Greenhouse Gas Emissions Assessment for the proposed Mountain View Grade Separation and Access Project in the City of Mountain View, California

Prepared by:



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LIST OF ABBREVIATED TERMS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
BAAQMD	Bay Area Air Quality Management District
CAP	Climate Action Plan
CARB	California Air Resources Board
CFCs	Chlorofluorocarbons
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
EPA	Environmental Protection Agency
GHG	greenhouse gas
HFCs	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
MMT	million metric tons
MTC	Metropolitan Transportation Commission
MWh	megawatt-hour
N_2O	nitrous oxide
NHTSA	National Highway Traffic Safety Administration
PFCs	Perfluorocarbons
RHNA	Regional Housing Allocation Needs Allocation
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF ₆	Sulfur Hexafluoride
SP	service population
VMT	vehicle miles traveled

1 INTRODUCTION

This report evaluates greenhouse gas (GHG) emissions associated with the proposed Mountain View Grade Separation and Access Project and analyzes project compliance with applicable regulations. The project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, is analyzed in this report.

1.1 **PROJECT LOCATION**

The project site is located in the City of Mountain View, in Santa Clara County in California. The project site is located within the Transit Center Master Plan area; refer to Exhibit 1, *Site Location Map*. The project is located adjacent to Evelyn Avenue, Central Expressway, Shoreline Boulevard, and SR 85; refer to Exhibit 2, *Project Area*.

1.2 PROJECT DESCRIPTION

The Mountain View Grade Separation and Access Project proposes a grade separation of pedestrian and roadway facilities and access and transit improvements project identified in the Mountain View Transit Center Master Plan. The Transit Center Master Plan was adopted by the City of Mountain View in May of 2017. The primary objective of the Mountain View Grade Separation and Access Project is to improve safety, capacity, and multimodal access in Mountain View Transit Center station area. The Transit Center now serves more than three times the original expected number of riders, and substantial growth is expected as Caltrain transitions to electrification. The project would improve public safety by removing at grade crossings for cars, pedestrians, bicyclists, and transit riders by removing all at-grade railroad crossings at the Mountain View Transit Center.

The Grade Separation and Access Project (proposed Project) consists of three main components: 1) Castro Street Grade Crossing; 2) Caltrain Station Improvements; and 3) Pedestrian and Bicycle Facilities improvements. Each of these components is shown in Exhibit 3, *Conceptual Design*.

In the City of Mountain View General Plan, the project site is designated as Downtown Mixed-Use and is located within the Central Neighborhoods/ Downtown Planning Area. The Planning Area surrounds Downtown and is the heart of the City. The area includes a wide range of low- to high-intensity commercial and residential development. The Downtown Mixed-Use designation includes a variety of retail, commercial, cultural and civic services for residents, visitors, and workers.





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2 ENVIRONMENTAL SETTING

2.1 GREENHOUSE GASES AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as greenhouse gases (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. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of 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, 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 any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ 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 CO₂ emissions remains stored in the atmosphere (IPCC 2013).¹ *Table 1, Description of Greenhouse Gases,* describes the primary GHGs attributed to global climate change, including their physical properties.

¹ IPCC (Intergovernmental Panel on Climate Change). 2013. Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf.

Table 1: Description of Greenhouse Gases				
Greenhouse Gas	Description			
Carbon Dioxide (CO ₂)	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 (N ₂ O)	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)	Methane, 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 Chlorofluorocarbons (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.			
Hydrochlorofluorocar bons (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	Nitrogen trifluoride (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 $17,200$.			
Source: Compiled from U.S. EPA, Overview of Greenhouse Gases, April 11, 2018 (https://www.epa.gov/ghgemissions/overview-greenhouse- gases); U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018; IPCC Climate Change 2007: The Physical Science Basis, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, Methane and Nitrous Oxide Emission from Natural Sources. April 2010.				

3 REGULATORY SETTING

3.1 FEDERAL

To date, no national standards have 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.
- 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 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 Clean Air Act 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 (carbon dioxide [CO₂], methane [CH₄], nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act 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, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. 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. It should be noted that the EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

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.

