APPENDIX F:

GREENHOUSE GAS EMISSIONS ASSESSMENT

Greenhouse Gas Emissions

Assessment

Riverside Community Hospital Parking Structure

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Appendix A: GHG Modeling Data

LIST OF ABBREVIATED TERMS

AB	Assembly Bill
CARB	California Air Resource Board
CCR	California Code of Regulations
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CALGreen Code	California Green Building Standards Code
CPUC	California Public Utilities Commission
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CFC	Chlorofluorocarbon
су	cubic yard
FCAA	Federal Clean Air Act
FR	Federal Register
GHG	greenhouse gas
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
LCFS	Low Carbon Fuel Standard
CH ₄	Methane
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
MTCO ₂ e	metric tons of carbon dioxide equivalent
NHTSA	National Highway Traffic Safety Administration
NF ₃	nitrogen trifluoride
N ₂ O	nitrous oxide
PFC	Perfluorocarbon
SB	Senate Bill
SCAB	South Coast Air Basin
South Coast AQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Government
Sf	square feet or square foot
SF ₆	sulfur hexafluoride
TAC	toxic air contaminants
U.S. EPA	U.S. Environmental Protection Agency

1.0 INTRODUCTION

This report documents the results of a Greenhouse Gas Assessment completed for the Riverside Community Hospital Parking Structure Project ("Project" or "proposed Project"). An Environmental Impact Report (EIR) was prepared for the Riverside Community Hospital Expansion Project. The construction of new parking structures was contemplated as future discretionary projects for Phase IIC within the *Riverside Community Hospital Specific Plan Expansion Project Final EIR* (2014 Final EIR). The construction of the Project has been prepared as a part of Phase IIb. This comparative analysis has been undertaken to analyze whether the proposed Project would result in any new or substantially more severe significant environmental impacts as compared to the conclusions discussed in the certified 2015 Final EIR.

1.1 Project Background

The Riverside Community Hospital Specific Plan (RCHSP) was adopted (Resolution No. 26690), and the 2014 Final EIR was certified by the Riverside City Council in May 2014 (Resolution No. 22689). The 2014 Final EIR was previously prepared to evaluate the potential environmental impacts associated with the RCHSP, which provides a roadmap to guide future expansion plans and address compliance with the Alfred E. Alquist Hospital Seismic Safety Act (Alquist Act) of 1973, Senate Bill (SB) 1953. The RCHSP includes a two-phased campus master plan for the future expansion of RCH on approximately 22.5 acres over a 30-year period. The primary focus of Phase I is to construct a new hospital bed tower to alleviate seismic concerns associated with existing buildings and to meet seismic retrofit requirements as required by SB 1953. Phase II also addresses seismic concerns and includes potential future long-range development broken down into Phase IIA, Phase IIB, and Phase IIC.

As described in the 2014 Final EIR, Phase I would involve the construction of a new 251,000-squarefoot, seven-story hospital bed tower. Phase IIA would entail the demolition of Building A to allow the construction of an approximately 100,000-square-foot mixed-use building and additional surface or structure parking. Phase IIB would consist the demolition of two parking structures to allow for the construction of a second new, estimated nine-story, 600,000+ square foot replacement bed tower. Phase IIB also includes additional convenience parking during this phase. The final phase of longrange improvements planned for 2030 or later would involve the addition of 38 licensed beds, to take the campus-wide total to 600 licensed beds (this could occur in Phase IIB if need is demonstrated prior to 2030), construction of ancillary services as necessary, and construction of surface or structured parking as needed to support growth.

The Approved Project would increase patient and support services, add several new buildings, renovate and demolish a number of existing buildings or structures onsite. One or two standalone parking structures may also be included in the master planned changes to the site. These and other possible changes on the site would be phased over a period of many years as funding becomes available and services are needed. The hospital may expand services into the community and may add new services as medical practices change over time and needs arise.

The discussion in the 2014 Final EIR noted that the phasing plan proposed was only an estimate based on plans and conditions at that time. It was identified that many factors would affect the timing and funding of the planned improvements, so the indicated phasing was merely suggestive of

what may occur in the future, but the actual phasing and locations of the various improvements may occur at times different than those identified in the 2014 Final EIR, due to unanticipated delays or conditions. Some phases may even be implemented prior to previous phases.

The 2014 Final EIR was prepared to evaluate the environmental impacts of the Approved Project and address various actions by the City and other agencies to adopt and implement the Approved Project. It was the intent of the 2014 Final EIR to inform the City, other agencies, and interested parties of the potential environmental impacts of the Approved Project. The Phasing Plan described in the 2014 Final EIR included the following:

- Phase I (2014 to 2017) Completed
- Phase II, divided into three sub-phases:
 - o Phase IIA (2017-2024),
 - Phase IIB (2024-2029), and
 - Phase IIC (2030-2043).

1.2 Project Location

The approximately 1.66-acre Project site (Assessor Parcel Numbers [APN] 217060024, 217060026, 217060027, 217060028, 217060020, and 217060009) is located in the City of Riverside, California. The site is approximately 0.42 miles west of State Route 91 (SR-91) and approximately 1.60 miles south of SR-60. Specifically, the Project site is located at the northwest corner of Brockton Avenue and 14th Street. Most of the Project site (APNs 217060024, 217060026, 217060027, and 217060028) is within the Riverside Community Hospital Specific Plan (RCHSP), however, two parcels (APNs 217060020 and 217060020 and 217060009) are within the Downtown Specific Plan. A Specific Plan Amendment is proposed to amend the RCHSP boundary to include the two parcels that are currently within the Downtown Specific Plan (i.e., APNs 217060020 and 217060009), which currently contain a vacant medical office building and auto body shop. See **Figure 1: Regional Map** and **Figure 2: Aerial of the Project Site**.

The Brockton Parking Garage Project (Project) site is currently developed with an auto body shop, Women's Services Building (Building M), Brockton Storage Building (Building L), and medical office building that are also owned by the Project Applicant. Ornamental landscaping is provided along the Project site frontage on Brockton Avenue and 14th Street, as well as throughout the Project site. Pedestrian sidewalk is provided along the Project site frontage on Brockton Avenue and 14th Street. Overhead utility lines and lighting are also provided along the Project site frontage on Brockton Avenue and 14th Street.

1.3 **Project Description**

Site Development

The Project would include the demolition of 61,500 square feet of existing buildings to construct a new approximately 207,780 square foot parking garage. The parking garage would accommodate 587 parking spaces within a five-level parking garage structure (four levels above ground and one level subterranean). **Figure 3: Conceptual Site Plan** depicts the proposed development. The

parking garage would support RCH Campus's parking demand, compensating for the loss in parking caused by the anticipated demolition of two parking garages (Buildings I and J) as part of Tower H (Building S) construction which is estimated to start construction in September 2026. Tower H was previously analyzed in the 2014 Final EIR; therefore, the analysis is based only on the development of a parking garage.

The proposed parking garage would be designed to meet the 2022 California Building Code requirements for an "open" parking garage. Stair and elevator cores are proposed on the east side of the building, closest to the hospital. Accessible travel paths are proposed along the garage's east side, connecting the garage with the existing hospital.

Primary vehicular access to the Proposed Project site would be provided via one existing left-out restricted driveway on Brockton Avenue (Driveway 1), one proposed full-movement driveway on Brockton Avenue (Driveway 2), one proposed parking garage egress-only driveway on Brockton Avenue (Driveway 3), and one existing driveway on 14th Street with proposed left-out restricted access (Driveway 4). All driveways would be unsignalized. Parking aisles generally run east to west, with 90-degree parking on both sides and a parkable ramp at the southern bay. Electrical vehicle charging stations and bicycle parking would be located on Level 0. Accessible parking spaces would be located on Level 1 with an accessible pathway connecting the garage to the future Tower H.

1.4 Construction

Project construction is anticipated to begin in April 2025 and finish in July 2026. The Project is anticipated to require approximately 17,000 cubic yards (cy) of cut and 2,000 cy of fill, resulting in a net of 15,000 cy soil export. Construction would be in compliance with Riverside Municipal Code Section 7.35.020, which limits construction between the hours of 7:00AM and 7:00PM on weekdays and between 8:00AM and 5:00PM on Saturdays. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent.

