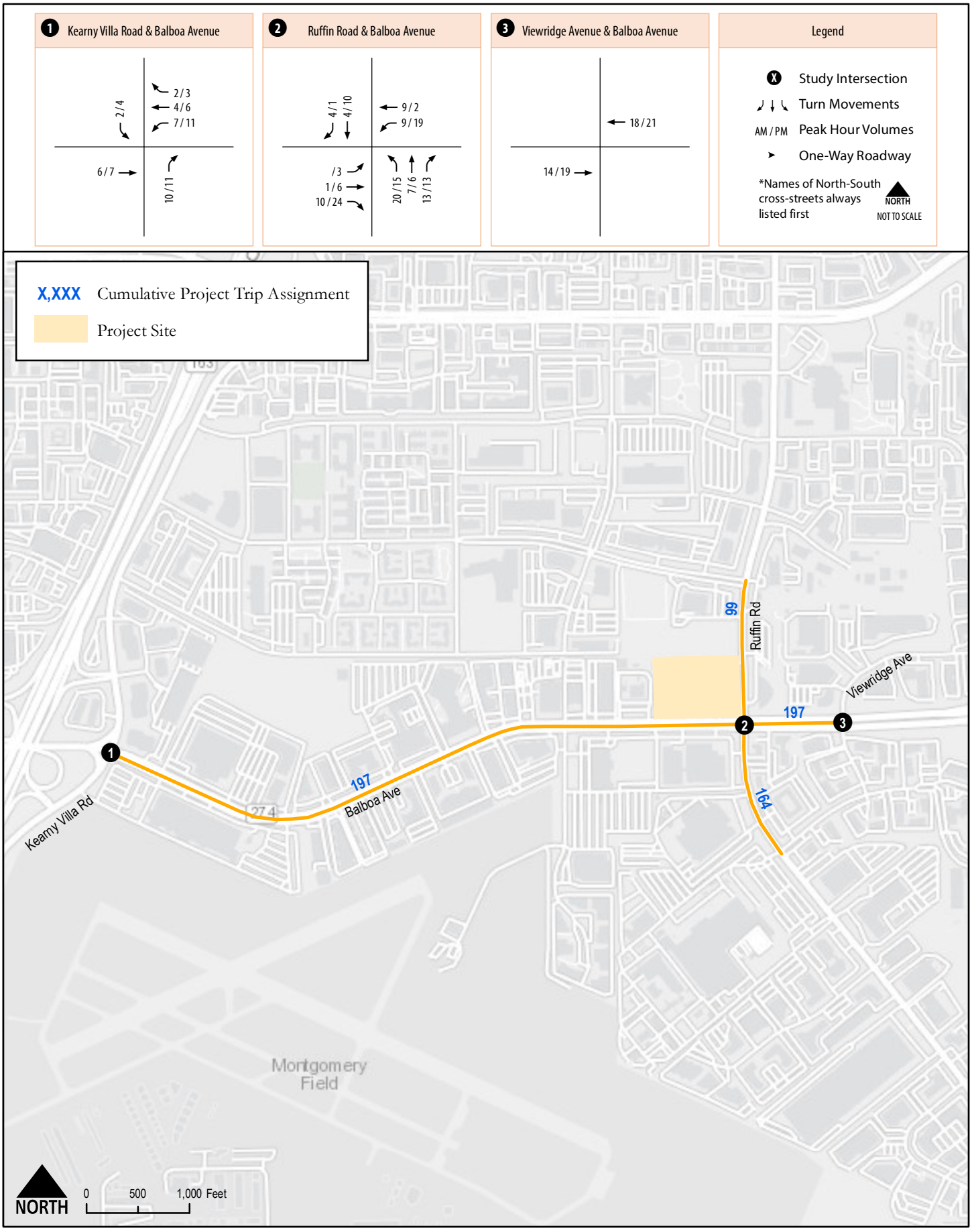

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Figure 9
Cumulative Project Trip Assignment

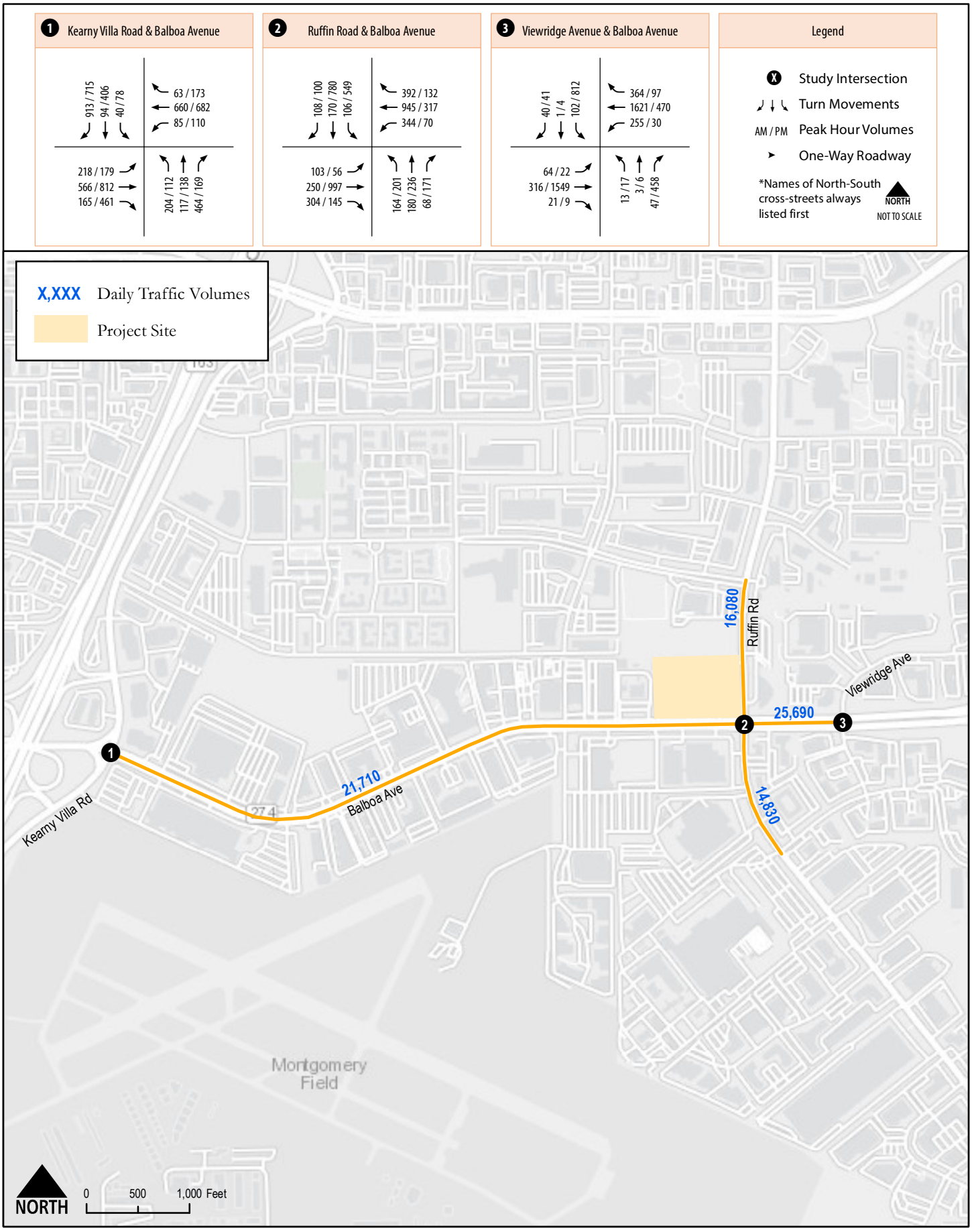

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Figure 10
Traffic Volumes
Opening Year 2025 without Project Conditions

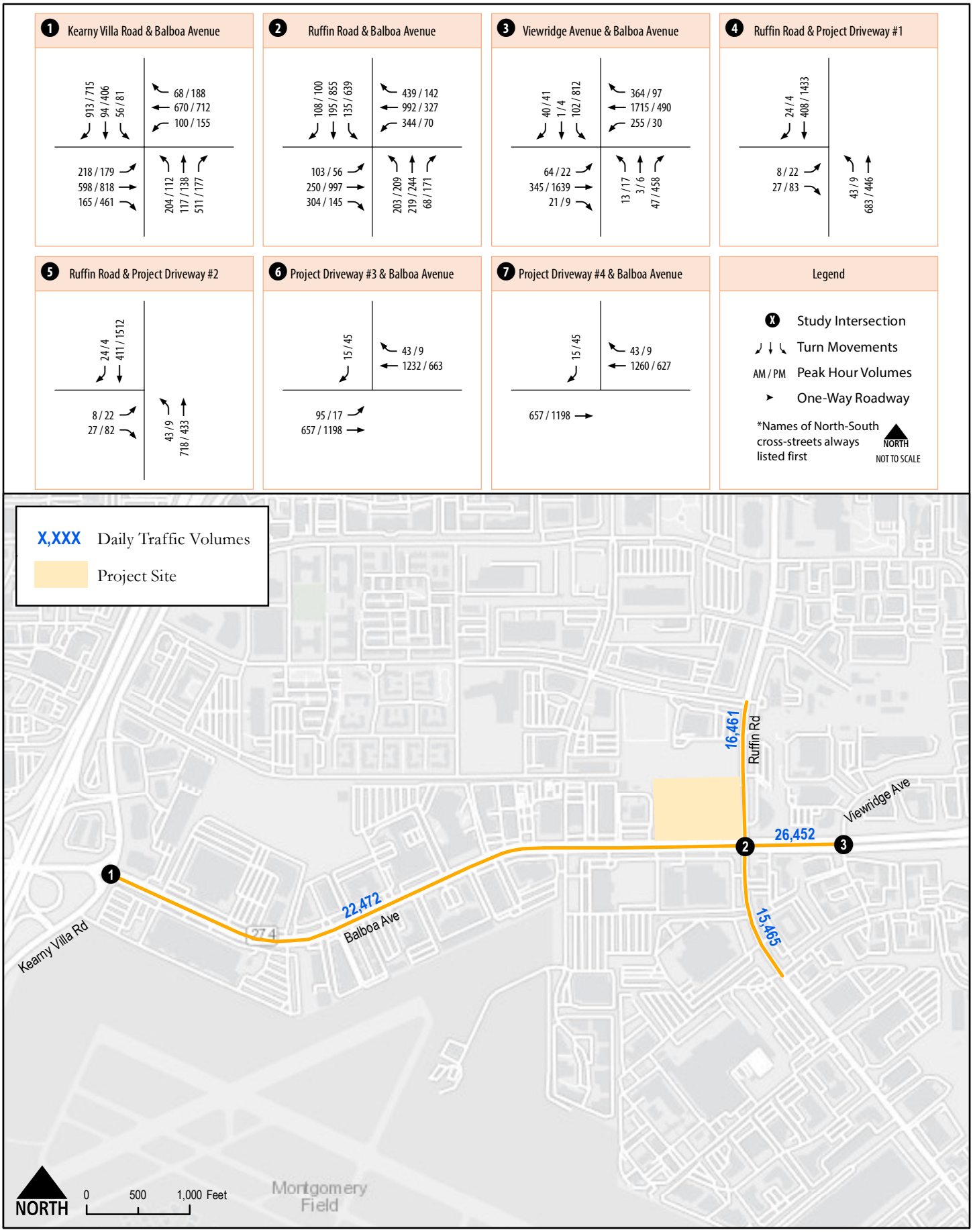

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Figure 11
Traffic Volumes
Opening Year 2025 with Project Conditions

Opening Year 2025 Traffic Conditions

Roadway Segment Analysis

Table 8 displays roadway segment LOS and analysis results for study roadway segments under Opening Year 2025 without and with Project Conditions.