Clean Power Plan and New Source Performance Standards for Electric Generating Units. On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, the federal government directed the EPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Presidential Executive Order 13783. Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

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 carbon dioxide equivalents (CO₂e) in the world and produced 459 million gross metric tons of CO₂e 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 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). Assembly Bill (AB) 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 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.

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")². The Scoping Plan evaluates opportunities for sector-specific reductions; integrates early actions by CARB and the State's Climate Action Team and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the adopted role of a cap-and-trade program.³ 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 Communities Strategies have been adopted).

² 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.

³ 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.

- 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 gasses 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 (CARB 2008).

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. 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 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 Plan⁴. 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 the Clean Power Plan and other Federal actions.

Senate Bill 32 (California Global Warming Solutions Act of 2006: emissions limit). Signed into law in September 2016, Senate Bill (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.

⁴ California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf_Accessed January 19, 2019.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards). California 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 U.S. EPA's denial of an implementation waiver. The U.S. EPA subsequently granted the requested waiver in 2009, which was upheld by the 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 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 CO_2e emissions and 75 percent fewer smog-forming emissions.

SB 1368 (Emission Performance Standards). SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission 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 California Public Utilities Commission 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, of 1,100 lbs. CO₂ per megawatt-hour (MWh).

SB 1078 and SBX1-2 (Renewable Electricity Standards). SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 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, which 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 final end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator (ISO) 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.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of 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 greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas 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. In particular, 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 Low Carbon Fuel Standard 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 Renewable Portfolio Standard (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 MMCO₂e. 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.

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 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 (California Code of Regulations 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 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (California Code of Regulations 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, 2017.

3.3 REGIONAL

Bay Area Air Quality Management District

The BAAQMD is the regional agency with jurisdiction over the nine-county region located in the Basin. The Association of Bay Area Governments (ABAG), Metropolitan Transportation Commission (MTC), county transportation agencies, cities and counties, and various nongovernmental organizations also join in the efforts to improve air quality through a variety of programs. These programs include the adoption of regulations and policies, as well as implementation of extensive education and public outreach programs.

Under CEQA, the BAAQMD is a commenting responsible agency on air quality within its jurisdiction or impacting its jurisdiction. The BAAQMD reviews projects to ensure that they would: (1) support the primary goals of the latest Air Quality Plan; (2) include applicable control measures from the Air Quality Plan; and (3) not disrupt or hinder implementation of any Air Quality Plan control measures.

In May 2010, the BAAQMD adopted its updated *California Environmental Quality Act (CEQA) Air Quality Guidelines* as a guidance document to provide lead government agencies, consultants, and project proponents with uniform procedures for assessing air quality impacts and preparing the air quality sections of environmental documents for projects subject to CEQA. The BAAQMD *CEQA Guidelines* include methodologies and thresholds for addressing project and program level air quality and GHG emissions. The Guidelines were called into question by an order issued March 5, 2012, in *California Building Industry Association (CBIA) v. BAAQMD* (Alameda Superior Court Case No. RGI0548693). The Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it

adopted the thresholds. The court also issued a writ of mandate ordering the BAAQMD to set aside the thresholds and cease dissemination of them until the BAAQMD had complied with CEQA. Notably, the court's ruling was based solely on BAAQMD's failure to comply with CEQA. The court did not reach any issues relating to the validity of the scientific reasoning underlying the recommended significance thresholds.

In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds.⁵ CBIA sought review by the California Supreme Court on three issues, including the appellate court's decision to uphold the BAAQMD's adoption of the thresholds, and the Court granted review on just one: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users of a proposed project? In December 2015, the California Supreme Court confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project.⁶ The BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The BAAQMD is currently working to revise any outdated information in the Guidelines as part of its update to the CEQA Guidelines and thresholds of significance.