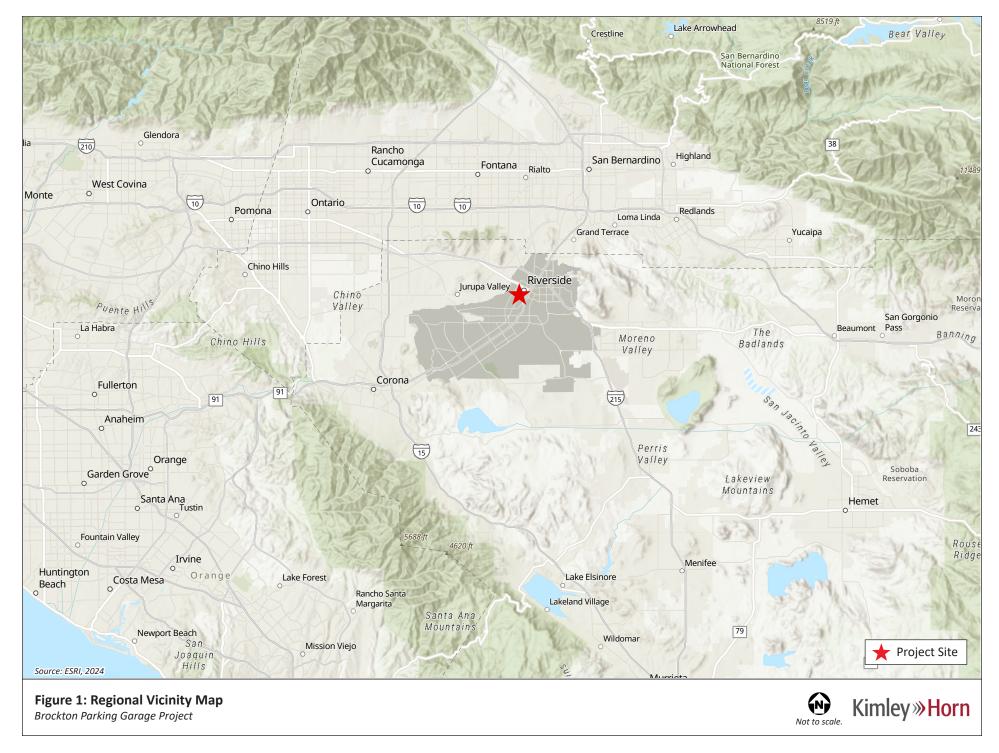
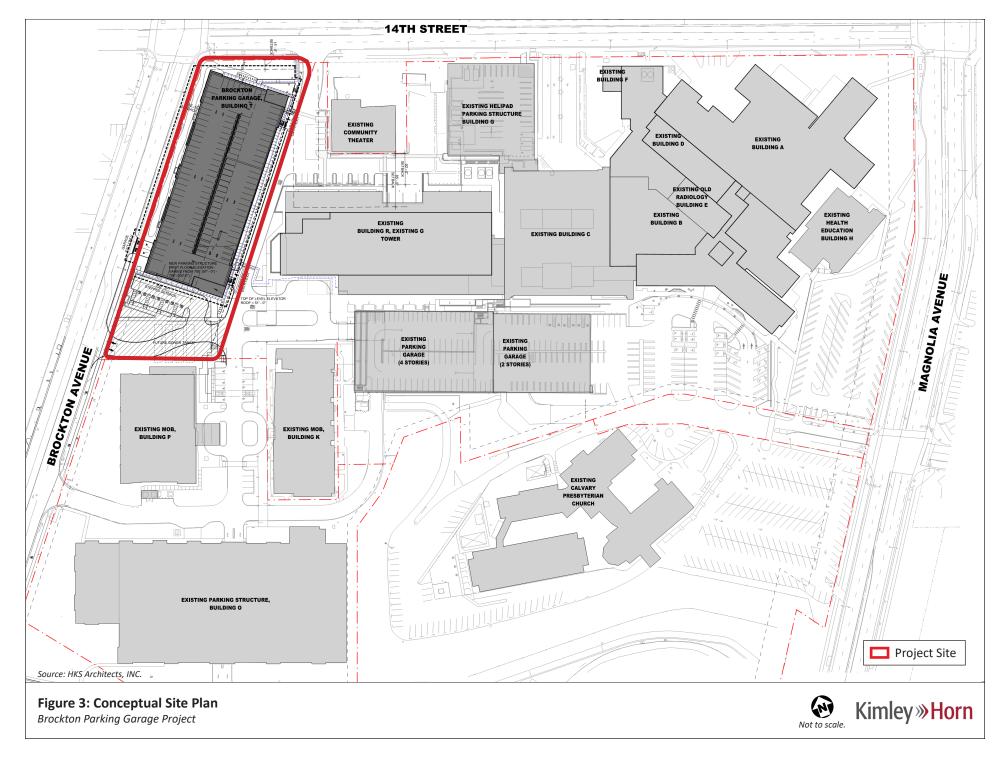




Figure 2: Local Vicinity Map Brockton Parking Garage Project





2.0 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere.¹ Table 1: Description of Greenhouse Gases describes the primary GHGs attributed to global climate change, including their physical properties.

¹ Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, 2013. https://www.ipcc.ch/site/assets/uploads/2017/09/WG1AR5_Frontmatter_FINAL.pdf, accessed November 2024

Table 1: Description of Greenhouse Gases		
Greenhouse Gas	Description	
Carbon Dioxide (CO2)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.	
Nitrous Oxide (N2O)	N_2O is largely attributable to agricultural practices and soil management. Primary human- related sources of N_2O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N_2O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years. The Global Warming Potential of N_2O is 298.	
Methane (CH4)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.	
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.	
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.	
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.	
Sulfur Hexafluoride (SF ₆)	SF_6 is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF_6 is 23,900.	
Hydrochlorofluoroca rbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.	
Nitrogen Trifluoride (NF3)	NF_3 was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.	
2018; U.S. EPA, Inventory Climate Change 2007: The	I.S. EPA, Overview of Greenhouse Gases, (https://www.epa.gov/ghgemissions/overview-greenhouse-gases), of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018; Intergovernmental Panel on Climate Change, e Physical Science Basis, 2007; National Research Council, Advancing the Science of Climate Change, 2010; itrous Oxide Emission from Natural Sources, April 2010.	

3.0 REGULATORY SETTING

3.1 Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the Project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks (see Federal Vehicle Standards, below for further discussion of NHTSA rule-making).
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In 2018, the President and the U.S. EPA stated their intent to halt various federal regulatory activities to reduce GHG emissions, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the U.S. EPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019.) The Part One Rule revokes California's authority to set its own GHG emissions standards and set zeroemission vehicle mandates in California. On March 31, 2020, the U.S. EPA and NHTSA finalized rulemaking for SAFE Part Two which sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The current U.S. EPA administration has repealed SAFE Rule Part One, effective January 28, 2022, and is reconsidering Part Two.

As of April 1, 2022, the CAFE standards require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026. The new CAFE standards for model year 2024-2026 will reduce fuel use by more than 200 billion gallons through 2050, as compared to continuing under the old standards.²

² National Highway Traffic Safety Administration, USDOT Announces New Vehicle Fuel Economy Standards for Model Year 2024-2026, https://www.nhtsa.gov/press-releases/usdot-announces-new-vehicle-fuel-economy-standards-model-year-2024-2026, accessed November 2024

Presidential Executive Orders 13990 and 14008

On January 20, 2021, President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis". Executive Order 13990 directs Federal agencies to immediately review and take action to address the promulgation of Federal regulations and other actions that conflict with these important national objectives and to immediately commence work to confront the climate crisis. Executive Order 13990 directs the Council on Environmental Quality (CEQ) to review CEQ's 2020 regulations implementing the procedural requirements of the National Environmental Policy Act (NEPA) and identify necessary changes or actions to meet the objectives of Executive Order 13990.

On January 27, 2021, President Biden signed Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," to declare the Administration's policy to move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifested and will continue to intensify according to current trajectories. In line with these Executive Order directives, CEQ is reviewing the 2020 NEPA regulations and plans to publish a notice of proposed rulemaking (NPRM) to identify necessary revisions in order to comply with the law; meet the environmental, climate change, and environmental justice objectives of Executive Orders 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA's statutory requirements.

3.2 State of California

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO_2 equivalents (CO_2e) in the world and produced 459 million gross metric tons of CO_2e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

2017 CARB Scoping Plan

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual").³ The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to be pursued as regulations, and outlines the adopted role of a cap-and-trade program.⁴ Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gases with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California's transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California's freight transport system is essential to supporting the State's economic development in coming decades while reducing pollution.
- CARB's Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from

³ CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

⁴ The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State's Climate Adaptation Strategy.

transportation emissions, and reduce petroleum consumption over the next fifteen years. The Mobile Source Strategy includes increasing ZEV buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan.⁵ The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support other Federal actions.

2022 CARB Scoping Plan

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and

⁵ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017.

scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.⁶ CARB specifically states that Appendix D does not address other land uses (e.g., industrial).⁷ However, CARB plans to explore new approaches for other land use types in the future.⁸

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

Zero-Emission Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.

⁶ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.

⁷ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 4, November 2022.

⁸ California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.

• Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions. In 2018, the EPA proposed the SAFE Vehicles Rule, which would roll back fuel economy standards and revoke California's waiver. However, in December 2021, the NHTSA repealed the SAFE Vehicle Rule Part One.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO_2 per megawatt-hour.

SB 1078, SB 107, and SBX1-2 (Renewable Electricity Standards)

SB 1078 (2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 (2006) changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2 (2011) codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb toxic air contaminants and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)

Signed into law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1346 (Air Pollution: Small Off-Road Engines)

Signed into law in October 2021, AB 1346 requires CARB, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

AB 1279 (The California Climate Crisis Act)

AB 1279 establishes the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage technologies.

SB 1020 (100 Percent Clean Electric Grid)

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100 percent clean electricity retail sales. It creates a target of 90 percent clean electricity retail sales by 2035 and 95 percent clean electricity retail sales by 2040.

SB 905 (Carbon Sequestration Program)

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

AB 1757 (Nature-Based Solutions)

Signed on September 16, 2022, AB 1757 requires State agencies to develop a range of targets for natural carbon sequestration and nature-based climate solutions that reduce GHG emissions to meet the 2030, 2038, and 2045 goals which would be integrated into a scoping plan addressing natural and working lands.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.