Table 8 – Roadway Segment LOS Results – Opening Year 2025 without and with Project Conditions

Roadway	Segment	Functional Classification	Capacity	Opening Year 2025 Without Project			Opening Year 2025 With Project			Δ
				ADT	V/C	LOS	ADT	V/C	LOS	
Ruffin Road	Spectrum Center Blvd to Balboa Ave	4-Lane Collector w/ TWLTL	30,000	16,080	0.536	C	16,461	0.549	C	0.013
Ruffin Road	Balboa Ave to Ridgehaven Ct	4-Lane Collector w/ TWLTL	30,000	14,830	0.494	C	15,465	0.516	C	0.022
Balboa Avenue	Kearny Villa Road to Ruffin Road	4-Lane Major Arterial	40,000	21,710	0.543	C	22,472	0.562	C	0.019
Balboa Avenue	Ruffin Rd to Viewridge Ave	6-Lane Prime Arterial	60,000	25,690	0.428	B	26,452	0.441	B	0.013

Source: CR Associates (2024)

Note:
V/C = Volume / Capacity.

As shown, all of the study roadway segments are projected to operate at LOS C or better under Opening Year 2025 with Project conditions. Therefore, implementation of the Project is not projected to degrade roadway segment level of service to substandard LOS E or F.

Intersection Analysis

Table 9 displays intersection LOS and average vehicle delay results for the study intersections under Opening Year 2025 without and with Project Conditions. LOS calculation worksheets for Opening Year 2025 without Project Conditions and Opening Year 2025 with Project Conditions are provided in **Attachment C** and **Attachment D**, respectively.

Table 9 – Peak Hour Intersection LOS Results – Opening Year 2025 Conditions

ID	Intersection	Control Type	Peak Hour	Opening Year 2025 without Project		Opening Year 2025 with Project		Δ
				Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	
1	Kearny Villa Road & Balboa Avenue	Signal	AM PM	16.9 23.5	B C	17.4 25.5	B C	0.5 2.0
2	Ruffin Road & Balboa Avenue	Signal	AM PM	35.5 48.9	D D	36.9 60.3	D **E**	1.4 11.4
3	Viewridge Avenue & Balboa Avenue	Signal	AM PM	17.4 63.7	B **E**	17.1 62.0	B **E**	-0.3 -1.7
2	Ruffin Road & Project Driveway #1	SSSC	AM PM	N/A N/A	N/A N/A	11.2 30.4	B D	11.2 30.4
3	Ruffin Road & Project Driveway #2	SSSC	AM PM	N/A N/A	N/A N/A	11.2 34.4	B D	11.2 34.4
4	Project Driveway #3 & Balboa Avenue	SSSC	AM PM	N/A N/A	N/A N/A	14.8 11.2	B B	14.8 11.2
5	Project Driveway #4 & Balboa Avenue	SSSC	AM PM	N/A N/A	N/A N/A	16.8 12.1	C B	16.8 12.1

Source: CR Associates (2024)

Note:
N/A = Not Applicable.
SSSC = Side-Street Stop Controlled. For SSSC intersections, the delay shown is the delay for the worst-case movement.

As shown, all of the study intersections are projected to operate at LOS D or better under Opening Year 2025 with Project conditions, with the exception of the following:

- *Ruffin Road & Balboa Avenue*: During the PM peak hour, this intersection is projected to operate at LOS D under "without Project" conditions and implementation of the Project would cause the intersection to operate at LOS E. Under "without Project" conditions, the most congested movements at this intersection include the left turns for all approaches, as well as the northbound and southbound through movements. Project traffic is anticipated to add trips to all of these movements, resulting in substandard LOS E during the PM peak hour. The LOS E result matches the findings in the City of San Diego Kearny Mesa Community Plan (KMCP), which emphasizes active transportation. In line with the KMCP, no further enhancements to the intersection are proposed. Nonetheless, it is suggested that the District collaborate with the City of San Diego to adjust the signal timing at this intersection to reflect changes in traffic flow.
- *Viewridge Avenue & Balboa Avenue*: The Project is projected to continue operating at LOS E during the PM peak hour. However, this intersection is projected to improve in delay slightly. In some instances, counterintuitively, adding trips to an intersection can reduce delay if those trips are added to an approach with remaining capacity. In this case, as mentioned previously, the northbound and southbound approaches are at capacity given the high number of southbound left and northbound right turns. The Project would only add traffic to the eastbound and westbound through movements, which have some remaining capacity. Therefore, although the intersection would continue to operate at LOS E, the Project is not anticipated to result in an increase in delay at this intersection.

Queue Analysis

In addition to the intersection LOS analyses presented above, a 95th percentile queueing analysis was conducted at the four (4) project driveways under Opening Year 2025 with Project Conditions. **Table 10** identifies the intersection control, pocket length, 95th percentile queue length, and excess queue (if applicable) for turning movements into the project driveway.

Table 10 – Peak Hour Intersection Queue Analysis– Opening Year 2025 with Project Conditions

ID	Intersection	Traffic Control	Turning Movement	Pocket Length (ft)	AM / PM 95% Queue Length (ft)[1]	AM / PM Excess Queue (ft)
2	Ruffin Road & Project Driveway #1	SSSC	SBL NBL	550[2] 150	0 / 0 25 / 25	0 / 0 0 / 0
3	Ruffin Road & Project Driveway #2	SSSC	SBL NBL	675[2] 50	0 / 0 25 / 25	0 / 0 0 / 0
4	Balboa Avenue & Project Driveway #3	SSSC	WBR EBL	600[2] 100	0 / 0 25 / 25	0 / 0 0 / 0
5	Balboa Avenue & Project Driveway #4	SSSC	WBR	75[2]	0 / 0	0 / 0

Source: CR Associates (2024)

Notes:
SSSC = Side-Street Stop-Controlled.
SBL = Southbound Left-Turn | NBL = Northbound Left-Turn | WBR = Westbound Right-Turn | EBL = Eastbound Left-Turn.
[1] Measured to the nearest 25 feet to represent one vehicle length.
[2] Measured from project driveway to upstream intersection.

As shown, the 95th percentile queues are not projected to extend beyond the available storage lengths during both the AM and PM peak periods.

Site Access and Circulation

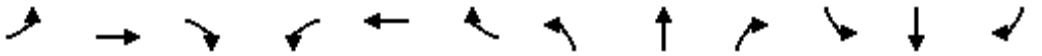
Site access will be provided via four (4) side-street stop-controlled intersections, including two (2) along Ruffin Road and two (2) along Balboa Avenue. The Project will allow for internal two-way flow of traffic. An internal road will connect the southeast parking lot to Project Driveway #2, Project Driveway #3, and Project Driveway #4. A separate internal road will provide a connection between Project Driveway #1, the proposed parking garage, and Project Driveway #3.

Based on review of the project site plan, the following recommendations are provided:

- Driveways are recommended to be constructed in accordance with City of San Diego standards.
- Install "Right Out Only" signage at Project Driveway #3. Left-turning vehicles at this location may cause significant delays due to the high volume of eastbound and westbound traffic.
- Prior to construction of the parking structure, provide signage on-site and a wayfinding diagram on the district's website to guide employees and visitors to the appropriate parking area.
- Develop a wayfinding/signage program for the ultimate buildout of the Project to facilitate efficient parking operations.