Clean Air Plan

Air quality plans developed to meet federal requirements are referred to as State Implementation Plans. The federal and state Clean Air Acts require plans to be developed for areas designated as nonattainment (with the exception of areas designated as nonattainment for the state PM₁₀ standard). The *2017 Clean Air Plan: Spare the Air, Cool the Climate* was adopted on April 19, 2019, by the BAAQMD.

The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the BAAQMD will continue progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

3.4 LOCAL

City of Mountain View General Plan

Mountain View 2030 General Plan was prepared in July 2012. The Plan is the City's roadmap for the future that describes the community's aspirations and identifies strategies for managing preservation and change. The project site is located within the Central Neighborhoods/ Downtown Planning Area. The key policy direction of this area includes enhancing small-town character, connecting the community, and

⁵ California Court of Appeal, First Appellate District, Case Nos. A135335 & A136212.

⁶ California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 [No. S 213478]

developing around transit. In 2009, 67 percent of the Planning Area was residential, both single-family and mixed residential.

According to the General Plan greenhouse gas emissions and air quality policies work in tandem with the accompanying Greenhouse Gas Reduction Program as well as other General Plan policies to reduce municipal and community-wide greenhouse gas emissions and improve air quality throughout the City.

Goal MOB-9: Achievement of state and regional air quality and greenhouse gas emission reduction targets.

Policy MOB-9.1: *Greenhouse Gas Emissions*. Develop cost-effective strategies for reducing greenhouse gas emissions in coordination with the Greenhouse Gas Reduction Program.

<u>Action MOB 9.1.1:</u> *Greenhouse Gas Inventory.* Maintain and regularly update the City's municipal and community Greenhouse Gas Inventory to track emissions.

<u>Action MOB 9.1.2</u>: *Greenhouse Gas Reduction Program*. Regularly update the Greenhouse Gas Reduction Program to address transportation emissions reductions.

Policy MOB-9.2: *Reduced vehicle miles traveled*. Support development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita vehicle miles traveled.

<u>Action MOB 9.2.1</u>: *Mixed use in higher densities*. Seek to create higher-intensity mixed use districts along transit, bicycle and pedestrian corridors.

<u>Action MOB 9.2.2:</u> *Alternative modes*. Promote walking, bicycling, transit and other highly efficient modes of transportation to reduce per capita vehicle miles traveled.

Policy MOB-9.3: *Low-emission vehicles*. Promote use of fuel-efficient, alternative fuel and low-emission vehicles.

<u>Action MOB 9.3.1</u>: *Municipal vehicles*. Minimize emissions from City-owned and operated vehicles through equipment retrofits, purchasing of more efficient models, changes in operation protocols, or other actions.

<u>Action MOB 9.3.2</u>: *Sustainable infrastructure*. Support the installation of innovative, sustainable infrastructure for low-emission vehicles (e.g. electric charging stations, etc.)

City of Mountain View Climate Action Plan

The City of Mountain View Climate Action Plan include three separate documents: Climate Protection Roadmap (CPR), Municipal Operations Climate Action Plan (MOCAP), and the Greenhouse Gas Reduction Program (GGRP).

Greenhouse Gas Reduction Program

The Greenhouse Gas Reduction Program (GGRP) was adopted in 2012 and mitigates the environmental impacts of the 2030 General Plan to comply with CEQA. The GGRP identifies strategies and measures that would enable the City to achieve the 2020 and 2030 emissions reduction goals mandated by the BAAQMD.

In the Transportation Strategy the GGRP highlights that transportation-related emissions make up the largest component (approximately 60 percent) of the City's 2005 emissions inventory. Lengthy vehicle trips between destinations and high number of trips create high emissions. Therefore, the City is aiming to reduce vehicle emissions by eliminating of shortening vehicle trips either by providing alternative modes of transportation (such as transit, bicycling, or walking).

The following measures and actions in the GGRP are targeted at reducing GHG emissions.