• By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO2e. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires

state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The California Energy Commission (CEC) adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption across California. For example, the 2022 Title 24 standards will require efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of

planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2023 (2022 CALGreen). The 2022 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

3.3 Regional

South Coast Air Quality Management District Thresholds

The SCAQMD formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting #15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. With the tiered approach, the Project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a 3,000 MTCO₂e threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). The Working Group indicated that the 10,000 MTCO₂e per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Southern California Association of Governments

On April 4, 2024, Southern California Association of Governments' (SCAG's) Regional Council adopted *Connect SoCal (2024 – 2050 Regional Transportation Plan/Sustainable Communities Strategy* [2024 RTP/SCS]). The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

3.4 Local

City of Riverside General Plan 2025

The City of Riverside 2025 General Plan contains objectives and policies intended to reduce GHG emissions within the Air Quality Element (AQ), Open Space and Conservation Element (OS), and Public Facilities and Infrastructure Element (PF), as identified in the following:

Air Quality Element

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

- **AQ-5.1:** Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ-5.3: Continue and expand use of renewable energy resources such as wind, solar, water, landfill gas, and geothermal sources.
- AQ-5.6: Support the use of automated equipment for conditioned facilities to control heating and air conditioning.
- AQ-5.7:Require residential building construction to meet or exceed energy use guidelines
in Title 24 of the California Administrative Code.
- **Objective AQ-8:** Make sustainability and global warming education a priority for the City's effort to protect public health and achieve state and federal clean air standards.
- **AQ-8.17:** Develop measures to encourage that a minimum of 40 percent of the waste from all construction sites throughout Riverside be recycled by the end of 2008.

Open Space and Conservation Element

- **Objective OS-8:** Encourage the efficient use of energy resources by residential and commercial users.
- **OS-8.2:** Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.
- **OS-8.3:** Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.
- **OS-8.4:** Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.
- **OS-8.5:** Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).
- **OS-8.6:** Require all new development to incorporate energyefficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.
- **OS-8.12:** Require bicycle parking in new non-residential development.

Public Facilities and Infrastructure Element

Objective PF-6:	Provide affordable, reliable and, to the extent practical, environmentally sensitive energy resources to residents and businesses.
PF-6.3:	Promote and encourage energy conservation.
PF-6.4:	Encourage energy-efficient development through its site plan and building design standard guidelines.

PF-6.5: Promote green building design. City of Riverside Restorative Growthprint

In 2016, the City of Riverside published the Riverside Restorative Growthprint (RRG), which combines the Economic Prosperity Action Plan (RRG-EPAP) and Climate Action Plan (RRG-CAP). The RRG-EPAP and RRG-CAP work together to encourage entrepreneurship and smart growth while advancing the City's GHG emission reduction goals through 2035. The RRG-CAP includes actions to reduce GHG emissions that align with AB 32 and SB 375, and with the City's planning priorities and its vision of a future "green" economy based on sustainable business practices. The City's comprehensive approach includes energy efficiency, renewable energy, sustainable transportation, waste reduction, water conservation, and local food systems—all designed to strengthen the local economy, create green jobs, and enhance community wellbeing. The following measures from the RRG-CAP are applicable to the Project:

SR-2:	2013 California Building Energy Efficiency Standards (Title 24, Part 6). Mandatory
	energy efficiency standards for buildings.

- **SR-12:** Electric Vehicle Plan and Infrastructure. Facilitate electric vehicle use by providing necessary infrastructure.
- **SR-13:** Construction & Demolition Waste Diversion. Meet mandatory requirement to divert 50 percent of C&D waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035.
- **T-2:** Bicycle Parking. Provide additional options for bicycle parking.
- **T-3:** End of Trip Facilities. Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.
- **T-19:** Alternative Fuel & Vehicle Technology and Infrastructure. Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.
- W-1: Water Conservation and Efficiency. Reduce per capita water use by 20 percent by 2020.

Envision Riverside 2025 Strategic Plan

In 2020, the City of Riverside adopted their Strategic Plan to help shape the City's community, economy, and the environment for the next five years. The Strategic Plan identifies six Strategic Priorities to guide the City's team in implementing their Strategic Plan, including Environmental Stewardship. The following Environmental Stewardship goals are applicable to the Project:

- **4.1:** Rapidly decrease Riverside's carbon footprint by acting urgently to reach a zero carbon electric grid with the goal of reaching 100 percent zero-carbon electricity production by 2040 while continuing to ensure safe, reliable and affordable energy for all residents.
- **4.6:** Implement the requisite measures to achieve citywide carbon neutrality no later than 2040.

4.0 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Thresholds and Significance Criteria

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.⁹

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

CEQA Guidelines Section 15064.4 provides that a lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. It also states that the lead agency shall have the discretion to determine, in the context of a particular project, whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Lead agencies should consider several factors when determining the significance of GHG emissions from a project: the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting; whether a project exceeds a significance threshold that the lead agency determines applies to the project; and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions.

Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), as long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved

⁹ 14 California Code of Regulations, Section 15064.4a

plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project.¹⁰ To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.¹¹ Examples of such programs include "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions."¹² Therefore, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of a less than significant.

The City has not adopted a numeric threshold for the analysis of GHG impacts. As noted above, CEQA Guidelines Section 15064.4(b)(2) allows the City to determine a threshold of significance that applies to the Project, and accordingly the threshold of significance applied here is whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Consistent with the 2014 Final EIR, no numeric emission-based thresholds is available to evaluate whether the Project emissions would exceed a threshold of significance. The 2014 Final EIR contemplated increases in emissions from the expansion of the Riverside Community Hospital and the proposed Project is consistent with the uses analyzed. This analysis also considers qualitative consistency with regulations or requirements adopted by *AB 32's Climate Change Scoping Plan* and subsequent updates, SCAG's RTP/SCS, the City's General Plan, and City's RRG-CAP.

4.2 Methodology

Consistent with the 2014 Final EIR, the Project's significance with regard to climate change would be evaluated solely on the basis of consistency with the climate change plans. Notwithstanding, for informational purposes, this analysis estimates the quantity of GHG's the Project would emit using recommended air quality models, as described below. The primary purpose of quantifying the Project's GHG emissions is to satisfy State CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the Project's incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions. However, this quantification is not a threshold of significance, or used for quantitative comparative purposes.

Consistency with Plans

The Project's GHG impacts were evaluated by assessing the Project's consistency with applicable statewide, regional, and local GHG reduction plans and strategies. The Project will be evaluated for consistency with AB 32's 2008 Climate Change Scoping Plan and subsequent updates, SCAG's RTP/SCS, the City's General Plan, and City's RRG-CAP.

OPR encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. On a statewide level, the 2008 Climate

¹⁰ 14 CCR Section 15064(h)(3)

¹¹ 14 CCR Section 15064(h)(3)

¹² 14 CCR Section 15064(h)(3)

Change Scoping Plan and subsequent updates provide measures to achieve AB 32 and SB 32 targets. On a regional level, SCAG's RTP/SCS contains measures to achieve VMT and GHG reductions required under SB 375. The City's General Plan and RRG-CAP contain goals and policies to implement energy efficient, transportation, waste reduction, and water efficient measures and would subsequently reduce GHG emissions within the City. If the Project is designed in accordance with these policies and regulations, the Project would result in a less than significant impact, because it would be consistent with the overarching State regulations on GHG reduction (e.g., AB 32, SB 32, SB 375).

A consistency analysis is provided below and describes the Project's compliance with, or exceedance of, performance-based standards included in the regulations outlined in the applicable portions of AB 32's *2022 Climate Change Scoping Plan*, SCAG's RTP/SCS, the City's General Plan, and City's RRG-CAP.

Quantification of Emissions

In view of the above considerations, the analysis below quantifies the Project's total annual GHG emissions. However, given the lack of a formally adopted numerical significance threshold or a formally adopted local plan for reducing GHG emissions applicable to this Project, significance of the Project's GHG emissions is determined consistent with the amended CEQA Guidelines which specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant. In this context, an assessment is provided herein of the Project's consistency with regulatory schemes, comparable to formally adopted local GHG emission reduction plans, that are designed to reduce GHG emissions by encouraging development located and designed to result in the efficient use of resources.

Project GHG Emissions

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 GtCO₂/year.¹³ As such, the geographic extent of climate change and GHG emissions cumulative impact discussion is worldwide.

- The Project would result in direct emissions of criteria pollutants generated by the following emissions sources:
 - Construction: emissions associated with demolition of existing uses, excavation, grading, and construction-related equipment and vehicular activity;
 - Area source: emissions associated with consumer products, architectural coatings, and landscape equipment; and
 - Energy source (building operations): emissions associated with space heating and cooling, and water heating.

¹³ Intergovernmental Panel on Climate Change, Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014.

This analysis considers construction and operational impacts associated with the Project. Emissions were modeled using the California Emissions Estimator Model (CalEEMod) version 2022. CalEEMod is a Statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. GHG impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction Emissions

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate GHG emissions. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the analysis to generate GHG emissions values for each construction activity. Please refer to CalEEMod construction output files for a complete listing of construction details modeled. CalEEMod default values were used for equipment and vehicle emission factors, equipment load factors, and vehicle trip lengths.

In accordance with SCAQMD's guidance, GHG emissions from construction were amortized (i.e., averaged annually) over the lifetime of the Project. As impacts from construction activities occur over a relatively short-term period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, SCAQMD recommended that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.¹⁴ Thus, total construction GHG emissions were divided by 30 to determine an estimate of annual construction emissions comparable to operational emissions.

Operational Emissions

Similar to construction, SCAQMD-recommended CalEEMod is used to calculate potential direct and indirect GHG emissions generated by new land uses on the Project Site. As concluded in the 2014 Final EIR, the parking structure would not generate additional operational emission because the proposed parking structures would support the on-site trip-generating uses. The trips associated with the RCHSP has been contemplated in the 2014 Final EIR.

