

SECTION 6: OTHER CEQA CONSIDERATIONS

6.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(b) requires an EIR to identify and focus on the significant environmental effects of the Project, including effects that cannot be avoided if the Project were implemented. With implementation of the Project, the following significant impacts that cannot be avoided would occur:

- **Adopted Air Quality Plan Consistency:** Given that the Project would not achieve the per capita annual GHG emissions threshold of 4.6 MTCO₂e/SP/yr established by BAAQMD even after the application of all feasible mitigation measures, the Project would result in a significant and unavoidable impact with respect to conflicts with the GHG Reduction Goal of BAAQMD's Clean Air Plan. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reduce emissions to less than significant levels. Therefore, this impact remains significant and unavoidable.
- **Greenhouse Gas Operational Emission Threshold:** The Project would exceed the Bay Area Air Quality Management District's threshold of 4.6 metric tons of carbon dioxide equivalents per service population for operational emissions, for the reasons set forth more fully in Section 3.3, Air Quality/Greenhouse Gas Emissions. Mitigation is proposed requiring the implementation of feasible emissions reduction measures; however, these measures would not reduce emissions to less than significant levels. Therefore, the significance after mitigation is significant and unavoidable.
- **Existing Plus Project Freeway Operations:** The Project would contribute vehicle trips to certain freeway segments that would operate at unacceptable levels of service (LOS) under Existing Plus Project Conditions, as described in Section 3.12, Transportation and Traffic. Mitigation is proposed; however, it would not fully reduce Project impacts to a level of less than significant. Therefore, the residual significance is significant and unavoidable.
- **Near-Term Plus Project Freeway Operations:** The Project would contribute vehicle trips to certain freeway segments and one intersection that would operate at unacceptable LOS under Near-Term Plus Project Conditions, as described in Section 3.12, Transportation and Traffic. Mitigation is proposed; however, it would not fully reduce Project impacts to a level of less than significant. Therefore, the residual significance is significant and unavoidable.
- **Cumulative Plus Project Freeway Operations:** The Project would contribute vehicle trips to certain freeway segments and intersections that would operate at unacceptable levels under Cumulative Plus Project Conditions, as described in Section 3.12, Transportation and Traffic. Mitigation is proposed; however, it would not fully reduce Project impacts to a level of less than significant. Therefore, the residual significance is significant and unavoidable.
- **Congestion Management Plan:** The Project would contribute vehicle trips to certain Congestion Management Plan facilities that would operate at unacceptable levels, as described in Section 3.12, Transportation and Traffic. Mitigation is proposed; however, it

would not fully reduce Project impacts to a level of less than significant. Therefore, the residual significance is significant and unavoidable.

6.2 - Growth-Inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, a project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines Section 15126.2(d)).

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

The Project would develop 125 residential units and would be expected to result in a population of 375 persons (at 3 persons per household). Conservatively assuming that all 375 persons would be new to Contra Costa County, the Project's population would represent a nominal 0.07 percent of the County's total unincorporated population of 166,594 as reported by the California Department of Finance in 2015. This amount of population growth is considered negligible, and, therefore, direct population growth would be less than significant. Additionally, while urban infrastructure would be extended only to the 30-acre Residential Development Area, adjacent areas would remain outside of the Contra Costa County Urban Limit Line, thereby prohibiting further expansion. The Project's proposal to permanently preserve and protect the vast majority of the Project Site for park, recreational, open space, grazing, scenic, wetlands, and habitat mitigation purposes—which would create a permanent "green wall" that would impose legal, physical and practical constraints to prevent future urban development beyond this wall—would further ensure that no additional urban expansion would occur. As such, development of the Project would not remove a physical barrier to growth. No impacts would occur.

6.3 - Mandatory Findings of Significance

The environmental effects of the Project are summarized in Section ES, Executive Summary, and are analyzed in detail in Section 3, Environmental Impact Analysis of this EIR.

As mandated by the CEQA Guidelines, the EIR must address any significant irreversible environmental change that would result from implementation of the proposed Project. Specifically, pursuant to the CEQA Guidelines (Section 15126.2(c)), such an impact would occur if:

- The Project would involve a large commitment of nonrenewable resources;
- Irreversible damage can result from environmental accidents associated with the Project; and
- The proposed consumption of resources is not justified (e.g., the Project results in the wasteful use of energy).

The proposed Project consists of the development of 125 new residential uses and associated improvements on 30 acres, and a Future Equestrian Staging Area, Pedestrian Staging Area, future trail connection, detention basin, sewer pump station, and landslide grading, as well as the permanent preservation and protection of approximately 710 acres for park, recreation, open space, agriculture (i.e., grazing), scenic, wetland preservation and creation, and habitat mitigation uses. Construction debris recycling practices would be expected to allow for the recovery and reuse of building materials such as concrete, lumber, and steel and would limit disposal of these materials, some of which are non-renewable.

Day-to-day activities would involve the use of non-renewable resources such as petroleum and natural gas during operations. The new residential uses would be required to adhere to the latest adopted edition of the California Building Standards Code, which includes a number of standards that would reduce energy demand, water consumption, wastewater generation, and solid waste generation that would collectively reduce the demand for resources. This would result in the emission and generation of less pollution and effluent and lessen the severity of corresponding environmental effects. Although the Project would result in an irretrievable commitment of non-renewable resources, the commitment of these resources would not be significantly inefficient, unnecessary, or wasteful. Furthermore, the proposed residential uses do not have the potential to cause significant environmental accidents through releases into the environment, as they would not involve large quantities of hazardous materials.