Energy Efficiency

- E-1.1 Residential Energy Efficiency Retrofit
- E-1.2 Non-Residential Energy Efficiency Retrofit
- E-1.3 Non-Residential Lighting Retrofit
- E-1.4 Residential Energy Star Appliances
- E-1.5 Smart Grid
- E-1.6 Exceed State Energy Standards in New Residential Development
- E-1.7 Exceed State Energy Standards in New Non-Residential Development
- E-1.8 Building Shade Trees in Residential Development

Renewable Energy

- E-2.1 Residential Solar Water Heaters
- E-2.2 Non-Residential Solar Water Heaters
- E-2.3 Residential Solar Photovoltaic System
- E-2.4 Non-Residential Solar Photovoltaic System
- E-2.5 Landfill Gas to Energy

Municipal Building Energy

E-3.1 Energy Efficiency in Municipal Buildings

Municipal Streetlights and Traffic Lights

E-4.1 Energy Efficiency in Streetlights and Traffic Lights

Municipal Renewables

E-5.1 Solar Photovoltaic Systems on Municipal Buildings

Solid Waste Strategy

SW-1.1 Implementation of a Zero-Waste Plan

Water Strategy

W-1.1 Urban Water Management Plan Conservation Strategies

Transportation Strategy

T-1.1 Transportation Demand Management

Carbon Sequestration Strategy

CS-1.1 Enhance the Urban Forest

Climate Protection Roadmap

The City of Mountain View adopted the Climate Protection Roadmap (CPR) in September 2015. The document is part of the City's multifaceted approach to addressing climate change. The CPR provides summary information about the current and future state of GHG emissions in the City, past and current City GHG reduction efforts, the State and regional policy context, CPR methodology, and potential reduction scenarios pending the implementation of the recommended mechanism. The CPR identifies the strategies and mechanisms to reduce community-wide GHG emissions by 80 percent by 2050. The document is divided into the three largest GHG contributors in the City: Building Energy, Transportation, and Solid Waste.

In 2009, the Mountain View City Council adopted the following voluntary, absolute communitywide GHG emission reduction targets:

- 5 percent below 2005 baseline levels by 2012
- 10 percent below 2005 baseline levels by 2015
- 15-20 percent below 2005 baseline levels by 2020
- 80 percent below 2005 baseline levels by 2050

In 2012, the City adopted a Greenhouse Gas Reduction Plan (GGRP) to mitigate the emissions associated with future development allowed in the General Plan. BAAQMD guidelines allow cities to either use an absolute or an efficiency-based target to meet 2020 goals. With the high levels of future development and emissions growth, and the general political and economic infeasibility of implanting aggressive emission reduction policies and programs the City of Mountain View chose to use a BAAQMD-approved emissions efficiency target within the GGRP. This is a per-capita target that would result in a community emissions efficiency of below 6.6 metric tons of CO₂e per service population. This means the City can continue to grow its overall absolute GHG emissions while striving to reduce its per-capita emissions.

Municipal Operations Climate Action Plan

The Municipal Operations Climate Action Plan (MOCAP) was adopted in 2015 and identifies strategies and actions to reduce municipal operations GHG emissions by 80 percent by 2050.

City of Mountain View Municipal Code

Chapter 8, Article I, Division III is the California Green Building Code with amended sections with City requirements. As part of the City's Green Building Ordinance, the City of Mountain View requires new residential construction less than five units comply with 2016 CalGreen and Mountain View amendments,

and demonstrate energy compliance to meet or exceed Title 24, Part 6. For new residential construction projects with more than five units the project must meet the intent of seventy (70) GreenPoint Rated points as well as the two requirements listed for residential projects under five units. Nonresidential new construction between 5,000 and 25,000 square-feet must meet the above requirements as well as meet the intent of Leadership in Energy and Environmental Design (LEED) certification. Nonresidential buildings over 25,000 square-feet must meet LEED silver certification. The LEED construction and/or other types of equivalent green building verification systems typically require enhanced building energy efficiency, which reduces heating and cooling requirements of a building and therefore also reduces GHG emissions.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 GREENHOUSE GAS THRESHOLDS

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 greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