- <u>Area Source Emissions</u>. Area source emissions would be generated due to on-site equipment, architectural coating, and landscape maintenance equipment.
- <u>Energy Source Emissions</u>. Energy source emissions would be generated due to electricity usage associated with the Project. Primary energy uses include ventilation, lighting, and elevators.

¹⁴ SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008.

5.0 IMPACT ANALYSIS AND MITIGATION

5.1 Greenhouse Gas Emissions

Threshold 5.1 Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?

Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of GHGs from construction. The approximate quantity of daily GHG emissions generated by construction equipment utilized to build the Project is depicted in <u>Table 2: Construction-Related Greenhouse Gas Emissions</u>.

Table 2: Construction-Related Greenhouse Gas Emissions		
Category	MTCO ₂ e	
Construction Year 1 (2025)	505	
Construction Year 2 (2026)	142	
Total Construction Emissions	647	
30-Year Amortized Construction	22	
Source: CalEEMod version 2022.1. Refer to Appendix A for model outputs.		

As shown in <u>Table 2</u>, the Project would result in the generation of approximately 647 $MTCO_2e$ over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period, then added to the operational emissions.¹⁵ The amortized Project construction emissions would be 22 $MTCO_2e$ per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, solid waste generation, and the energy required to convey water to, and wastewater from the Project. Total GHG emissions associated with the Project are summarized in <u>Table 3: Project Greenhouse Gas Emissions</u>.

¹⁵ The amortization period of 30-years is based on the standard assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Table 3: Project Greenhouse Gas Emissions		
Emissions Source	MTCO₂e per Year	
Construction Amortized Over 30 Years	22	
Area Source	4	
Energy	247	
Mobile	0	
Waste	0	
Water and Wastewater	<1	
Refrigerants	0	
Stationary Equipment	12	
Total Project Emissions	286	
Threshold	3,000	
Exceeds Threshold?	No	
Source: CalEEMod version 2022.1. Refer to Appendix A for model outputs.		

Below is a description of the primary sources of operational emissions:

- <u>Area Sources</u>. Area source emissions would be generated due to on-site equipment, architectural coating, and landscape maintenance equipment.
- <u>Energy Consumption</u>. Energy source emissions would be generated due to electricity usage associated with the Project. Primary energy uses include ventilation, lighting, and elevators.
- <u>Mobile Sources</u>. As concluded in the 2014 Final EIR, the parking structure would not generate additional operational emission because the proposed parking structure would support the on-site trip-generating uses. Therefore, mobile emissions associated with the proposed parking garage is zero.
- <u>Solid Waste</u>. Solid waste releases GHG emissions in the form of methane when these materials decompose. According to CalEEMod default rates, the proposed parking garage would not generate solid waste.
- *Water and Wastewater*. GHG emissions from water demand would occur from electricity consumption associated with water conveyance and treatment.
- <u>*Refrigerants*</u>. Air conditioning and refrigerator equipment typically generate GHG emissions. The proposed parking garage would not require the use of refrigerants.
- <u>Stationary Source Emissions</u>. The proposed parking garage would include an emergency generator and a fire pump. Stationary equipment would not be part of the Project's normal daily operations. Nonetheless, emissions associated one emergency backup generator and one fire pump was included to be conservative. Emissions were calculated separately form CalEEMod. However, CalEEMod default emissions rates were used.

<u>Table 3</u> shows that the Project's unmitigated emissions would be approximately 286 $MTCO_{2}e$ annually from operations with amortized construction. Project-related GHG emissions would not

exceed SCAQMD's Interim 3,000 MTCO $_2$ e per year threshold. Therefore, Project-related GHG emissions would be less than significant.

2014 Final EIR Mitigation Measures:

MM AQ-2 During the environmental review process for future discretionary permits for Phase IIC of the Riverside Community Hospital Expansion Project, an air quality technical report that includes project construction phasing, timing and operational details shall be analyzed using the current air quality model available from the South Coast Air Quality Management District (SCAQMD). Project emissions shall be modeled and then evaluated based on current SCAQMD thresholds. The technical analysis for Phase IIC shall be prepared to analyze construction and operational emissions.

> If air quality impacts are determined to be significant, feasible and appropriate project-specific mitigation measures shall be incorporated to reduce impacts. Examples of standard construction mitigation measures include the following:

> Consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site, by following the dust control measures listed below:

- a. During clearing, grading, earthmoving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems shall be used to prevent dust from leaving the site and to create a crust after each day's activities cease.
- b. During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning, after work is completed for the day, and whenever winds exceed 15 miles per hour.
- c. Soil stockpiled for more than 2 days shall be covered, kept moist, or treated with soil binders to prevent dust generation.
- d. Speeds on unpaved roads shall be reduced to less than 15 miles per hour.
- e. All grading and excavation operations shall be halted when wind speeds exceed 25 miles per hour.
- f. Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways shall be swept, vacuumed, and/ or washed at the end of each workday.

- g. If import/export of soil materials would be required, all trucks hauling dirt, sand, soil, or other loose material to and from the construction site shall be covered and/ or a minimum 2 feet of freeboard shall be maintained.
- h. At a minimum, at each vehicle egress from the project site to a paved public road, a pad consisting of washed gravel (minimum size: 1 inch) shall be installed and maintained in clean condition to a depth of at least 6 inches and extending at least 30 feet wide and at least 50 feet long (or as otherwise directed by the SCAQMD).
- i. Any additional requirements of SCAQMD Rule 403 shall be reviewed and complied with.

The following measures shall be adhered to during project grading and construction to reduce emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO,) from construction equipment:

- a. Heavy-duty diesel-powered construction equipment rated at greater than
 50 horsepower shall be equipped with Tier 4 or better diesel engines.
- b. The engine size of construction equipment shall be the minimum size.
- c. The amount of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest amount of equipment is operating at any one time.
- d. Construction equipment shall be maintained in tune per the manufacturer's specifications.
- e. Catalytic converters shall be installed on gasoline-powered equipment over 50 horsepower.
- f. Electric equipment shall be utilized in lieu of diesel- powered equipment, where feasible.
- g. RCH shall use zero-VOC-content architectural coatings during project construction/application of paints and other architectural coatings to reduce ozone precursors. If zero-VOC paint cannot be utilized, the developer shall avoid application of architectural coatings during the peak smog season: July, August, and September. RCH shall procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 Architectural Coatings).

If air quality impacts for operational emissions for Phase IIC are determined to be significant, feasible and appropriate project-specific mitigation measures shall be incorporated to reduce impacts. Examples of standard operational mitigation measures include the following: reduce trips in passenger vehicles by patients, visitors, or physicians/ staff, enhance transportation management demand programs; and reduce energy usage. Project Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant.

5.2 Greenhouse Gas Reduction Plan Compliance

Threshold 5.2 Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission (ZE) transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs.

The City's General Plan and RRG-CAP identify objectives and policies that would reduce GHG emissions in the City such as the reduction of solid waste disposed of in landfills and the efficient use of energy and energy resources by residential and commercial users.

The Proposed Project consists of the development of a parking structure within the RCHSP. The Project would be constructed in accordance with Title 24 of the California Building Standards Code – Energy Efficiency Standards. The proposed parking structure would serve vehicle trips generated by the Riverside Community Hospital, which have been accounted for and analyzed in the 2014 Final EIR, and would not generate mobile-source GHG emissions. In addition, the proposed parking structure would not include the use of natural gas, supporting statewide carbon neutrality goals. Therefore, the Project would not conflict with the 2022 CARB Scoping Plan and impacts would be less than significant.

Conclusion

As discussed in the 2014 Final EIR, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the project. In addition, for all of the reasons stated above, the Project would be consistent with, and would not conflict with, applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. Impacts would be less than significant, and no mitigation measures are required.

The 2014 Final EIR concluded that implementation of the RCHSP would not conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. No new impacts or a substantial increase in the severity of a previously identified impact evaluated in the 2014 Final EIR would occur. Additionally, no new information of substantial importance that was not known and could not have been known at the time the 2014 Final EIR was certified is available that would impact the prior finding of no significant impact under this issue area

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant.

5.3 Cumulative Setting and Impacts

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory.¹⁶ The State CEQA Guidelines generally address GHG emissions as a cumulative impact because of the global nature of climate change.¹⁷ As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself".¹⁸ As such, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As discussed above, the Project would not result in a significant cumulative GHG impact. Additionally, no new information of substantial importance that was not known and could not have been known at the time the 2014 Final EIR was certified is available that would impact the prior finding of no significant impact under this issue area.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant.

¹⁶ California Air Pollution Control Officers Association, CEQA and Climate Change White Paper, 2008.

¹⁷ Pub. Resources Code, § 21083, subd. (b)(2)

¹⁸ Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.