Attachment A

LOS Calculation Worksheets
Existing Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	560	165	78	656	61	204	117	454	38	94	913
Future Volume (veh/h)	218	560	165	78	656	61	204	117	454	38	94	913
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	240	583	10	100	691	2	240	136	162	44	112	0
Peak Hour Factor	0.91	0.96	0.76	0.78	0.95	0.80	0.85	0.86	0.89	0.86	0.84	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	1177	525	129	1495	464	302	700	312	66	229	
Arrive On Green	0.11	0.33	0.33	0.07	0.30	0.30	0.17	0.20	0.20	0.04	0.06	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	240	583	10	100	691	2	240	136	162	44	112	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.2	6.3	0.2	2.6	5.3	0.0	6.2	1.5	4.4	1.2	1.5	0.0
Cycle Q Clear(g_c), s	3.2	6.3	0.2	2.6	5.3	0.0	6.2	1.5	4.4	1.2	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1177	525	129	1495	464	302	700	312	66	229	
V/C Ratio(X)	0.63	0.50	0.02	0.77	0.46	0.00	0.80	0.19	0.52	0.67	0.49	
Avail Cap(c_a), veh/h	1441	2223	992	743	3195	992	743	1853	826	743	1853	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	12.6	10.6	21.7	13.7	11.8	18.9	15.9	17.0	22.6	21.5	0.0
Incr Delay (d2), s/veh	0.6	0.5	0.0	3.7	0.3	0.0	1.8	0.1	1.0	4.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.1	0.1	1.1	1.8	0.0	2.4	0.6	1.5	0.5	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	13.1	10.6	25.4	14.0	11.8	20.8	16.0	18.0	27.0	22.7	0.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	C	
Approach Vol, veh/h		833			793			538			156	
Approach Delay, s/veh		15.3			15.4			18.7			23.9	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	20.9	12.1	7.1	9.3	19.0	5.8	13.4
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	4.6	8.3	8.2	3.5	5.2	7.3	3.2	6.4
Green Ext Time (p_c), s	0.1	5.5	0.3	0.5	0.4	6.7	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	249	294	335	936	392	144	173	55	106	166	104
Future Volume (veh/h)	103	249	294	335	936	392	144	173	55	106	166	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	154	277	52	390	1029	206	185	199	0	132	200	9
Peak Hour Factor	0.67	0.90	0.87	0.86	0.91	0.83	0.78	0.87	0.72	0.80	0.83	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	180	410	181	889	2699	1564	240	527	235	184	469	203
Arrive On Green	0.10	0.12	0.12	0.50	0.53	0.53	0.07	0.15	0.00	0.05	0.13	0.13
Sat Flow, veh/h	1767	3526	1552	1767	5066	2657	3428	3526	1572	3428	3526	1526
Grp Volume(v), veh/h	154	277	52	390	1029	206	185	199	0	132	200	9
Grp Sat Flow(s),veh/h/ln	1767	1763	1552	1767	1689	1328	1714	1763	1572	1714	1763	1526
Q Serve(g_s), s	11.0	9.6	3.2	18.0	15.2	4.4	6.8	6.5	0.0	4.9	6.7	0.7
Cycle Q Clear(g_c), s	11.0	9.6	3.2	18.0	15.2	4.4	6.8	6.5	0.0	4.9	6.7	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	410	181	889	2699	1564	240	527	235	184	469	203
V/C Ratio(X)	0.86	0.68	0.29	0.44	0.38	0.13	0.77	0.38	0.00	0.72	0.43	0.04
Avail Cap(c_a), veh/h	243	818	360	889	2699	1564	445	1027	458	337	928	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	54.2	35.3	20.3	17.5	11.9	58.5	49.1	0.0	59.6	51.0	48.4
Incr Delay (d2), s/veh	15.8	8.6	4.0	0.1	0.3	0.1	2.0	0.7	0.0	2.0	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	4.8	1.7	7.2	5.8	1.3	2.9	2.9	0.0	2.1	3.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.4	62.9	39.3	20.4	17.8	12.0	60.5	49.8	0.0	61.6	52.0	48.5
LnGrp LOS	E	E	D	C	B	B	E	D	A	E	D	D
Approach Vol, veh/h		483			1625			384			341	
Approach Delay, s/veh		63.4			17.7			54.9			55.6	
Approach LOS		E			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.7	21.2	13.4	22.7	17.4	74.5	11.3	24.8
Change Period (Y+Rc), s	6.3	* 6.3	4.4	* 5.7	4.4	6.3	4.4	5.7
Max Green Setting (Gmax), s	27.6	* 30	16.6	* 34	17.6	39.7	12.6	37.3
Max Q Clear Time (g_c+I1), s	20.0	11.6	8.8	8.7	13.0	17.2	6.9	8.5
Green Ext Time (p_c), s	0.4	1.8	0.2	1.8	0.1	9.4	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	302	21	255	1603	364	13	3	47	102	1	40
Future Volume (veh/h)	64	302	21	255	1603	364	13	3	47	102	1	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	84	403	27	297	1822	417	20	4	3	174	0	0
Peak Hour Factor	0.76	0.75	0.58	0.86	0.88	0.82	0.65	0.75	0.65	0.65	0.25	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	105	2806	186	324	3660	836	29	6	30	233	122	0
Arrive On Green	0.12	1.00	1.00	0.18	0.70	0.70	0.02	0.02	0.02	0.07	0.00	0.00
Sat Flow, veh/h	1767	4853	322	1767	5233	1195	1484	297	1572	3534	1856	0
Grp Volume(v), veh/h	84	279	151	297	1666	573	24	0	3	174	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1798	1767	1596	1640	1781	0	1572	1767	1856	0
Q Serve(g_s), s	5.9	0.0	0.0	21.1	20.6	20.6	1.7	0.0	0.2	6.2	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	21.1	20.6	20.6	1.7	0.0	0.2	6.2	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.73	0.83		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	105	1953	1039	324	3348	1147	34	0	30	233	122	0
V/C Ratio(X)	0.80	0.14	0.15	0.92	0.50	0.50	0.70	0.00	0.10	0.75	0.00	0.00
Avail Cap(c_a), veh/h	257	1953	1039	552	3348	1147	210	0	186	665	349	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	55.7	0.0	0.0	51.3	8.9	8.9	62.4	0.0	61.7	58.7	0.0	0.0
Incr Delay (d2), s/veh	5.1	0.1	0.3	7.6	0.5	1.6	9.1	0.0	0.5	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.1	9.9	6.4	7.0	0.9	0.0	0.1	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.1	0.3	58.8	9.4	10.4	71.5	0.0	62.2	60.5	0.0	0.0
LnGrp LOS	E	A	A	E	A	B	E	A	E	E	A	A
Approach Vol, veh/h		514			2536			27			174	
Approach Delay, s/veh		10.1			15.4			70.5			60.5	
Approach LOS		B			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	79.8		13.3	12.0	95.3		7.4
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	40.0	29.2		24.1	18.6	* 51		15.1
Max Q Clear Time (g_c+I2), s	23.1	2.0		8.2	7.9	22.6		3.7
Green Ext Time (p_c), s	0.4	3.1		0.3	0.1	21.0		0.0

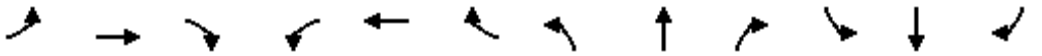
Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	805	461	99	676	170	112	138	158	74	406	715
Future Volume (veh/h)	179	805	461	99	676	170	112	138	158	74	406	715
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	199	982	162	112	751	44	137	168	29	84	541	0
Peak Hour Factor	0.90	0.82	0.78	0.88	0.90	0.89	0.82	0.82	0.88	0.88	0.75	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	299	1301	580	145	1842	572	175	865	386	109	733	
Arrive On Green	0.09	0.37	0.37	0.08	0.36	0.36	0.10	0.25	0.25	0.06	0.21	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	199	982	162	112	751	44	137	168	29	84	541	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.9	17.1	5.1	4.4	7.8	1.3	5.3	2.6	1.0	3.3	10.1	0.0
Cycle Q Clear(g_c), s	3.9	17.1	5.1	4.4	7.8	1.3	5.3	2.6	1.0	3.3	10.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1301	580	145	1842	572	175	865	386	109	733	
V/C Ratio(X)	0.67	0.75	0.28	0.78	0.41	0.08	0.78	0.19	0.08	0.77	0.74	
Avail Cap(c_a), veh/h	978	1509	673	504	2168	673	504	1257	561	504	1257	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.0	19.3	15.6	31.5	16.7	14.6	30.9	21.0	20.3	32.4	26.0	0.0
Incr Delay (d2), s/veh	1.0	2.2	0.4	3.3	0.2	0.1	2.9	0.1	0.1	4.3	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	6.8	1.8	1.9	2.8	0.4	2.3	1.1	0.4	1.5	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	21.5	15.9	34.9	16.9	14.7	33.8	21.0	20.4	36.7	27.1	0.0
LnGrp LOS	C	C	B	C	B	B	C	C	C	D	C	
Approach Vol, veh/h		1343			907			334			625	
Approach Delay, s/veh		22.4			19.0			26.2			28.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	30.9	10.9	18.6	10.1	30.5	8.3	21.2
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	6.4	19.1	7.3	12.1	5.9	9.8	5.3	4.6
Green Ext Time (p_c), s	0.1	6.8	0.1	2.5	0.3	7.2	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	991	121	51	315	132	186	230	158	549	770	99
Future Volume (veh/h)	53	991	121	51	315	132	186	230	158	549	770	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	72	1089	112	56	366	89	235	264	0	590	837	47
Peak Hour Factor	0.74	0.91	0.98	0.91	0.86	0.79	0.79	0.87	0.76	0.93	0.92	0.67
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	91	2281	234	72	2419	1892	291	366	163	706	828	369
Arrive On Green	0.05	0.49	0.49	0.08	0.96	0.96	0.08	0.10	0.00	0.21	0.23	0.23
Sat Flow, veh/h	1767	4667	479	1767	5066	2768	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	72	788	413	56	366	89	235	264	0	590	837	47
Grp Sat Flow(s),veh/h/ln	1767	1689	1769	1767	1689	1384	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	5.4	21.0	21.0	4.2	0.5	0.0	9.1	9.8	0.0	22.3	31.7	3.2
Cycle Q Clear(g_c), s	5.4	21.0	21.0	4.2	0.5	0.0	9.1	9.8	0.0	22.3	31.7	3.2
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	1651	865	72	2419	1892	291	366	163	706	828	369
V/C Ratio(X)	0.79	0.48	0.48	0.78	0.15	0.05	0.81	0.72	0.00	0.84	1.01	0.13
Avail Cap(c_a), veh/h	243	1651	865	217	2419	1892	726	948	423	706	828	369
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	23.0	23.0	61.5	1.6	0.2	60.7	58.6	0.0	51.4	51.6	40.7
Incr Delay (d2), s/veh	5.5	1.0	1.9	6.7	0.1	0.0	2.0	4.1	0.0	8.1	34.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.4	9.0	1.9	0.2	0.0	4.0	4.5	0.0	10.1	17.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.8	24.0	24.9	68.1	1.7	0.2	62.7	62.6	0.0	59.5	85.7	41.0
LnGrp LOS	E	C	C	E	A	A	E	E	A	E	F	D
Approach Vol, veh/h		1273			511			499			1474	
Approach Delay, s/veh		26.8			8.7			62.7			73.8	
Approach LOS		C			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	72.3	15.9	37.0	11.4	70.8	33.1	19.7
Change Period (Y+Rc), s	4.4	6.3	4.4	5.3	4.4	6.3	5.3	* 5.7
Max Green Setting (Gmax), s	16.6	37.7	28.6	31.7	18.6	35.7	23.6	* 36
Max Q Clear Time (g_c+I1), s	6.2	23.0	11.1	33.7	7.4	2.5	24.3	11.8
Green Ext Time (p_c), s	0.0	6.8	0.4	0.0	0.0	3.3	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	47.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1530	9	30	449	97	17	6	458	812	4	41
Future Volume (veh/h)	22	1530	9	30	449	97	17	6	458	812	4	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	1739	14	40	510	85	0	0	443	911	0	0
Peak Hour Factor	0.55	0.88	0.56	0.75	0.88	0.81	0.81	0.75	0.79	0.94	0.33	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	2506	20	51	2684	431	0	263	445	709	372	0
Arrive On Green	0.06	0.97	0.97	0.03	0.48	0.48	0.00	0.00	0.14	0.20	0.00	0.00
Sat Flow, veh/h	1767	5183	42	1767	5584	897	0	1856	3145	3534	1856	0
Grp Volume(v), veh/h	40	1133	620	40	435	160	0	0	443	911	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1848	1767	1596	1694	0	1856	1572	1767	1856	0
Q Serve(g_s), s	3.0	4.5	4.5	3.0	7.0	7.3	0.0	0.0	19.0	27.1	0.0	0.0
Cycle Q Clear(g_c), s	3.0	4.5	4.5	3.0	7.0	7.3	0.0	0.0	19.0	27.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.53	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	51	1633	894	51	2301	814	0	263	445	709	372	0
V/C Ratio(X)	0.78	0.69	0.69	0.78	0.19	0.20	0.00	0.00	1.00	1.28	0.00	0.00
Avail Cap(c_a), veh/h	178	1633	894	170	2301	814	0	263	445	709	372	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	63.2	1.2	1.2	65.1	20.0	20.1	0.0	0.0	57.9	54.0	0.0	0.0
Incr Delay (d2), s/veh	6.8	1.8	3.2	9.1	0.2	0.5	0.0	0.0	41.4	138.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.0	1.4	1.5	2.6	3.0	0.0	0.0	10.1	25.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	3.0	4.4	74.2	20.2	20.7	0.0	0.0	99.3	192.4	0.0	0.0
LnGrp LOS	E	A	A	E	C	C	A	A	F	F	A	A
Approach Vol, veh/h		1793			635			443			911	
Approach Delay, s/veh		5.0			23.7			99.3			192.4	
Approach LOS		A			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	71.1		32.0	8.3	70.7		24.0
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	13.6	56.2		27.1	13.6	* 56		19.1
Max Q Clear Time (g_c+I1), s	5.0	6.5		29.1	5.0	9.3		21.0
Green Ext Time (p_c), s	0.0	22.6		0.0	0.0	4.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	64.3
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