BAAQMD Thresholds

The BAAQMD's 2017 *CEQA Air Quality Guidelines* provide significance thresholds for project GHG emissions that are used by the City of Mountain View. If the BAAQMD thresholds are exceeded, a potentially significant impact could result. These thresholds are substantiated in the *Options and Justification Report* (dated October 2009) prepared by the BAAQMD. These recommendations represent the best available science on the subject of what constitutes a significant GHG effect on climate change for this Project. BAAQMD's recommended thresholds are as follows:

- Compliance with a Qualified Climate Action Plan or
- Meet one of the following thresholds:
 - \circ 1,100 MT CO₂e/year (yr); or
 - 4.6 MTCO₂e/service population (sp)/yr (residents and employees)

4.2 METHODOLOGY

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). Details of the modeling assumptions and emission factors are provided in Appendix A, *Greenhouse Gas Emissions Data*. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule, and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. The Project's operations-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste.

5 POTENTIAL IMPACTS AND MITIGATION

Threshold 5.1 Would the project would generate greenhouse gas emissions, either directly or indirectly, that could have a significant impact on the environment?

Construction Emissions

Project construction would result in direct emissions of CO₂, N₂O, and CH₄ from the operation of construction equipment and the transport of materials and construction workers to and from the Project site. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years).⁷ BAAQMD does not have a threshold for construction GHG emissions, but recommends that construction GHG emissions are quantified and disclosed. As shown in Table 2, *Project Greenhouse Gas Emissions*, Project construction would result in 1,100.44 MTCO₂e (36.68 MTCO₂e/yr when amortized over 30 years). The CalEEMod outputs are contained within the Appendix A, *Greenhouse Gas Emissions Data*.

Table 2: Project Greenhouse Gas Emissions			
Category	MTCO ₂ e ^{1, 2}		
CONSTRUCTION EMISSIONS			
Total Construction Emissions (2021-2023)	1,100.44		
30- Year Amortized Construction	36.68		
Notes: 1. Emissions were calculated using CalEEMod. 2. Construction emissions are provided for informational purposes. The BAAQMD does not have construction GHG thresholds.			

Operational Emissions

Operational or long-term emissions occur over the life of the proposed Project. Generally, GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power over the life of the Project, the energy required to convey water to, and wastewater from the Project site, the emissions associated with solid waste generated from the Project site, and any fugitive refrigerants from air conditioning or refrigerators.

The proposed Project includes three main components: the Castro Street Grade Separation; Caltrain Station Improvements; and other supportive pedestrian and bicycle facilities improvements. The Transportation Impact Analysis (TIA) prepared by Kimley-Horn (December 2018) determined that the proposed Project would not generate any new automobile, bicycle, or pedestrian traffic and the effects to existing vehicle distribution and travel speeds would be nominal. The Project would improve access and enhance transit ridership, both of which serve to reduce regional VMT and would offset nominal potentially longer trip length for certain local routes due to the circulation network changes. Any changes to vehicle distribution and travel speeds can affect vehicle emissions rates, although these changes would

⁷ The project lifetime is based on the standard 30-year 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).

be minimal and would not substantially change GHG emissions, which are primarily driven by VMT. While the Project assumes increased ridership, it is primarily due to implementation of other planned transit projects to be completed by the Peninsula Corridor Joint Powers Board (which operates the Caltrain service) or other agencies. However, the assumed increases to bicycle, pedestrian, and vehicle traffic due to the planned transit projects were incorporated into the baseline scenarios analyzed in the TIA.

The proposed Project does not include any occupied structures which would require energy, or generate waste, water, or wastewater emissions. Additionally, the Project does not include landscaping. Therefore, no GHG emissions are expected to be generated from operation of the proposed Project.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

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

City of Mountain View Climate Action Plan

In 2012, the City adopted a Greenhouse Gas Reduction Plan (GGRP) to mitigate the emissions associated with future development allowed in the General Plan. BAAQMD guidelines allow cities to either use an absolute or an efficiency-based target to meet 2020 goals. With the high levels of future development and emissions growth, and the general political and economic infeasibility of implanting aggressive emission reduction policies and programs the City of Mountain View chose to use a BAAQMD-approved emissions efficiency target within the GGRP. This is a per-capita target that would result in a community emissions efficiency of below 6.0 metric tons of CO₂e per service population. This means the City can continue to grow its overall absolute GHG emissions while striving to reduce its per-capita emissions.