6.0 **REFERENCES**

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Appendix A

GHG Modeling Data

Riverside Community Hospital Brockton Parking Garage CalEEMod Assumptions

Land Use

Land Use	Size	Metric
Unenclosed Parking with Elevator	166,224	SF
Enclosed Parking with Elevator	41,556	SF
Off-Site Improvements	0.1	AC
KSF = thousand square feet; DU = dwelling unit		•

Construction

Schedule

Phase Name	Start Date	End Date	Workdays
Demolition	4/1/2025	6/1/2025	44
Site Preparation	6/2/2025	6/29/2025	20
Grading	6/30/2025	9/28/2025	65
Infrastructure Improvements	10/1/2025	12/31/2025	66
Building Construction	9/29/2025	2/15/2026	100
Paving	2/16/2026	6/28/2026	95
Architectural Coating	2/16/2026	7/31/2026	120

Equipment

Construction		Number per	Hours Per	Engine Tier
Phase	Equipment	Day	Day	-
	Tractors/Loaders/Backhoes	3	8	Tier 4 Final
Demolition	Rubber Tired Dozers	1	8	Tier 4 Final
	Concrete/Industrial Saws	1	8	Tier 4 Final
	Graders	1	8	Tier 4 Final
Site Preparation	Rubber Tired Dozers	1	8	Tier 4 Final
	Tractors/Loaders/Backhoes	2	7	Tier 4 Final
	Graders	1	8	Tier 4 Final
Grading	Rubber Tired Dozers	1	8	Tier 4 Final
	Tractors/Loaders/Backhoes	2	7	Tier 4 Final
	Cranes	1	6	Tier 4 Final
Infraaty, at wa	Forklifts	1	6	Tier 4 Final
Infrastructure	Generator Sets	1	8	Tier 4 Final
Improvement	Tractors/Loaders/Backhoes	1	6	Tier 4 Final
	Welders	3	8	Tier 4 Final
	Cranes	1	6	Tier 4 Final
Duilding	Forklifts	1	6	Tier 4 Final
Building	Generator Sets	1	8	Tier 4 Final
Construction	Tractors/Loaders/Backhoes	1	6	Tier 4 Final
	Welders	3	8	Tier 4 Final
	Cement and Mortar Mixers	1	6	Tier 4 Final
Paving	Pavers	1	6	Tier 4 Final
	Paving Equipment	1	8	Tier 4 Final

Riverside Community Hospital Brockton Parking Garage

Construction		Number per	Hours Per	Engine Tier
Phase	Equipment	Day	Day	
	Rollers	1	7	Tier 4 Final
	Tractors/Loaders/Backhoes	1	8	Tier 4 Final
Architectural Coating	Air Compressors	1	6	Tier 4 Final

Grading/Earthwork

Phase	Import (CY)	Export (CY)	Haul Distance (mi)
Site Preparation			
Grading		15,000	20
CY = cubic yards; mi = miles			

Worker, Vendor, and Haul Trips

Тгір Туре	# One-Way Trips/Day	Trip Length (miles)
Demolition		
Worker	13	18.5
Vendor	0	10.2
Hauling	34	20
On-Site Truck	0	0
Site Preparation		
Worker	8	18.5
Vendor	0	10.2
Hauling	0	20
On-Site Truck	0	0
Grading		
Worker	10	18.5
Vendor	0	10.2
Hauling	29	20
On-Site Truck	0	0
Infrastructure Improvemen	ts	
Worker	87	18.5
Vendor	34	10.2
Hauling	0	20
On-Site Truck	0	0
Building Construction		
Worker	87	18.5
Vendor	34	10.2
Hauling	0	20
On-Site Truck	0	0
Paving		
Worker	13	18.5
Vendor	0	10.2

Riverside Community Hospital Brockton Parking Garage

Тгір Туре	# One-Way Trips/Day	Trip Length (miles)			
Hauling	0	20			
On-Site Truck	0	0			
Architectural Coating					
Worker	35	18.5			
Vendor	0	10.2			
Hauling	0	20			
On-Site Truck	0	0			

Demolition

Phase	Amount (CY)
Building	
Building Area (SF)	61,500
Waste Volume (CF)	153,750
Waste Volume (CY)	5,694
Building Waste Volume (tons)	2,847
Pavement	
Pavement Area (SF)	87,120
Pavement Thickness (ft)	0.5
Pavement Volume (CF)	43,560
Pavement Density (lbs/CF)	145
Pavement Waste (lbs)	6,316,200
Pavement Waste (tons)	3,158
TOTAL DEMOLITION WASTE (tons)	6,005
CY = cubic yards	

Operations

Vehicle Data

Land Use	Size	Metric	Trip Rate	Daily Trip Generation
Unenclosed Parking with Elevator	166,224	SF	0	0
Enclosed Parking with Elevator	41,556	SF	0	0
Off-Site Improvements	0.1	AC	0	0
Total Daily Trips	-	-	-	0
KSF = thousand square feet; DU = dwellir	ng unit			

Stationary Sources

Equipment Type	Fuel Type	#	Hours/ Day	Hours/ Year	НР	Load Factor
Emergency Generators	Diesel	1	1	50	300	0.74
Fire Pumps	Diesel	1	1	50	300	0.74
HP = horsepower						

RCH Parking Garage Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	RCH Parking Garage
Construction Start Date	4/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	6.80
Location	4445 Magnolia Ave, Riverside, CA 92501, USA
County	Riverside-South Coast
City	Riverside
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5405
EDFZ	11
Electric Utility	City of Riverside
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use SubtypeSizeUnitLot AcreageBuilding Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
--	--	-----------------------------------	------------	-------------

Unenclosed Parking with Elevator	480	Space	1.76	166,224	15,632	0.00	_	_
Enclosed Parking with Elevator	118	Space	0.00	41,556	0.00	0.00	—	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	-	-	_	-	_	-	—	—	—	_	-	-	_	—	_	_
Unmit.	0.72	0.69	5.07	17.6	0.04	0.09	3.70	3.79	0.09	1.51	1.60	_	5,022	5,022	0.15	0.40	7.48	5,150
Daily, Winter (Max)	_	_	-	-	-	_	_	_	_	_	_	_	_	_	-	_	_	
Unmit.	1.32	1.18	10.3	31.9	0.05	0.09	2.86	2.96	0.09	0.70	0.79	_	7,949	7,949	0.30	0.43	0.39	8,086
Average Daily (Max)	—	—	_	-	-	_	_	—	—	—	—	_	—	_	_		—	
Unmit.	0.36	0.32	3.20	11.3	0.02	0.05	1.71	1.76	0.05	0.54	0.59	-	2,992	2,992	0.10	0.19	1.84	3,052
Annual (Max)	-	-	_	_	-	-	_	_	_	_	_	_	_	_	_	-	-	-
Unmit.	0.07	0.06	0.58	2.05	< 0.005	0.01	0.31	0.32	0.01	0.10	0.11	_	495	495	0.02	0.03	0.31	505

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	_	—	_	-	_	_	-	_	-	_	_	_	-	_	_	_	-
2025	0.72	0.61	5.07	17.6	0.04	0.09	3.70	3.79	0.09	1.51	1.60	-	5,022	5,022	0.15	0.40	7.48	5,150
2026	0.72	0.69	1.82	11.0	0.01	0.02	0.62	0.64	0.02	0.15	0.17	-	1,779	1,779	0.07	0.03	2.21	1,792
Daily - Winter (Max)	—	_	-	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	1.32	1.18	10.3	31.9	0.05	0.09	2.86	2.96	0.09	0.70	0.79	-	7,949	7,949	0.30	0.43	0.39	8,086
2026	0.71	0.68	5.06	15.6	0.03	0.05	1.43	1.48	0.05	0.35	0.39	-	3,933	3,933	0.11	0.22	0.18	4,001
Average Daily	-	-	-	—	-	-	-	_	-	-	-	-	-	-	-	-	-	-
2025	0.36	0.32	3.20	11.3	0.02	0.05	1.71	1.76	0.05	0.54	0.59	-	2,992	2,992	0.10	0.19	1.84	3,052
2026	0.27	0.26	1.00	4.31	0.01	0.01	0.32	0.33	0.01	0.08	0.09	-	846	846	0.03	0.03	0.56	856
Annual	-	_	_	-	_	_	_	_	-	_	-	-	_	_	-	_	_	_
2025	0.07	0.06	0.58	2.05	< 0.005	0.01	0.31	0.32	0.01	0.10	0.11	-	495	495	0.02	0.03	0.31	505
2026	0.05	0.05	0.18	0.79	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.02	-	140	140	< 0.005	< 0.005	0.09	142

2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)		—	—	—	—	—	_											—
Unmit.	1.62	1.50	0.08	9.04	< 0.005	0.02	0.00	0.02	0.01	0.00	0.01	0.00	1,528	1,528	0.06	0.01	0.00	1,531
Daily, Winter (Max)		_	_															_
Unmit.	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,491	1,491	0.06	0.01	0.00	1,494

Average Daily (Max)		_	_	_	_				_	_		_	_				_	_
Unmit.	1.12	1.03	0.05	6.19	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	1,516	1,516	0.06	0.01	0.00	1,520
Annual (Max)	—	—	—	—	—		_	—	—	—	_	—	—	_	_	_		—
Unmit.	0.20	0.19	0.01	1.13	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	251	251	0.01	< 0.005	0.00	252

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	-	-	-	-	-	_	-	_	_	-	-	—	_	-	-	-
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.62	1.50	0.08	9.04	< 0.005	0.02	_	0.02	0.01	_	0.01	_	37.2	37.2	< 0.005	< 0.005	_	37.3
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	-	0.00	-	1,488	1,488	0.06	0.01	_	1,491
Water	_	_	_	—	-	_	_	_	_	_	_	0.00	3.15	3.15	< 0.005	< 0.005	_	3.15
Waste	_	_	_	—	-	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	1.62	1.50	0.08	9.04	< 0.005	0.02	0.00	0.02	0.01	0.00	0.01	0.00	1,528	1,528	0.06	0.01	0.00	1,531
Daily, Winter (Max)	—	_	-	_	_	_	_	_	_	—	—	_		_		_	_	-
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.02	0.02	_	_	_	-	_	-	_	_	_	-	-	-	_	_	_	_
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	-	1,488	1,488	0.06	0.01	_	1,491
Water	_	_	_	_	_	_	_	-	_	_	_	0.00	3.15	3.15	< 0.005	< 0.005	_	3.15
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,491	1,491	0.06	0.01	0.00	1,494
Average Daily		_	_			_	_	_	_	_	_	_		_	_			_

Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	1.12	1.03	0.05	6.19	< 0.005	0.01	_	0.01	0.01	_	0.01	_	25.5	25.5	< 0.005	< 0.005	_	25.5
Energy	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	_	1,488	1,488	0.06	0.01	_	1,491
Water	-	_	_	_	_	_	_	_	_	_	_	0.00	3.15	3.15	< 0.005	< 0.005	_	3.15
Waste	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	1.12	1.03	0.05	6.19	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	1,516	1,516	0.06	0.01	0.00	1,520
Annual	—	_	_	—	_	—	—	_	-	—	_	—	-	_	—	_	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.20	0.19	0.01	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	_	< 0.005	_	4.21	4.21	< 0.005	< 0.005	_	4.23
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	_	0.00	—	246	246	0.01	< 0.005	_	247
Water	_	_	_	_	_	_	_	_	_	_	_	0.00	0.52	0.52	< 0.005	< 0.005	_	0.52
Waste	—	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	0.20	0.19	0.01	1.13	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	251	251	0.01	< 0.005	0.00	252

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Daily, Summer (Max)		_	—	_	—	_	_	—	—	—	—	—	—	—	—	—	_	—
Off-Roa d Equipm ent	0.25	0.25	2.27	14.6	0.02	0.05	-	0.05	0.05		0.05	-	2,494	2,494	0.10	0.02	-	2,502
Demoliti on	_	_	-	-	_	_	2.92	2.92	-	0.44	0.44	-	-	-	-	-	_	—
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
PR-	2024-0017	701 (GPA, S	PA, RZ, DF	R) Exhibit 13	- EIR Adde	endum and a	appedices		11 / 51	1				1				

Daily, Winter (Max)		_					_		_	_			_	_				_
Average Daily	_	_	-	-	-	_	-	-	-	-	_	-	-	-	-	_	_	_
Off-Roa d Equipm ent	0.03	0.03	0.27	1.75	< 0.005	0.01	_	0.01	0.01	_	0.01	_	301	301	0.01	< 0.005	_	302
Demoliti on		_	-	_	-	_	0.35	0.35	_	0.05	0.05	_	_	_	_	_		
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-Roa d Equipm ent	0.01	0.01	0.05	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005		< 0.005	—	49.8	49.8	< 0.005	< 0.005		49.9
Demoliti on	_	-	-	-	-	-	0.06	0.06	-	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)		_	_	_	_	_	-	-	_	_	_	-	_	-	_			_
Worker	0.07	0.06	0.05	0.97	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.65	179
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	0.10	0.04	2.61	0.64	0.02	0.05	0.62	0.66	0.05	0.17	0.22	_	2,352	2,352	0.04	0.37	5.02	2,469
Daily, Winter (Max)							_		—	_			_					
Average Daily	—	—	-	—	_	_	_	_	_	_	_	_	-	_	_	—	—	_
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	19.8	19.8	< 0.005	< 0.005	0.03	20.1

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	0.33	0.08	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	—	284	284	0.01	0.04	0.26	297
Annual	-	—	—	—	_	_	—	_	—	_	_	_	_	_	_	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.27	3.27	< 0.005	< 0.005	0.01	3.32
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.0	47.0	< 0.005	0.01	0.04	49.2

3.3. Site Preparation (2025) - Unmitigated

Location		ROG	NOx		SO2				PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		—	_	—	_	—	—	—	—	—		—	—	—	—	—	—	_
Off-Roa d Equipm ent	0.19	0.19	1.01	11.9	0.02	0.04		0.04	0.04		0.04		2,065	2,065	0.08	0.02		2,072
Dust From Material Movemer					_	_	2.44	2.44		1.17	1.17		_		_	—		—
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
Daily, Winter (Max)		_	—	_	_	_	_	—	_			—	_	—	_	_	_	_
Average Daily	_	-	-	_	-	-	_	—	_	_	_	_	-	_	-	-	-	—
Off-Roa d Equipm ent	0.01	0.01	0.06	0.65	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		113	113	< 0.005	< 0.005		114

Dust From Material Movemer		_	_	_	_	_	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
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.12	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	18.7	18.7	< 0.005	< 0.005	_	18.8
Dust From Material Movemer							0.02	0.02		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)	—	_	_	_	_	—	—	_	_	—	—	—	—	—		_	—	_
Worker	0.04	0.03	0.03	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	-	106	106	< 0.005	< 0.005	0.39	107
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)		-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-
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	_	5.39	5.39	< 0.005	< 0.005	0.01	5.47
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	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.89	0.89	< 0.005	< 0.005	< 0.005	0.91

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

3.5. Grading (2025) - Unmitigated

Location	1	ROG	NOx	со	SO2	PM10E	PM10D	PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	_	_	_	_	_	—	—	_	—	—	—	-	_	—
Daily, Summer (Max)	—	-	-	-	-	_	_	_	_	_	_	_	_	—	_	_	_	_
Off-Roa d Equipm ent	0.23	0.23	1.20	14.2	0.02	0.05	_	0.05	0.05	_	0.05	_	2,455	2,455	0.10	0.02	_	2,463
Dust From Material Movemer	—	_	-	-	-	—	2.77	2.77	_	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)	—			_	-	_	_	_	_			_	—	—	—		_	
Average Daily	_	—	—	—	—	-	_	—	_	-	—	_	—	_	-	-	_	-
Off-Roa d Equipm ent	0.04	0.04	0.21	2.54	< 0.005	0.01	_	0.01	0.01		0.01		437	437	0.02	< 0.005		439
Dust From Material Movemer					_		0.49	0.49		0.24	0.24		_	_				
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-Roa d Equipm ent	0.01	0.01	0.04	0.46	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	72.4	72.4	< 0.005	< 0.005	_	72.6
Dust From Material Movemer				_		_	0.09	0.09		0.04	0.04	_	_				_	
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	0.05	0.04	0.04	0.77	0.00	0.00	0.13	0.13	0.00	0.03	0.03	-	141	141	0.01	< 0.005	0.52	143
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	0.08	0.03	2.20	0.54	0.01	0.04	0.52	0.56	0.04	0.15	0.18	-	1,988	1,988	0.04	0.31	4.24	2,086
Daily, Winter (Max)	—	_	_	-	_	_	—	_	—	_	—	_	—	_	—	_	-	—
Average Daily	_	—	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.4	23.4	< 0.005	< 0.005	0.04	23.7
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	0.01	0.41	0.10	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	354	354	0.01	0.06	0.32	371
Annual	—	-	-	-	-	-	_	-	-	-	-	—	-	-	-	-	—	-
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	-	3.87	3.87	< 0.005	< 0.005	0.01	3.92
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	_	58.6	58.6	< 0.005	0.01	0.05	61.5

3.7. Infrastructure Improvement (2025) - Unmitigated

Location		ROG	NOx	СО	so2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	_	—	—	—	—	—	—
Daily, Summer (Max)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Daily, Winter (Max)	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-
Off-Roa d Equipm ent	0.20	0.20	3.54	10.5	0.02	0.03	_	0.03	0.03	-	0.03	_	1,801	1,801	0.07	0.01		1,807
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-Roa d Equipm ent	0.04	0.04	0.64	1.89	< 0.005	0.01	-	0.01	0.01	-	0.01	-	326	326	0.01	< 0.005		327
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-Roa d Equipm ent	0.01	0.01	0.12	0.35	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	53.9	53.9	< 0.005	< 0.005		54.1
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	0.41	0.37	0.42	5.09	0.00	0.00	1.14	1.14	0.00	0.27	0.27	_	1,131	1,131	0.05	0.04	0.12	1,145
Vendor	0.05	0.02	1.20	0.37	0.01	0.02	0.29	0.31	0.02	0.08	0.10	_	1,043	1,043	0.02	0.16	0.08	1,090
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	0.07	0.07	0.08	0.97	0.00	0.00	0.21	0.21	0.00	0.05	0.05	_	207	207	0.01	0.01	0.35	210
Vendor	0.01	< 0.005	0.22	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	_	188	188	< 0.005	0.03	0.23	197
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	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	34.3	34.3	< 0.005	< 0.005	0.06	34.8
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	31.2	31.2	< 0.005	< 0.005	0.04	32.7
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