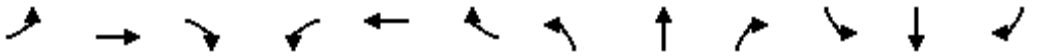
Attachment B
Cumulative Projects

Project #	Project Name	Scope	Address
203962	MISSION VALLEY CHRISTIAN	KEARNY MESA (PROCESS 3) Conditional Use Permit for a church in an existing building with 663 seats at 4255 Ruffin Road in the IL-2-1 Zone within the Kearny Mesa Community Plan, Airport Influence Area, FAA Part 77. Council District 6. Notice Cards=3.	4255 RUFFIN RD
585542	MPF 9244 Balboa Ave	KEARNY MESA (Process 3) Conditional Use Permit for a Marijuana Production Facility to operate within an existing 45,600-square-foot building located at 9244 Balboa Avenue. The 2.93-acre site is located in the IL-2-1 base zone within the Kearny Mesa Community Plan area in Council District 6.	9244 BALBOA AV

Attachment C

LOS Calculation Worksheets

Opening Year 2025 Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	566	165	85	660	63	204	117	464	40	94	913
Future Volume (veh/h)	218	566	165	85	660	63	204	117	464	40	94	913
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	240	590	10	109	695	5	240	136	173	47	112	0
Peak Hour Factor	0.91	0.96	0.76	0.78	0.95	0.80	0.85	0.86	0.89	0.86	0.84	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	1157	516	141	1501	466	301	693	309	69	229	
Arrive On Green	0.11	0.33	0.33	0.08	0.30	0.30	0.17	0.20	0.20	0.04	0.06	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	240	590	10	109	695	5	240	136	173	47	112	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.2	6.4	0.2	2.9	5.3	0.1	6.2	1.5	4.7	1.3	1.5	0.0
Cycle Q Clear(g_c), s	3.2	6.4	0.2	2.9	5.3	0.1	6.2	1.5	4.7	1.3	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	1157	516	141	1501	466	301	693	309	69	229	
V/C Ratio(X)	0.63	0.51	0.02	0.77	0.46	0.01	0.80	0.20	0.56	0.68	0.49	
Avail Cap(c_a), veh/h	1437	2217	989	741	3186	989	741	1848	824	741	1848	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	12.9	10.8	21.5	13.7	11.8	19.0	16.0	17.3	22.6	21.5	0.0
Incr Delay (d2), s/veh	0.6	0.5	0.0	3.3	0.3	0.0	1.8	0.1	1.2	4.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.2	0.1	1.2	1.8	0.0	2.4	0.6	1.6	0.6	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	13.4	10.9	24.9	14.0	11.9	20.8	16.1	18.5	27.1	22.7	0.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	C	
Approach Vol, veh/h		840			809			549			159	
Approach Delay, s/veh		15.5			15.5			18.9			24.0	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	20.7	12.1	7.1	9.3	19.1	5.9	13.4
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	4.9	8.4	8.2	3.5	5.2	7.3	3.3	6.7
Green Ext Time (p_c), s	0.1	5.6	0.3	0.5	0.4	6.8	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	250	304	344	945	392	164	180	68	106	170	108
Future Volume (veh/h)	103	250	304	344	945	392	164	180	68	106	170	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	154	278	63	400	1038	206	210	207	0	132	205	13
Peak Hour Factor	0.67	0.90	0.87	0.86	0.91	0.83	0.78	0.87	0.72	0.80	0.83	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	180	412	181	885	2690	1559	265	533	238	184	450	194
Arrive On Green	0.10	0.12	0.12	0.50	0.53	0.53	0.08	0.15	0.00	0.05	0.13	0.13
Sat Flow, veh/h	1767	3526	1552	1767	5066	2657	3428	3526	1572	3428	3526	1524
Grp Volume(v), veh/h	154	278	63	400	1038	206	210	207	0	132	205	13
Grp Sat Flow(s),veh/h/ln	1767	1763	1552	1767	1689	1328	1714	1763	1572	1714	1763	1524
Q Serve(g_s), s	11.0	9.7	3.9	18.7	15.5	4.5	7.7	6.8	0.0	4.9	6.9	1.0
Cycle Q Clear(g_c), s	11.0	9.7	3.9	18.7	15.5	4.5	7.7	6.8	0.0	4.9	6.9	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	412	181	885	2690	1559	265	533	238	184	450	194
V/C Ratio(X)	0.86	0.67	0.35	0.45	0.39	0.13	0.79	0.39	0.00	0.72	0.46	0.07
Avail Cap(c_a), veh/h	243	818	360	885	2690	1559	445	1027	458	337	928	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	54.2	34.8	20.6	17.7	12.0	58.0	49.0	0.0	59.6	51.7	49.1
Incr Delay (d2), s/veh	15.8	8.6	5.2	0.1	0.3	0.1	2.0	0.7	0.0	2.0	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	4.8	2.1	7.5	5.9	1.3	3.3	3.0	0.0	2.1	3.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.4	62.7	40.0	20.7	18.0	12.1	60.1	49.7	0.0	61.6	52.9	49.4
LnGrp LOS	E	E	D	C	B	B	E	D	A	E	D	D
Approach Vol, veh/h		495			1644			417			350	
Approach Delay, s/veh		62.8			17.9			54.9			56.0	
Approach LOS		E			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	21.3	14.3	22.0	17.4	74.3	11.3	25.1
Change Period (Y+Rc), s	6.3	* 6.3	4.4	* 5.7	4.4	6.3	4.4	5.7
Max Green Setting (Gmax), s	27.6	* 30	16.6	* 34	17.6	39.7	12.6	37.3
Max Q Clear Time (g_c+I1), s	20.7	11.7	9.7	8.9	13.0	17.5	6.9	8.8
Green Ext Time (p_c), s	0.4	1.9	0.2	1.9	0.1	9.4	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	316	21	255	1621	364	13	3	47	102	1	40
Future Volume (veh/h)	64	316	21	255	1621	364	13	3	47	102	1	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	84	421	27	297	1842	417	20	4	3	174	0	0
Peak Hour Factor	0.76	0.75	0.58	0.86	0.88	0.82	0.65	0.75	0.65	0.65	0.25	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	105	2815	179	324	3668	828	29	6	30	233	122	0
Arrive On Green	0.12	1.00	1.00	0.18	0.70	0.70	0.02	0.02	0.02	0.07	0.00	0.00
Sat Flow, veh/h	1767	4868	309	1767	5245	1184	1484	297	1572	3534	1856	0
Grp Volume(v), veh/h	84	291	157	297	1681	578	24	0	3	174	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1800	1767	1596	1642	1781	0	1572	1767	1856	0
Q Serve(g_s), s	5.9	0.0	0.0	21.1	20.8	20.9	1.7	0.0	0.2	6.2	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	21.1	20.8	20.9	1.7	0.0	0.2	6.2	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.72	0.83		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	105	1953	1041	324	3348	1149	34	0	30	233	122	0
V/C Ratio(X)	0.80	0.15	0.15	0.92	0.50	0.50	0.70	0.00	0.10	0.75	0.00	0.00
Avail Cap(c_a), veh/h	257	1953	1041	552	3348	1149	210	0	186	665	349	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	55.7	0.0	0.0	51.3	8.9	8.9	62.4	0.0	61.7	58.7	0.0	0.0
Incr Delay (d2), s/veh	5.0	0.2	0.3	7.6	0.5	1.6	9.1	0.0	0.5	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.1	9.9	6.5	7.1	0.9	0.0	0.1	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	0.2	0.3	58.8	9.5	10.5	71.5	0.0	62.2	60.5	0.0	0.0
LnGrp LOS	E	A	A	E	A	B	E	A	E	E	A	A
Approach Vol, veh/h		532			2556			27			174	
Approach Delay, s/veh		9.8			15.4			70.5			60.5	
Approach LOS		A			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	27.5	79.8		13.3	12.0	95.3		7.4
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	40.0	29.2		24.1	18.6	* 51		15.1
Max Q Clear Time (g_c+I2), s	23.1	2.0		8.2	7.9	22.9		3.7
Green Ext Time (p_c), s	0.4	3.3		0.3	0.1	21.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	812	461	110	682	173	112	138	169	78	406	715
Future Volume (veh/h)	179	812	461	110	682	173	112	138	169	78	406	715
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	199	990	162	125	758	47	137	168	41	89	541	0
Peak Hour Factor	0.90	0.82	0.78	0.88	0.90	0.89	0.82	0.82	0.88	0.88	0.75	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	297	1292	576	160	1877	583	174	846	377	115	728	
Arrive On Green	0.09	0.37	0.37	0.09	0.37	0.37	0.10	0.24	0.24	0.07	0.21	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	199	990	162	125	758	47	137	168	41	89	541	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	4.0	17.7	5.2	5.0	7.9	1.4	5.4	2.7	1.5	3.5	10.3	0.0
Cycle Q Clear(g_c), s	4.0	17.7	5.2	5.0	7.9	1.4	5.4	2.7	1.5	3.5	10.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	297	1292	576	160	1877	583	174	846	377	115	728	
V/C Ratio(X)	0.67	0.77	0.28	0.78	0.40	0.08	0.79	0.20	0.11	0.77	0.74	
Avail Cap(c_a), veh/h	958	1478	659	494	2124	659	494	1232	550	494	1232	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.7	20.0	16.0	31.8	16.7	14.6	31.5	21.7	21.2	32.9	26.6	0.0
Incr Delay (d2), s/veh	1.0	2.4	0.4	3.1	0.2	0.1	3.0	0.1	0.1	4.1	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	7.1	1.8	2.2	2.9	0.5	2.4	1.1	0.5	1.6	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	22.4	16.4	34.9	16.9	14.7	34.5	21.8	21.3	37.0	27.7	0.0
LnGrp LOS	C	C	B	C	B	B	C	C	C	D	C	
Approach Vol, veh/h		1351			930			346			630	
Approach Delay, s/veh		23.2			19.2			26.7			29.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	31.2	11.1	18.8	10.2	31.5	8.7	21.2
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	7.0	19.7	7.4	12.3	6.0	9.9	5.5	4.7
Green Ext Time (p_c), s	0.1	6.5	0.1	2.5	0.3	7.3	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	997	145	70	317	132	201	236	171	549	780	100
Future Volume (veh/h)	56	997	145	70	317	132	201	236	171	549	780	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	76	1096	137	77	369	89	254	271	0	590	848	48
Peak Hour Factor	0.74	0.91	0.98	0.91	0.86	0.79	0.79	0.87	0.76	0.93	0.92	0.67
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	96	2140	267	96	2377	1878	310	375	167	718	828	369
Arrive On Green	0.05	0.47	0.47	0.11	0.94	0.94	0.09	0.11	0.00	0.21	0.23	0.23
Sat Flow, veh/h	1767	4561	570	1767	5066	2768	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	76	811	422	77	369	89	254	271	0	590	848	48
Grp Sat Flow(s),veh/h/ln	1767	1689	1753	1767	1689	1384	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	5.7	22.7	22.7	5.7	0.7	0.0	9.8	10.0	0.0	22.2	31.7	3.3
Cycle Q Clear(g_c), s	5.7	22.7	22.7	5.7	0.7	0.0	9.8	10.0	0.0	22.2	31.7	3.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	1584	822	96	2377	1878	310	375	167	718	828	369
V/C Ratio(X)	0.79	0.51	0.51	0.80	0.16	0.05	0.82	0.72	0.00	0.82	1.02	0.13
Avail Cap(c_a), veh/h	243	1584	822	217	2377	1878	726	948	423	718	828	369
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	25.0	25.0	59.4	2.2	0.2	60.3	58.4	0.0	51.0	51.6	40.8
Incr Delay (d2), s/veh	5.4	1.2	2.3	5.5	0.1	0.0	2.1	4.0	0.0	7.1	37.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.1	9.7	2.6	0.3	0.0	4.3	4.6	0.0	10.0	17.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.5	26.2	27.3	65.0	2.4	0.3	62.4	62.4	0.0	58.1	89.3	41.0
LnGrp LOS	E	C	C	E	A	A	E	E	A	E	F	D
Approach Vol, veh/h		1309			535			525			1486	
Approach Delay, s/veh		29.0			11.0			62.4			75.3	
Approach LOS		C			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	69.6	16.6	37.0	11.7	69.6	33.6	20.0
Change Period (Y+Rc), s	4.4	6.3	4.4	5.3	4.4	6.3	5.3	* 5.7
Max Green Setting (Gmax), s	16.6	37.7	28.6	31.7	18.6	35.7	23.6	* 36
Max Q Clear Time (g_c+I1), s	7.7	24.7	11.8	33.7	7.7	2.7	24.2	12.0
Green Ext Time (p_c), s	0.0	6.5	0.4	0.0	0.0	3.3	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	48.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1549	9	30	470	97	17	6	458	812	4	41
Future Volume (veh/h)	22	1549	9	30	470	97	17	6	458	812	4	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	1760	14	40	534	85	0	0	443	911	0	0
Peak Hour Factor	0.55	0.88	0.56	0.75	0.88	0.81	0.81	0.75	0.79	0.94	0.33	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	2507	20	51	2702	416	0	263	445	709	372	0
Arrive On Green	0.06	0.97	0.97	0.03	0.48	0.48	0.00	0.00	0.14	0.20	0.00	0.00
Sat Flow, veh/h	1767	5184	41	1767	5622	865	0	1856	3145	3534	1856	0
Grp Volume(v), veh/h	40	1146	628	40	452	167	0	0	443	911	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1848	1767	1596	1700	0	1856	1572	1767	1856	0
Q Serve(g_s), s	3.0	4.7	4.7	3.0	7.3	7.6	0.0	0.0	19.0	27.1	0.0	0.0
Cycle Q Clear(g_c), s	3.0	4.7	4.7	3.0	7.3	7.6	0.0	0.0	19.0	27.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.51	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	51	1633	894	51	2301	817	0	263	445	709	372	0
V/C Ratio(X)	0.78	0.70	0.70	0.78	0.20	0.20	0.00	0.00	1.00	1.28	0.00	0.00
Avail Cap(c_a), veh/h	178	1633	894	170	2301	817	0	263	445	709	372	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	63.2	1.2	1.2	65.1	20.1	20.2	0.0	0.0	57.9	54.0	0.0	0.0
Incr Delay (d2), s/veh	6.7	1.8	3.3	9.1	0.2	0.6	0.0	0.0	41.4	138.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.0	1.5	1.5	2.7	3.1	0.0	0.0	10.1	25.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	3.0	4.5	74.2	20.3	20.8	0.0	0.0	99.3	192.4	0.0	0.0
LnGrp LOS	E	A	A	E	C	C	A	A	F	F	A	A
Approach Vol, veh/h		1814			659			443			911	
Approach Delay, s/veh		5.0			23.7			99.3			192.4	
Approach LOS		A			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	71.1		32.0	8.3	70.7		24.0
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	13.6	56.2		27.1	13.6	* 56		19.1
Max Q Clear Time (g_c+I1), s	5.0	6.7		29.1	5.0	9.6		21.0
Green Ext Time (p_c), s	0.0	23.0		0.0	0.0	5.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