As discussed in the regulatory section above, the GGRP aims to reduce or eliminate vehicle trips by increasing and improving the viability of alternative modes of transportation. The proposed Project would improve the existing Mountain View Transit Center by constructing undercrossings for pedestrians and bicyclists, extending existing cycletracks, and rerouting vehicular traffic. Goals and Principles include bike system improvements, pedestrian system improvements, and transit system improvements which would all be provided by the proposed Project.

To address the potential impact, consistency with the City of Mountain View Community Climate Protection Roadmap (CPR) is used for this analysis. The CPR describes the emission forecast for the City from 2005 to 2050 and uses the forecasts to extrapolate the business as usual 2050 emission forecast. The plan estimated community emissions to increase by 166,641 MTCO₂e per year between 2005 and 2020, and by 277,735 MTCO₂e per year between 2005 and 2030. The Plan highlights the award-winning transit center with free community and employee shuttles, dedicated bicycle paths as part of the City's effort to provide alternatives to single-occupancy vehicle transportation.

The Mountain View CRP and GGRP identify sources of GHG emissions within the City's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic goals, measures, and actions to reduce emissions. The GGRP is a qualified Greenhouse Gas Reduction Strategy under CEQA, which can be used to determine the significance of GHG emissions from a project (CEQA Guidelines section 15183.5). The BAAQMD also recognizes the use of the GGRP as a

qualified GHG Reduction Strategy under the standards established by the BAAQMD. Therefore, if the project is consistent with the CAP, then the Project would result in a less than significant cumulative impact to global climate change in 2020.

The proposed Project would be consistent with the overall goals of the Mountain View CRP and GGRP, which are the City's strategic planning document to reduce GHG emissions. As an infill project on a currently developed site, the proposed Project would support efforts to reduce GHG emissions from VMT. Additionally, according to the TIA the proposed Project generates no new vehicle trips. The proposed Project does not include any occupied structures requiring energy (only a vehicular ramp, pedestrian undercrossings, extension of platforms, and bicycle paths). The proposed Project would not conflict with any strategies to reduce GHG emissions in the CRP and GGRP. Therefore, impacts would be less than significant.

CARB Scoping Plan

The latest CARB Climate Change Scoping Plan (2017) outlines the state's strategy to return reduce state's GHG emissions to return to 40 percent below 1990 levels by 2030 pursuant to SB 32. The CARB Scoping Plan is applicable to state agencies and is generally not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

The CARB Scoping Plan includes various Statewide strategies such as the Pavley I motor vehicle emission standards, Pavley II (LEV III) Advanced Clean Cars Program (extends to model year 2025), the Low Carbon Fuel Standard (LCFS), the Renewable Portfolio Standards (RPS), Green Building Code Standards for indoor water use, or the California Model Water Efficient Landscape Ordinance (outdoor water), the latest 2019 Title 24 Energy Efficiency Standards (effective January 1, 2020), and the 2016 Title 24 Energy Efficiency Standards to lower mobile and stationary source GHG emissions. The proposed Project would not generate new operational GHG emissions and would not conflict with any CARB Scoping Plan measures. Therefore, impacts would be less than significant in this regard.

Plan Bay Area

The proposed Project would be consistent with the overall goals of *Plan Bay Area 2040* in improving alternative transportation access in a downtown area. The proposed Project would improve bicycle and pedestrian safety and accessibility. Therefore, the proposed Project would not conflict with the land use concept plan in *Plan Bay Area 2040* and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6 **REFERENCES**

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Appendix A

Greenhouse Gas Emissions Data