3.9. Building Construction (2025) - Unmitigated

Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	_	-	—	—	—	—	—	—	—	—	—	—	—	_	_	—
Daily, Summer (Max)		—	—	—	_	_	—	—	—	—	—	—	—	—	_	—	—	—
Off-Roa d Equipm ent	0.20	0.20	3.54	10.5	0.02	0.03	_	0.03	0.03	_	0.03		1,801	1,801	0.07	0.01	_	1,807
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-Roa Equipme	0.20 nt	0.20	3.54	10.5	0.02	0.03	—	0.03	0.03	_	0.03	_	1,801	1,801	0.07	0.01	_	1,807
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-Roa d Equipm ent	0.04	0.04	0.65	1.93	< 0.005	0.01		0.01	0.01	_	0.01	_	331	331	0.01	< 0.005	_	332
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-Roa d Equipm ent	0.01	0.01	0.12	0.35	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	54.9	54.9	< 0.005	< 0.005	_	55.0
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	0.47	0.39	0.38	6.74	0.00	0.00	1.14	1.14	0.00	0.27	0.27	_	1,230	1,230	0.05	0.04	4.52	1,249
Vendor	0.05	0.02	1.14	0.36	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,042	1,042	0.02	0.16	2.96	1,093
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	0.41	0.37	0.42	5.09	0.00	0.00	1.14	1.14	0.00	0.27	0.27	—	1,131	1,131	0.05	0.04	0.12	1,145
Vendor	0.05	0.02	1.20	0.37	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,043	1,043	0.02	0.16	0.08	1,090
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	0.08	0.07	0.08	0.99	0.00	0.00	0.21	0.21	0.00	0.05	0.05	_	211	211	0.01	0.01	0.36	214
Vendor	0.01	< 0.005	0.22	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	_	192	192	< 0.005	0.03	0.24	201
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	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	34.9	34.9	< 0.005	< 0.005	0.06	35.4
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	31.7	31.7	< 0.005	< 0.005	0.04	33.2
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

3.11. Building Construction (2026) - Unmitigated

Location		ROG	NOx		SO2				PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	-	-	—	-	—	—	_	—	—	—	—	_	—	—	_	—	—
Daily, Summer (Max)		—	—	_	_	—	—	—	—	—	—	—	_	—	_	_	—	—
Daily, Winter (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	0.20	0.20	3.54	10.5	0.02	0.03		0.03	0.03		0.03		1,801	1,801	0.07	0.01		1,807
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-Roa d Equipm ent	0.02	0.02	0.32	0.94	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		162	162	0.01	< 0.005	_	163
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-Roa Equipme	< 0.005 nt	< 0.005	0.06	0.17	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	26.8	26.8	< 0.005	< 0.005	_	26.9
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	0.39	0.35	0.38	4.75	0.00	0.00	1.14	1.14	0.00	0.27	0.27	-	1,107	1,107	0.02	0.04	0.11	1,120
Vendor	0.05	0.02	1.14	0.35	0.01	0.02	0.29	0.31	0.02	0.08	0.10	_	1,026	1,026	0.02	0.16	0.07	1,074
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	0.03	0.04	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	101	101	< 0.005	< 0.005	0.16	102
Vendor	< 0.005	< 0.005	0.10	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	92.3	92.3	< 0.005	0.01	0.11	96.7
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	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.7	16.7	< 0.005	< 0.005	0.03	16.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	15.3	15.3	< 0.005	< 0.005	0.02	16.0
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. Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Daily, Summer (Max)	—											_						_

Off-Roa Equipmer		0.10	0.99	6.65	0.01	0.02	—	0.02	0.02	_	0.02	_	991	991	0.04	0.01	_	995
Paving	0.05	0.05	_	_	-	_	_	-	-	_	-	-	_	-	_	_	-	—
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-Roa d Equipm ent	0.10	0.10	0.99	6.65	0.01	0.02	_	0.02	0.02	_	0.02	_	991	991	0.04	0.01	_	995
Paving	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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-Roa d Equipm ent	0.03	0.03	0.26	1.73	< 0.005	< 0.005		< 0.005	< 0.005	-	< 0.005	-	258	258	0.01	< 0.005	-	259
Paving	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
Annual	_	_	_	-	_	—	_	_	_	_	_	_	_	_	_	_	_	_
Off-Roa d Equipm ent	< 0.005	< 0.005	0.05	0.32	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	42.7	42.7	< 0.005	< 0.005	_	42.9
Paving	< 0.005	< 0.005	_	_	_	_	_	_	—	_	_	_	_	_	_	_	_	—
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	0.06	0.05	0.05	0.90	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	172	172	0.01	0.01	0.58	175
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	0.06	0.05	0.05	0.68	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.02	160
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	0.01	0.01	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	_	41.8	41.8	< 0.005	< 0.005	0.07	42.3
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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	6.92	6.92	< 0.005	< 0.005	0.01	7.01
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

3.15. Architectural Coating (2026) - Unmitigated

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)			—	—		—	—	—		_		—	—		—			

Off-Roa d Equipm	0.02	0.02	0.65	0.96	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	134	134	0.01	< 0.005		134
Architect ural Coating s	0.33	0.33	_	_	_						_			_	_			_
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-Roa d Equipm ent	0.02	0.02	0.65	0.96	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		134	134	0.01	< 0.005		134
Architect ural Coating s	0.33	0.33	_	_	_	_	_	_	_	_	_	_		_	_	_		_
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-Roa d Equipm ent	0.01	0.01	0.21	0.32	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		43.9	43.9	< 0.005	< 0.005		44.0
Architect ural Coating s	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
Annual	_	_	_	_	_	_	_	_	_	_		_	_	_	—	_	_	_

Off-Roa d Equipm ent	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	_	7.27	7.27	< 0.005	< 0.005	_	7.29
Architect ural Coating s	0.02	0.02	_	_	_		—	—		_	_	_	_	_	_	—	_	—
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	0.16	0.15	0.14	2.51	0.00	0.00	0.46	0.46	0.00	0.11	0.11	_	481	481	0.02	0.02	1.63	488
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	0.16	0.14	0.15	1.90	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	443	443	0.01	0.02	0.04	448
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	0.05	0.05	0.05	0.65	0.00	0.00	0.15	0.15	0.00	0.03	0.03	_	147	147	< 0.005	0.01	0.23	149
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	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	24.4	24.4	< 0.005	< 0.005	0.04	24.7
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

						,			-									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)		_	—	_	_	—	—	—	_	—	_	_	_	_	—	_	_	—
Unenclo sed 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
Enclose d 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	0.00	0.00	0.00	0.00	0.00	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)	_	_	_	-	-	-	-	-	-	-	_	_	-	_	-	_	-	_
Unenclo sed 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
Enclose d 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	0.00	0.00	0.00	0.00	0.00	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	—	—	—	_	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unenclo sed 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
Enclose d 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Land	TOG	ROG	NOx	СО			PM10D		PM2.5E				NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_			_	_	_	-	_	_	_
Unenclo sed Parking with Elevator		_	_	_	_	_							1,121	1,121	0.04	0.01		1,123
Enclose d Parking with Elevator		_	_	_		—							367	367	0.01	< 0.005		368
Total	-	_	_	_	-	_	_	—	—	_	_	—	1,488	1,488	0.06	0.01	_	1,491
Daily, Winter (Max)	_	_	_	_	_	_		_					_	_	_	_	_	-

Unenclo Parking with Elevator													1,121	1,121	0.04	0.01		1,123
Enclose d Parking with Elevator			_		_		_			_			367	367	0.01	< 0.005	_	368
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,488	1,488	0.06	0.01	—	1,491
Annual	_	—	—	—	—	—	—	—	_	—	—	_	—	—	—	_	—	—
Unenclo sed Parking with Elevator			_		_		_			_			186	186	0.01	< 0.005		186
Enclose d Parking with Elevator													60.8	60.8	< 0.005	< 0.005	_	60.9
Total	_	_	_	_	_	_	_	_	_	_	_	_	246	246	0.01	< 0.005	_	247

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unenclo sed 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

Enclose d 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	0.00	0.00	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)		—	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unenclo sed 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
Enclose d 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	0.00	0.00	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	_	_	_	_	_	_	_	_	-	_	_	_	_	-	_	_	_	_
Unenclo sed 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
Enclose d 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	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	-	0.00	_	0.00	0.00	0.00	0.00	_	0.00

4.3. 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) PR-2024-001701 (GPA, SPA, RZ, DR) Exhibit 13 - EIR Addendum and appedices 29 / 51

Source	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	_	_	—	—	_	—	—	—	—	—	—	—	—		_	—
Consum er Product s	0.01	0.01	_	_	_	—		_	—	_	_	—	_	_				_
Architect ural Coating s	0.01	0.01			_	—		_	_	—	—	—	—				_	_
Landsca pe Equipm ent	1.61	1.48	0.08	9.04	< 0.005	0.02		0.02	0.01	—	0.01	—	37.2	37.2	< 0.005	< 0.005		37.3
Total	1.62	1.50	0.08	9.04	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.2	37.2	< 0.005	< 0.005	—	37.3
Daily, Winter (Max)	—	_	_	_	_	_	_	—	—	_	_	—	—	_	_	_	_	—
Consum er Product s	0.01	0.01		_	_	_		_	_		_	_	_				_	_
Architect ural Coating s	0.01	0.01	-	-	_				_									
Total	0.02	0.02	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_		_	_	_	_	_	_	_	_		_	_
Consum er Product s	< 0.005	< 0.005	-	-	_				_									
ural Coating s	< 0.005			—) Exhibit 13	_	_		_		—	—	—	—					_

Landsca Equipme		0.19	0.01	1.13	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	_	4.21	4.21	< 0.005	< 0.005	_	4.23
Total	0.20	0.19	0.01	1.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	4.21	4.21	< 0.005	< 0.005	_	4.23