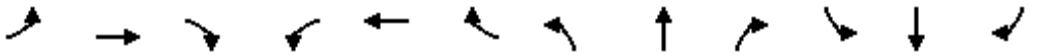
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Attachment D

LOS Calculation Worksheets

Opening Year 2025 with Project Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	598	165	100	670	68	204	117	511	56	94	913
Future Volume (veh/h)	218	598	165	100	670	68	204	117	511	56	94	913
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	240	623	6	128	705	8	240	136	202	65	112	0
Peak Hour Factor	0.91	0.96	0.76	0.78	0.95	0.80	0.85	0.86	0.89	0.86	0.84	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	383	1116	498	167	1514	470	301	658	294	85	228	
Arrive On Green	0.11	0.32	0.32	0.09	0.30	0.30	0.17	0.19	0.19	0.05	0.06	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	240	623	6	128	705	8	240	136	202	65	112	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	3.2	7.0	0.1	3.4	5.4	0.2	6.3	1.6	5.8	1.7	1.5	0.0
Cycle Q Clear(g_c), s	3.2	7.0	0.1	3.4	5.4	0.2	6.3	1.6	5.8	1.7	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	1116	498	167	1514	470	301	658	294	85	228	
V/C Ratio(X)	0.63	0.56	0.01	0.77	0.47	0.02	0.80	0.21	0.69	0.76	0.49	
Avail Cap(c_a), veh/h	1429	2204	983	737	3167	983	737	1837	819	737	1837	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	13.6	11.3	21.2	13.7	11.9	19.1	16.5	18.2	22.6	21.7	0.0
Incr Delay (d2), s/veh	0.6	0.6	0.0	2.8	0.3	0.0	1.8	0.1	2.1	5.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.5	0.0	1.4	1.8	0.1	2.4	0.6	2.0	0.8	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	14.2	11.3	24.0	14.0	11.9	20.9	16.6	20.3	27.7	22.9	0.0
LnGrp LOS	C	B	B	C	B	B	C	B	C	C	C	
Approach Vol, veh/h		869			841			578			177	
Approach Delay, s/veh		16.1			15.5			19.7			24.7	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	20.2	12.2	7.1	9.4	19.3	6.3	13.0
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	5.4	9.0	8.3	3.5	5.2	7.4	3.7	7.8
Green Ext Time (p_c), s	0.1	5.9	0.3	0.5	0.4	6.9	0.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	250	304	344	992	439	203	219	68	135	195	108
Future Volume (veh/h)	103	250	304	344	992	439	203	219	68	135	195	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	154	278	63	400	1090	263	260	252	0	169	235	13
Peak Hour Factor	0.67	0.90	0.87	0.86	0.91	0.83	0.78	0.87	0.72	0.80	0.83	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	180	412	181	848	2583	1533	315	568	253	222	473	205
Arrive On Green	0.10	0.12	0.12	0.48	0.51	0.51	0.09	0.16	0.00	0.06	0.13	0.13
Sat Flow, veh/h	1767	3526	1552	1767	5066	2654	3428	3526	1572	3428	3526	1527
Grp Volume(v), veh/h	154	278	63	400	1090	263	260	252	0	169	235	13
Grp Sat Flow(s),veh/h/ln	1767	1763	1552	1767	1689	1327	1714	1763	1572	1714	1763	1527
Q Serve(g_s), s	11.0	9.7	3.8	19.5	17.2	6.0	9.5	8.3	0.0	6.2	7.9	1.0
Cycle Q Clear(g_c), s	11.0	9.7	3.8	19.5	17.2	6.0	9.5	8.3	0.0	6.2	7.9	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	412	181	848	2583	1533	315	568	253	222	473	205
V/C Ratio(X)	0.86	0.67	0.35	0.47	0.42	0.17	0.83	0.44	0.00	0.76	0.50	0.06
Avail Cap(c_a), veh/h	243	818	360	848	2583	1533	445	1027	458	337	928	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	54.2	33.4	22.4	19.6	12.8	57.1	48.5	0.0	58.9	51.4	48.4
Incr Delay (d2), s/veh	15.8	8.6	5.2	0.1	0.4	0.2	5.9	0.8	0.0	2.1	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	4.8	2.1	7.9	6.6	1.7	4.3	3.6	0.0	2.7	3.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.4	62.7	38.6	22.5	20.0	13.0	63.1	49.3	0.0	60.9	52.7	48.6
LnGrp LOS	E	E	D	C	B	B	E	D	A	E	D	D
Approach Vol, veh/h		495			1753			512			417	
Approach Delay, s/veh		62.7			19.5			56.3			55.9	
Approach LOS		E			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	67.7	21.3	16.2	22.9	17.4	71.6	12.7	26.3
Change Period (Y+Rc), s	6.3	* 6.3	4.4	* 5.7	4.4	6.3	4.4	5.7
Max Green Setting (Gmax), s	27.6	* 30	16.6	* 34	17.6	39.7	12.6	37.3
Max Q Clear Time (g_c+I1), s	21.5	11.7	11.5	9.9	13.0	19.2	8.2	10.3
Green Ext Time (p_c), s	0.4	1.9	0.2	2.1	0.1	9.8	0.1	2.2