6.4 - Energy Conservation

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines. Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below and as indicated in Section 3.13, Utilities and Service Systems, this R-DEIR concludes that the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy, would not cause the need for additional natural gas or electrical energy-producing facilities, and, therefore, would not create a significant impact on energy resources.

6.4.1 - Regulatory Setting

Federal and state agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the state level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting state fuel economy standards for new on-road motor vehicles. Some of the more relevant federal and state energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the United States Department of Transportation, is responsible for establishing additional vehicle standards and for revising existing standards.

As of Model Year 2010, the fuel economy standard for new passenger cars is 27.5 miles per gallon and the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) is 23.5 miles per gallon. Heavy-duty vehicles (vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; rather, compliance is determined by each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) such as ABAG were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California residential and nonresidential consumers have reduced their utility bills by at least \$15.8 billion. The CEC further estimates that by 2011, residential and nonresidential consumers will save an additional \$43 billion in energy costs.

Because the adoption of Title 24 post-dates the adoption of AB 1575, it has generally been the presumption throughout the State that compliance with Title 24 (as well as compliance with the federal and state regulations discussed above) ensures that projects will not result in the inefficient, wasteful, and unnecessary consumption of energy. As is the case with other uniform building codes, Title 24 is designed to provide certainty and uniformity throughout the State while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Large infrastructure transportation projects that cannot adhere to Title 24 design-build performance standards may, depending on the circumstances, undertake a more involved assessment of energy conservation measures in accordance with some of the factors set forth in Appendix F of the CEQA Guidelines. As an example, pursuant to the California Department of Transportation CEQA implementation procedures and FHWA Technical Advisory 6640.8A, a detailed energy study is generally only required for large-scale infrastructure projects. However, for the vast majority of residential and nonresidential projects, adherence to Title 24 is deemed necessary to ensure that no significant impacts occur from the inefficient, wasteful, and unnecessary consumption of energy. As a further example, the adoption of federal vehicle fuel standards, which have been continually

improved since their original adoption in 1975, have also protected against the inefficient, wasteful, and unnecessary use of energy.

6.4.2 - Energy Requirements of the Proposed Project

Short-term construction and long-term operational energy consumption are discussed below.

Short-Term Construction

Development of the Project would include short-term construction activities that would consume energy, primarily in the form of diesel fuel (e.g., mobile construction equipment) and electricity (e.g., power tools). Construction activities would be subject to applicable regulations such as anti-idling measures, limits on duration of activities, and the use of alternative fuels, thereby reducing energy consumption.

As shown in Table 6-1, the total construction fuel consumption for the Project is estimated to be 1.4 million gallons.

Table 6-1: Approximate Construction Fuel Consumption

Phase	Fuel Consumption (gallons)
Site Development	712,082
Home Construction	782,270
Total	1,494,352
Source: FCS, 2015.	

There are no aspects of the Project that would foreseeably result in the inefficient, wasteful, or unnecessary consumption of energy during construction activities. For example, there are no unusual characteristics that would directly or indirectly cause construction activities to be any less efficient than would otherwise occur elsewhere (restrictions on equipment, labor, types of activities, etc.).

In summary, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy during construction activities.

Long-Term Operations

Transportation Energy Demand

Daily transportation fuel consumption for the Project is summarized in Table 6-2. As shown in the table, the daily fuel consumption for the Project is estimated to be 595 gallons.

Table 6-2: Approximate Transportation Fuel Consumption Estimate

Vehicle Type	Percent of Fleet	Daily Vehicle Miles Traveled	Average Fuel Economy	Total Daily Fuel Consumption
Passenger cars ¹	52.8	5,426	23.6	230

Table 6-2 (cont.): Approximate Transportation Fuel Consumption Estimate

Vehicle Type	Percent of Fleet	Daily Vehicle Miles Traveled	Average Fuel Economy	Total Daily Fuel Consumption
Light trucks ²	38.7	3,977	17.2	231
Medium trucks/Heavy trucks/Other ³	7.9	812	6.1	133
Motorcycles ⁴	0.6	62	50.0	1
<i>Total</i>	<i>100.0</i>	<i>10,277</i>	<i>—</i>	<i>595</i>

Notes:
 Fleet percentages obtained from CalEEMod operational output—See Appendix B.
¹ Includes Light-Duty Auto (LDA)
² Includes Light Duty Truck 1 (LDT1) and Light Duty Trucks 2 (LDT2) and Medium Duty Vehicles (MDV)
³ Includes Light Heavy Duty (LHD), Medium Heavy Duty (MHD), and Heavy Heavy Duty Trucks (HHD), Other Bus (OBUS), Urban Bus (UBUS), School Bus (SBUS), and Motor Home (MH)
⁴ Includes Motorcycles
 Source: FirstCarbon Solutions, 2015.

The Project is located directly adjacent to a developed suburban area and would accommodate bicycle and pedestrian access to adjacent areas. In summary, the Project would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy during operational activities.

Building Energy Demand

As discussed in Section 3.13, Utilities and Service Systems, the Project would demand an estimated 861,000 million kilowatt-hours of electricity and 5 million cubic feet of natural gas on an annual basis. All new residential development would be subject to the latest adopted edition of the Title 24 energy efficiency standards, which are among the most stringent in the United States. As such, the Project would not result in the unnecessary, wasteful, or inefficient use of building energy during operational activities.

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