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

					/					1 101 01	/						
TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
—	_	—	—	—	—	—	—	—	—	_	—	—		—	—	—	_
		_	_								0.00	3.15	3.15	< 0.005	< 0.005		3.15
	_	_	_	_							0.00	0.00	0.00	0.00	0.00		0.00
-	_	_	—	—	—	—	—	—	—	_	0.00	3.15	3.15	< 0.005	< 0.005	—	3.15
_	-	-	_	_	-	_	_	_	_	_	_	_	_	_	-	-	-
	_	_	_	_	_	_	_				0.00	3.15	3.15	< 0.005	< 0.005	_	3.15
		_		_						_	0.00	0.00	0.00	0.00	0.00		0.00
	TOG					Image: series of the series	Image: series of the series	Image: series of the series	Image: series of the series	Image: series of the series	Image: space of the space of	Image: Normal startImage:	Image: Normal state Image: Normal state	Image: Second	Image: A state in the state interval inter	Image: A state in the state interval inter	Image: A state in the state interval inter

Total	_	_	—	_	_	_	_	_	_	_	_	0.00	3.15	3.15	< 0.005	< 0.005	_	3.15
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unenclo sed Parking with Elevator								_	_		_	0.00	0.52	0.52	< 0.005	< 0.005		0.52
Enclose d Parking with Elevator												0.00	0.00	0.00	0.00	0.00		0.00
Total	_		_	_	_	_	_	_	_	_	_	0.00	0.52	0.52	< 0.005	< 0.005	_	0.52

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Land Use	TOG	ROG		CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)		—			—	_			—				—	—	—	—		—
Unenclo sed Parking with Elevator												0.00	0.00	0.00	0.00	0.00		0.00
Enclose d Parking with Elevator												0.00	0.00	0.00	0.00	0.00		0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00

Daily, Winter (Max)															_			_
Unenclo sed Parking with Elevator												0.00	0.00	0.00	0.00	0.00		0.00
Enclose d Parking with Elevator												0.00	0.00	0.00	0.00	0.00		0.00
Total	_	_	—	_	-	_	_	_	_	—	_	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	_	—	_	—	—	—	—	—	—	—	_	—	_	—	—	—	_
Unenclo sed Parking with Elevator				_								0.00	0.00	0.00	0.00	0.00		0.00
Enclose d Parking with Elevator	—		_				—				—	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Land Use	TOG	ROG	NOx	со	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. 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)

					1	/		· · ·	1			/						
Equipm ent Type	TOG	ROG	NOx	со	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

Equipm ent Type	TOG	ROG	NOx	со	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. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Equipm ent Type	TOG	ROG		СО			PM10D	PM10T		PM2.5D			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)

Vegetati on	TOG	ROG	NOx	со	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

Land Use	TOG	ROG		СО		PM10E	PM10D	PM10T			PM2.5T		NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	-
Total	_	-	_	_	_	—	_	_	—	_	_	_	_	_	_	_	_	—
Daily, Winter (Max)	_	—	_	_			_	—	_	—	_	—	_	_		—	—	-
Total	_	—	_	—	—	—	_	—	—	_	_	_	_	_	—	_	_	—
Annual	_	_	_	_	_	_		_		_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	_	—	_	_	_	—	—	—	—	—	_	—	—	_	_	_	-
Avoided	—	—	—	—	—	—	_	—	_	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	-	—	—	—	—	_	—	—	—	—	—	—	—	—
Sequest ered	—	-	—	-	-	_				_	—	—		—	_	—	_	—
Subtotal	—	_	—	_	_	_	—	_	—	_	—	_	_	—	_	_	_	—
Remove d	—	—	_	_	-	-	—	—	_	—	—	-	—	—	-	-	-	—
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
—	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	-	_	_	-	-	_	_	_	_	_	-	_	_	-	-	-	-
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	—	_	—	-	-	_	—	—	_	_	—	_	—	_	_	_	_	_
Subtotal	—	—	—	_	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	_	—	—	_		—	_	—	_	_	—	—	—	_	_	—
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	—
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	—	_	_	_	_	_	_	_

Sequest ered		—	_		—	—	—	_		—	—	—	_	_	—			—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d		—	_	_	_	_	—	_		—	_	—	—		_			—
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	4/1/2025	6/1/2025	5.00	44.0	—
Site Preparation	Site Preparation	6/2/2025	6/29/2025	5.00	20.0	—
Grading	Grading	6/30/2025	9/28/2025	5.00	65.0	—
Infrastructure Improvement	Building Construction	10/1/2025	12/31/2025	5.00	66.0	—
Building Construction	Building Construction	9/29/2025	2/15/2026	5.00	100	—
Paving	Paving	2/16/2026	6/28/2026	5.00	95.0	_
Architectural Coating	Architectural Coating	2/16/2026	7/31/2026	5.00	120	_

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	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Back hoes		Tier 4 Final	3.00	8.00	84.0	0.37
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Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
nfrastructure mprovement	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Infrastructure Improvement	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Infrastructure Improvement	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	14.0	0.74
nfrastructure mprovement	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Infrastructure Improvement	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Tier 4 Final	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	-	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	34.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	28.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Infrastructure Improvement	—	—	—	—
Infrastructure Improvement	Worker	87.3	18.5	LDA,LDT1,LDT2
Infrastructure Improvement	Vendor	34.1	10.2	HHDT,MHDT
Infrastructure Improvement	Hauling	0.00	20.0	HHDT
Infrastructure Improvement	Onsite truck	—	—	HHDT
Building Construction	_		_	
Building Construction	Worker	87.3	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	34.1	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck			HHDT
Paving	—		_	_
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	_	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	—	HHDT
Architectural Coating	—	_	—	—
Architectural Coating	Worker	34.9	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	10.2	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

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name		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	3,450	383	4,600

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	6,005	_
Site Preparation	—	_	18.8	0.00	

Grading	—	15,000	65.0	0.00	_
Paving	0.00	0.00	0.00	0.00	1.76

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unenclosed Parking with Elevator	1.76	100%
Enclosed 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
2025	0.00	873	0.03	< 0.005
2026	0.00	873	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
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enclosed 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

5.10.2. 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	3,450	383	4,600

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Unenclosed Parking with Elevator	468,419	873	0.0330	0.0040	0.00
Enclosed Parking with Elevator	153,401	873	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)
Unenclosed Parking with Elevator	0.00	247,856
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unenclosed Parking with Elevator	0.00	_
Enclosed 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

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
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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 Boile	ers					

Equipment TypeFuel TypeNumberBoiler Rating (MMBtu/hr)Daily Heat Input (MMBtu/day)Annual Heat Input (MMBtu/day)	uipment Type Fuel Ty	Fuel Type Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yi
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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. Biomass Cover Type			
5.18.1. Biomass Cover Type 5.18.1.1. Unmitigated			
	Initial Acres	Final Acres	

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)	э Туре	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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
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Temperature and Extreme Heat	25.6	annual days of extreme heat
Extreme Precipitation	2.20	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	1.19	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	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	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	0	0	0	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

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Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
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	1	1	1	2

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	97.0
AQ-PM	91.0
AQ-DPM	96.0
Drinking Water	77.4
Lead Risk Housing	81.5
Pesticides	0.00
Toxic Releases	56.7
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Traffic	68.2
Effect Indicators	—
CleanUp Sites	88.4
Groundwater	85.1
Haz Waste Facilities/Generators	84.9
Impaired Water Bodies	0.00
Solid Waste	9.67
Sensitive Population	_
Asthma	91.3
Cardio-vascular	96.4
Low Birth Weights	87.6
Socioeconomic Factor Indicators	_
Education	63.6
Housing	78.7
Linguistic	59.8
Poverty	78.0
Unemployment	73.4

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	19.49185166
Employed	2.130116771
Median HI	5.556268446
Education	—
Bachelor's or higher	24.75298345
High school enrollment	3.772616451

Preschool enrollment	1.873476197
Transportation	
Auto Access	5.158475555
Active commuting	87.77107661
Social	
2-parent households	12.6780444
Voting	1.976132427
Neighborhood	
Alcohol availability	14.92364943
Park access	81.35506224
Retail density	97.92121134
Supermarket access	80.46965225
Tree canopy	28.26895932
Housing	
Homeownership	6.236365969
Housing habitability	31.64378288
Low-inc homeowner severe housing cost burden	85.70511998
Low-inc renter severe housing cost burden	42.52534326
Uncrowded housing	31.19466188
Health Outcomes	
Insured adults	13.22982163
Arthritis	30.2
Asthma ER Admissions	5.5
High Blood Pressure	19.3
Cancer (excluding skin)	57.8
Asthma	12.1
Coronary Heart Disease	23.5
Chronic Obstructive Pulmonary Disease	8.5

Diagnosed Diabetes	35.6
Life Expectancy at Birth	4.5
Cognitively Disabled	15.2
Physically Disabled	10.8
Heart Attack ER Admissions	10.1
Mental Health Not Good	13.8
Chronic Kidney Disease	35.4
Obesity	8.0
Pedestrian Injuries	90.5
Physical Health Not Good	18.1
Stroke	17.3
Health Risk Behaviors	
Binge Drinking	33.9
Current Smoker	4.4
No Leisure Time for Physical Activity	19.3
Climate Change Exposures	_
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	78.7
Elderly	45.2
English Speaking	52.7
Foreign-born	22.8
Outdoor Workers	43.6
Climate Change Adaptive Capacity	_
Impervious Surface Cover	47.5
Traffic Density	69.5
Traffic Access	71.3
Other Indices	

Hardship	79.2
Other Decision Support	
2016 Voting	17.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	1.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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
Land Use	Project Area 1.66 ac + 0.1 ac of off site improvements
Construction: Construction Phases	Project Schedule
Construction: Off-Road Equipment	Final EIR MM A-2 requiring Tier 4 or better