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	345	21	255	1715	364	13	3	47	102	1	40
Future Volume (veh/h)	64	345	21	255	1715	364	13	3	47	102	1	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	84	460	27	297	1949	417	20	4	3	174	0	0
Peak Hour Factor	0.76	0.75	0.58	0.86	0.88	0.82	0.65	0.75	0.65	0.65	0.25	0.83
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	105	2831	165	324	3713	791	29	6	30	233	122	0
Arrive On Green	0.12	1.00	1.00	0.18	0.70	0.70	0.02	0.02	0.02	0.07	0.00	0.00
Sat Flow, veh/h	1767	4896	285	1767	5309	1131	1484	297	1572	3534	1856	0
Grp Volume(v), veh/h	84	316	171	297	1757	609	24	0	3	174	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1804	1767	1596	1652	1781	0	1572	1767	1856	0
Q Serve(g_s), s	5.9	0.0	0.0	21.1	22.3	22.5	1.7	0.0	0.2	6.2	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	21.1	22.3	22.5	1.7	0.0	0.2	6.2	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.68	0.83		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	105	1953	1043	324	3348	1155	34	0	30	233	122	0
V/C Ratio(X)	0.80	0.16	0.16	0.92	0.52	0.53	0.70	0.00	0.10	0.75	0.00	0.00
Avail Cap(c_a), veh/h	257	1953	1043	552	3348	1155	210	0	186	665	349	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	55.7	0.0	0.0	51.3	9.1	9.2	62.4	0.0	61.7	58.7	0.0	0.0
Incr Delay (d2), s/veh	4.9	0.2	0.3	7.6	0.6	1.7	9.1	0.0	0.5	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.1	9.9	7.0	7.6	0.9	0.0	0.1	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	0.2	0.3	58.8	9.7	10.9	71.5	0.0	62.2	60.5	0.0	0.0
LnGrp LOS	E	A	A	E	A	B	E	A	E	E	A	A
Approach Vol, veh/h		571			2663			27			174	
Approach Delay, s/veh		9.1			15.5			70.5			60.5	
Approach LOS		A			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.5	79.8		13.3	12.0	95.3		7.4				
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9				
Max Green Setting (Gmax), s	40.0	29.2		24.1	18.6	* 51		15.1				
Max Q Clear Time (g_c+I1), s	23.1	2.0		8.2	7.9	24.5		3.7				
Green Ext Time (p_c), s	0.4	3.6		0.3	0.1	20.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	27	43	683	408	24
Future Vol, veh/h	8	27	43	683	408	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	29	47	742	443	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	921	235	469	0	-	0
Stage 1	456	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	268	764	1082	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	256	764	1082	-	-	-
Mov Cap-2 Maneuver	384	-	-	-	-	-
Stage 1	576	-	-	-	-	-
Stage 2	596	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1082	-	623	-	-
HCM Lane V/C Ratio	0.043	-	0.061	-	-
HCM Control Delay (s)	8.5	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	27	43	718	411	24
Future Vol, veh/h	8	27	43	718	411	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	29	47	780	447	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	944	237	473	0	-	0
Stage 1	460	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	259	761	1078	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	248	761	1078	-	-	-
Mov Cap-2 Maneuver	377	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1078	-	617	-	-
HCM Lane V/C Ratio	0.043	-	0.062	-	-
HCM Control Delay (s)	8.5	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	657	0	0	1232	43	0	0	0	0	0	15
Future Vol, veh/h	95	657	0	0	1232	43	0	0	0	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	110	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	103	714	0	0	1339	47	0	0	0	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1386	0	0	714	0	0	1590	2306	357	1926	2283	693
Stage 1	-	-	-	-	-	-	920	920	-	1363	1363	-
Stage 2	-	-	-	-	-	-	670	1386	-	563	920	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33	3.53	4.03	3.33
Pot Cap-1 Maneuver	485	-	-	875	-	-	71	37	637	40	39	384
Stage 1	-	-	-	-	-	-	290	346	-	154	212	-
Stage 2	-	-	-	-	-	-	410	207	-	476	346	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	485	-	-	875	-	-	57	29	637	33	31	384
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	29	-	33	31	-
Stage 1	-	-	-	-	-	-	229	273	-	121	212	-
Stage 2	-	-	-	-	-	-	393	207	-	375	273	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	0	14.8
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	485	-	-	875	-	-	384
HCM Lane V/C Ratio	-	0.213	-	-	-	-	-	0.042
HCM Control Delay (s)	0	14.4	-	-	0	-	-	14.8
HCM Lane LOS	A	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0.8	-	-	0	-	-	0.1

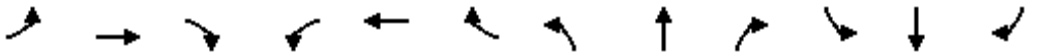
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	657	1260	43	0	15
Future Vol, veh/h	0	657	1260	43	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	714	1370	47	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	709
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	321
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	321
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	16.8
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	321
HCM Lane V/C Ratio	-	-	-	0.051
HCM Control Delay (s)	-	-	-	16.8
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	818	461	155	712	188	112	138	177	81	406	715
Future Volume (veh/h)	179	818	461	155	712	188	112	138	177	81	406	715
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	199	998	162	176	791	64	137	168	50	92	541	0
Peak Hour Factor	0.90	0.82	0.78	0.88	0.90	0.89	0.82	0.82	0.88	0.88	0.75	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	292	1251	558	216	1986	617	173	822	366	119	713	
Arrive On Green	0.09	0.35	0.35	0.12	0.39	0.39	0.10	0.23	0.23	0.07	0.20	0.00
Sat Flow, veh/h	3428	3526	1572	1767	5066	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	199	998	162	176	791	64	137	168	50	92	541	0
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1689	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	4.3	19.5	5.7	7.4	8.6	2.0	5.8	2.9	1.9	3.9	11.1	0.0
Cycle Q Clear(g_c), s	4.3	19.5	5.7	7.4	8.6	2.0	5.8	2.9	1.9	3.9	11.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	1251	558	216	1986	617	173	822	366	119	713	
V/C Ratio(X)	0.68	0.80	0.29	0.81	0.40	0.10	0.79	0.20	0.14	0.77	0.76	
Avail Cap(c_a), veh/h	897	1384	617	462	1988	617	462	1153	514	462	1153	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.0	22.2	17.7	32.7	16.7	14.7	33.7	23.6	23.2	35.1	28.7	0.0
Incr Delay (d2), s/veh	1.1	3.4	0.4	2.8	0.2	0.1	3.1	0.1	0.1	4.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.1	2.0	3.2	3.2	0.7	2.6	1.2	0.7	1.8	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	25.6	18.1	35.5	16.9	14.8	36.8	23.7	23.3	39.1	30.0	0.0
LnGrp LOS	D	C	B	D	B	B	D	C	C	D	C	
Approach Vol, veh/h		1359			1031			355			633	
Approach Delay, s/veh		26.1			20.0			28.7			31.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	32.1	11.5	19.5	10.5	35.0	9.1	21.8
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	25.0	20.0	30.0	20.0	25.0
Max Q Clear Time (g_c+I1), s	9.4	21.5	7.8	13.1	6.3	10.6	5.9	4.9
Green Ext Time (p_c), s	0.2	5.6	0.1	2.4	0.3	7.6	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	997	145	70	327	142	209	244	171	639	855	100
Future Volume (veh/h)	56	997	145	70	327	142	209	244	171	639	855	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	76	1096	137	77	380	102	265	280	0	687	929	48
Peak Hour Factor	0.74	0.91	0.98	0.91	0.86	0.79	0.79	0.87	0.76	0.93	0.92	0.67
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	96	2125	265	96	2361	1870	321	385	172	719	828	369
Arrive On Green	0.05	0.47	0.47	0.11	0.93	0.93	0.09	0.11	0.00	0.21	0.23	0.23
Sat Flow, veh/h	1767	4561	570	1767	5066	2768	3428	3526	1572	3428	3526	1572
Grp Volume(v), veh/h	76	811	422	77	380	102	265	280	0	687	929	48
Grp Sat Flow(s),veh/h/ln	1767	1689	1753	1767	1689	1384	1714	1763	1572	1714	1763	1572
Q Serve(g_s), s	5.7	22.8	22.8	5.7	0.8	0.1	10.2	10.4	0.0	26.7	31.7	3.3
Cycle Q Clear(g_c), s	5.7	22.8	22.8	5.7	0.8	0.1	10.2	10.4	0.0	26.7	31.7	3.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	1573	817	96	2361	1870	321	385	172	719	828	369
V/C Ratio(X)	0.79	0.52	0.52	0.80	0.16	0.05	0.82	0.73	0.00	0.96	1.12	0.13
Avail Cap(c_a), veh/h	243	1573	817	217	2361	1870	726	948	423	719	828	369
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	25.3	25.4	59.4	2.5	0.3	60.1	58.2	0.0	52.7	51.6	40.8
Incr Delay (d2), s/veh	5.4	1.2	2.3	5.5	0.1	0.1	2.1	4.0	0.0	23.0	70.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.2	9.8	2.6	0.3	0.0	4.5	4.8	0.0	13.5	21.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.5	26.6	27.7	65.0	2.6	0.3	62.1	62.2	0.0	75.8	122.2	41.0
LnGrp LOS	E	C	C	E	A	A	E	E	A	E	F	D
Approach Vol, veh/h		1309			559			545			1664	
Approach Delay, s/veh		29.4			10.8			62.1			100.7	
Approach LOS		C			B			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	69.2	17.1	37.0	11.7	69.2	33.6	20.4
Change Period (Y+Rc), s	4.4	6.3	4.4	5.3	4.4	6.3	5.3	* 5.7
Max Green Setting (Gmax), s	16.6	37.7	28.6	31.7	18.6	35.7	23.6	* 36
Max Q Clear Time (g_c+I1), s	7.7	24.8	12.2	33.7	7.7	2.8	28.7	12.4
Green Ext Time (p_c), s	0.0	6.5	0.4	0.0	0.0	3.5	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1639	9	30	490	97	17	6	458	812	4	41
Future Volume (veh/h)	22	1639	9	30	490	97	17	6	458	812	4	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	40	1862	14	40	557	85	0	0	443	911	0	0
Peak Hour Factor	0.55	0.88	0.56	0.75	0.88	0.81	0.81	0.75	0.79	0.94	0.33	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	51	2508	19	51	2719	402	0	263	445	709	372	0
Arrive On Green	0.06	0.97	0.97	0.03	0.48	0.48	0.00	0.00	0.14	0.20	0.00	0.00
Sat Flow, veh/h	1767	5187	39	1767	5656	836	0	1856	3145	3534	1856	0
Grp Volume(v), veh/h	40	1212	664	40	469	173	0	0	443	911	0	0
Grp Sat Flow(s),veh/h/ln	1767	1689	1849	1767	1596	1705	0	1856	1572	1767	1856	0
Q Serve(g_s), s	3.0	5.7	5.7	3.0	7.6	7.9	0.0	0.0	19.0	27.1	0.0	0.0
Cycle Q Clear(g_c), s	3.0	5.7	5.7	3.0	7.6	7.9	0.0	0.0	19.0	27.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.49	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	51	1633	894	51	2301	820	0	263	445	709	372	0
V/C Ratio(X)	0.78	0.74	0.74	0.78	0.20	0.21	0.00	0.00	1.00	1.28	0.00	0.00
Avail Cap(c_a), veh/h	178	1633	894	170	2301	820	0	263	445	709	372	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.62	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	63.2	1.2	1.2	65.1	20.2	20.3	0.0	0.0	57.9	54.0	0.0	0.0
Incr Delay (d2), s/veh	5.9	1.9	3.5	9.1	0.2	0.6	0.0	0.0	41.4	138.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.1	1.6	1.5	2.8	3.2	0.0	0.0	10.1	25.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	3.2	4.7	74.2	20.4	20.9	0.0	0.0	99.3	192.4	0.0	0.0
LnGrp LOS	E	A	A	E	C	C	A	A	F	F	A	A
Approach Vol, veh/h		1916			682			443			911	
Approach Delay, s/veh		5.1			23.7			99.3			192.4	
Approach LOS		A			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	71.1		32.0	8.3	70.7		24.0
Change Period (Y+Rc), s	4.0	5.8		4.9	4.4	* 5.8		4.9
Max Green Setting (Gmax), s	13.6	56.2		27.1	13.6	* 56		19.1
Max Q Clear Time (g_c+I1), s	5.0	7.7		29.1	5.0	9.9		21.0
Green Ext Time (p_c), s	0.0	24.9		0.0	0.0	5.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	83	9	446	1433	4
Future Vol, veh/h	22	83	9	446	1433	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	90	10	485	1558	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1823	781	1562	0	-	0
Stage 1	1560	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	68	335	414	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	754	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	66	335	414	-	-	-
Mov Cap-2 Maneuver	131	-	-	-	-	-
Stage 1	153	-	-	-	-	-
Stage 2	754	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.4	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	414	-	253	-	-
HCM Lane V/C Ratio	0.024	-	0.451	-	-
HCM Control Delay (s)	13.9	-	30.4	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	2.2	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	82	9	433	1512	4
Future Vol, veh/h	22	82	9	433	1512	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	25	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	89	10	471	1643	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1901	824	1647	0	-	0
Stage 1	1645	-	-	-	-	-
Stage 2	256	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	60	314	384	-	-	-
Stage 1	141	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	58	314	384	-	-	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	34.4	0.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	384	-	232	-	-
HCM Lane V/C Ratio	0.025	-	0.487	-	-
HCM Control Delay (s)	14.6	-	34.4	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.1	-	2.4	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1198	0	0	663	9	0	0	0	0	0	45
Future Vol, veh/h	17	1198	0	0	663	9	0	0	0	0	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	110	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	18	1302	0	0	721	10	0	0	0	0	0	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	731	0	0	1302	0	0	1699	2069	651	1413	2064	366
Stage 1	-	-	-	-	-	-	1338	1338	-	726	726	-
Stage 2	-	-	-	-	-	-	361	731	-	687	1338	-
Critical Hdwy	4.16	-	-	4.16	-	-	7.56	6.56	6.96	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	2.23	-	-	3.53	4.03	3.33	3.53	4.03	3.33
Pot Cap-1 Maneuver	863	-	-	522	-	-	59	53	409	97	53	628
Stage 1	-	-	-	-	-	-	160	218	-	380	425	-
Stage 2	-	-	-	-	-	-	627	423	-	401	218	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	863	-	-	522	-	-	54	52	409	95	52	628
Mov Cap-2 Maneuver	-	-	-	-	-	-	54	52	-	95	52	-
Stage 1	-	-	-	-	-	-	157	213	-	372	425	-
Stage 2	-	-	-	-	-	-	578	423	-	393	213	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	0	11.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	863	-	-	522	-	-	628
HCM Lane V/C Ratio	-	0.021	-	-	-	-	-	0.078
HCM Control Delay (s)	0	9.3	-	-	0	-	-	11.2
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1198	627	9	0	45
Future Vol, veh/h	0	1198	627	9	0	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1302	682	10	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	346
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	553
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	553
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	553
HCM Lane V/C Ratio	-	-	-	0.088
HCM Control Delay (s)	-	-	-	12.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3

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Appendix E

Transportation Impact Analysis

TO:	Tim Belzman; Helix Environmental
FROM:	Phuong Nguyen, PE; CR Associates
DATE:	March 5, 2024
RE:	SDUSD GW Smith Education Center – Transportation Impact Analysis

The purpose of this technical memorandum is to document the findings of the transportation impact analysis conducted for the George Walker Smith Education Center (the "Project").

Project Description

The George Walker Smith Education Center proposes to redevelop and renovate the existing 150,000 sq. ft. on-site building located on the 7.8-acre site at 9330 Balboa Avenue in the City of San Diego, which is designated Industrial and Technology Park in the Kearny Mesa Community Plan and is zoned Light Industrial (IL-2-1). The goal of the project is to centralize the various services currently scattered across different sites within the San Diego Unified School District. This includes moving the services presently housed at the Central Office at 4100 Normal Street in the City of San Diego to this new consolidated location. Similar to the current Central Office, the Project will provide services to both educators and parent/student (for services that are not available at the local school). The project would be implemented in two phases:

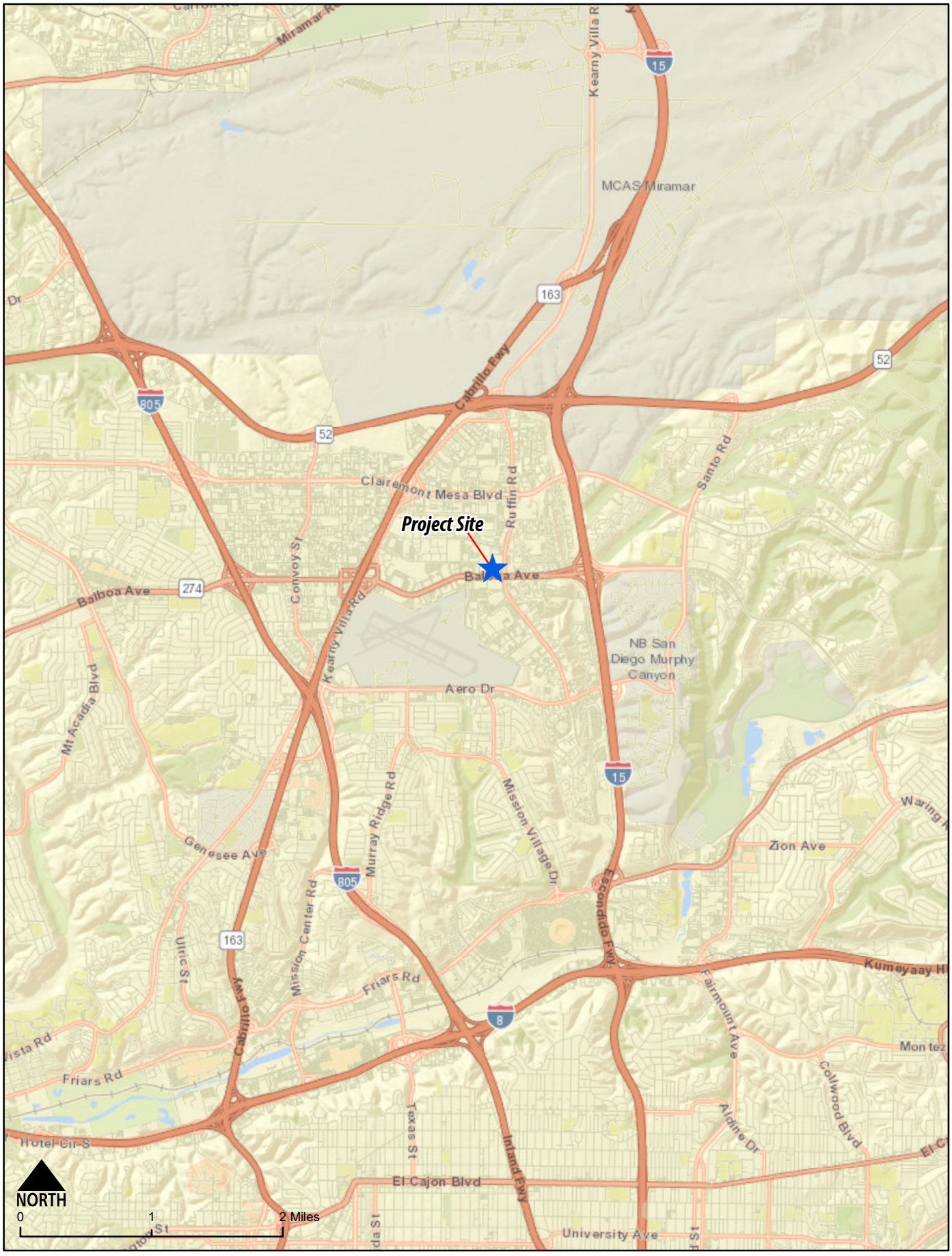
- Phase 1 – The first phase would entail construction of a five-level parking garage on the northwestern portion of the site with a total area of approximately 180,000 sq. ft. to accommodate approximately 500 parking spaces.
- Phase 2 – The second phase would redevelop and renovate the existing 150,000 sq. ft. on-site building with a new approximately 60,000 sq. ft. two-story addition of the existing building and a new entrance on the northeast side of the building, in additions to the construction of surface parking lots on the southern and eastern portions of the site.

Access to the project will be provided via two driveways along Balboa Avenue and two driveways along Ruffin Road. Construction of the Project is expected to start December 2024 and finish September 2025. **Figure 1** shows the project location. **Figure 2** displays the project site plan.

Transportation Impact Analysis

The analysis is based on the revised (2021) State of California Environmental Quality Act (CEQA) Guidelines. This methodology is consistent with the guidance provided in the Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018 (OPR Technical Advisory), authored by the Governor's Office of Planning and Research (OPR).

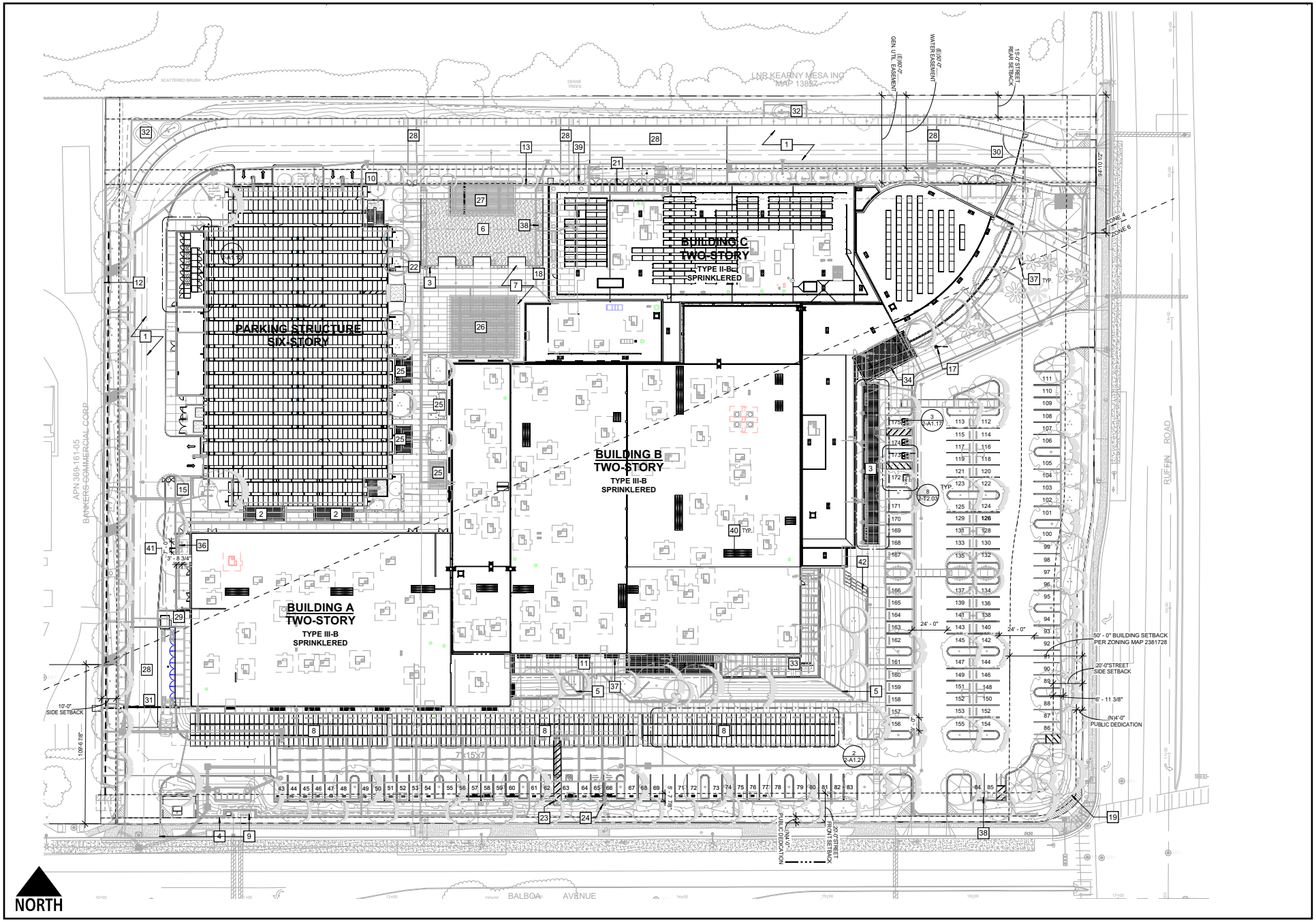
Although the OPR Technical Advisory doesn't offer specific directives for educational facilities like this, it does include a provision for office projects with a public service element, such as a government office. In such cases, a lead agency is permitted to evaluate the project's impact on customer Vehicle Miles Traveled (VMT) using the approach designated for retail developments, particularly assessing if the project would lead to an increase in regional VMT. Given that the proposed project is focused on consolidating various services into a local public facility, it is not expected to contribute to an increase in regional VMT. Consequently, its transportation-related impact would be less than significant under CEQA. Additional supporting information are provided in Attachment A.



SDUSD GW Smith Education Center
Transportation Impact Analysis

C+R

Figure 1
Project Regional Location



SDUSD GW Smith Education Center
Transportation Impact Analysis

C+R

Figure 2
Project Site Plan

Attachment A

Supporting Information

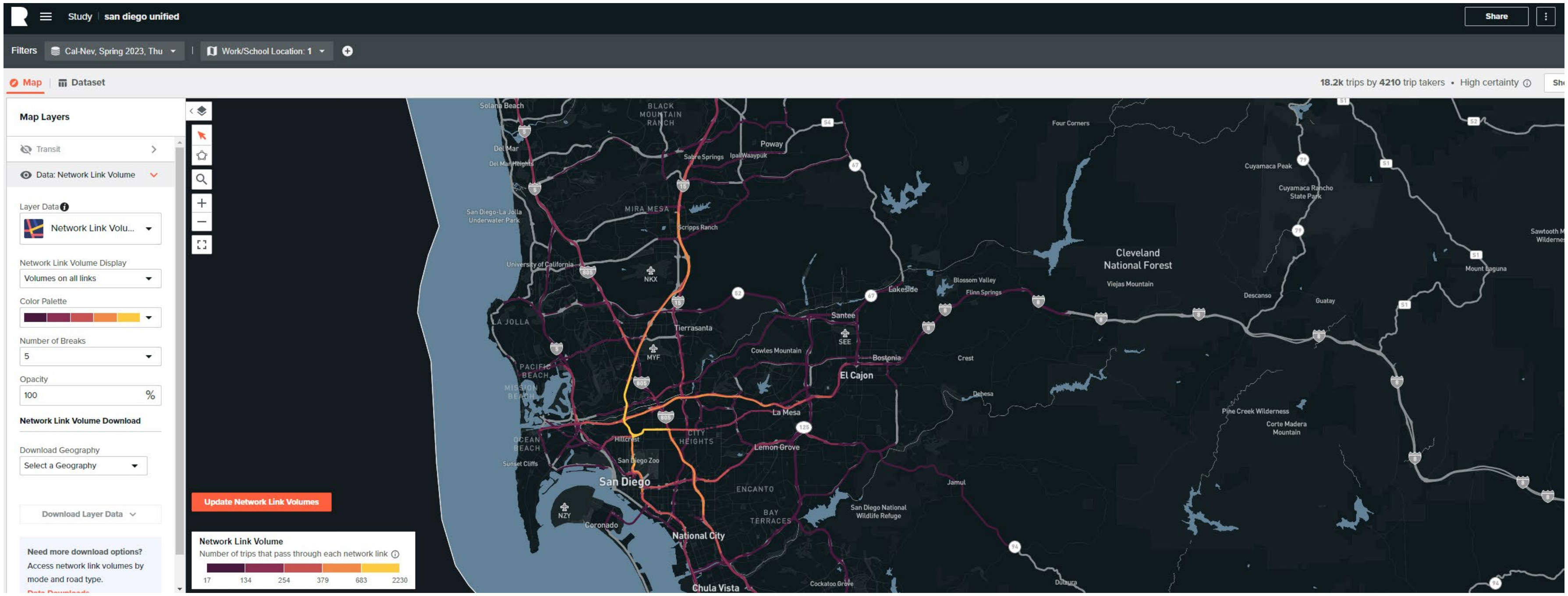
Locally Serving Public Facilities Screening

Although the City of San Diego does not serve as the lead CEQA agency for this Project, since the Project is within the city limits, the City of San Diego Transportation Study Manual (COSDTSM) as a reference during the analysis phase. The COSDTSM, specifically on pages 20-21, outlines the following screening criteria:

The requirements to prepare a detailed transportation VMT analysis apply to all land development projects, except for those that meet at least one of the following criteria in the numbered list below. A project that meets at least one of the screening criteria below would be presumed to have a less than significant VMT impact due to project characteristics and/or location.

5. Locally Serving Public Facility: The project is a locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is a passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.

According to the COSDTSM, the Project is classified as serving the local community and is not expected to contribute to an increase in regional VMT. This conclusion is backed by an analysis using mobility data from Replica, a big data platform that synthesizes travel patterns from cell phone and GPS data. The analysis reveals that employees currently commuting to the Central Office from various communities and cities throughout San Diego County. Two of the highest origin point are the Mira Mesa community (north of the Central Office and Project site) and the City of National City, and City of Chula Vista (to the south of the Central Office and the Project site). Under the with Project scenario, employees from Mira Mesa would end up with a shorter commuting distance due to the close proximity between Mira Mesa and the Project site. Employees from the southern parts of the county would be diverted from their current route to the Project site. These employees currently travel northbound along I-805 and then proceed west on I-8 or El Cajon Boulevard to reach the Central Office. After the relocation, these employees will shift to a simpler journey along I-805 to the new site, making the change in travel distance negligible. Consequently, the Project will essentially redistribute existing trips and VMT without causing an increase in regional VMT. The figure below displays the travel pattern obtained from Replica for the Central Office.


Study | san diego unified
Share
Filters
Cal-Nev, Spring 2023, Thu
Work/School Location: 1
Map
Dataset
18.2k trips by 4210 trip takers • High certainty
Map Layers
Transit
Data: Network Link Volume
Layer Data
Network Link Volu...
Network Link Volume Display
Volumes on all links
Color Palette
Number of Breaks
5
Opacity
100
%
Network Link Volume Download
Download Geography
Select a Geography
Download Layer Data
Need more download options?
Access network link volumes by mode and road type.
Update Network Link Volumes
Network Link Volume
Number of trips that pass through each network link
17
134
254
379
683
2230
Cleveland National Forest
San Diego
El Cajon
National City
Chula Vista
La Mesa
Lemon Grove
Santee
Lakeside
Poway
Tierrasanta
Coronado
La Jolla
Four Corners
Cuyamaca Peak
Descanso
Guatay
Crest
Jamul
Dehesa
Bostonia
Cowles Mountain
Hillcrest
San Diego Zoo
Encanto
Bay Terraces
City Heights
Pacific Beach
Mission Beach
Ocean Beach
Sunset Cliffs
Mira Mesa
Scripps Ranch
Del Mar
Solana Beach
Sabre Springs
Blossom Valley
Flinn Springs
Viejas Mountain
Pine Creek Wilderness
Corte Madera Mountain
San Diego National Wildlife Refuge
Cockatoo Grove
Mount Laguna