6.0 ALTERNATIVES

The California Environmental Quality Act (CEQA) and the CEQA Guidelines require an Environmental Impact Report (EIR) to:

> "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6(a))."

One of the alternatives that must be analyzed is the "No Project" alternative. The No Project analysis must discuss the existing conditions at the time the Notice of Preparation (NOP) was published. As described in CEQA Guidelines Section 15126.6(e)(2), the No Project Alternative should describe what would be reasonably expected to occur in the foreseeable future if the project were not approved.

As outlined in CEQA Guidelines Section 15126.6(e)(3), the discussion of the No Project alternative generally proceeds along one of two lines. When revisions to an existing land use or regulatory plan are proposed, the No Project alternative should describe the continuation of the existing land use plan. For projects that would not include revisions to a land use plan, the No Project alternative would be the circumstance under which the project would not proceed. This is generally used for projects for which the No Project alternative is effectively a "no build" alternative, where disapproval of the project would maintain existing conditions on the project site.

An examination of the "no build" type alternative is relevant in this case. It is informative to compare the Project to a No Build Alternative under which the Project site would remain as-is; effectively, a no build alternative. This allows a clear comparison between implementation of the Project and a No Project scenario. Accordingly, this section analyzes one "No Project" alternative.

The Project would require an amendment to the City of Dublin's General Plan. The amendment would update the General Plan to reflect the proposed lane configuration for the Project. Livermore and County may update their General Plans, as appropriate, to reflect the proposed lane configuration of the Project. While the Project would require a minor amendment to Dublin's General Plan, the Project would not include changes to land use or the amount or type of planned development in eastern Dublin. The net change between implementation of the General Plan as approved and implementation of the General Plan with the proposed amendment to clarify number of lanes is negligible from a land use planning perspective. Therefore, a No Project alternative in which the General Plan amendment does not move forward would not be notably different than the Project.

This chapter evaluates a second alternative: Aerial Structure – Alternative 2. Alternative 2 includes a project similar to the Project evaluated in this Draft EIR, but an elevated roadway structure would be implemented in lieu of an at-grade roadway.

Table 6-3 at the end of this chapter presents a comparative summary of the impacts for the Project and each alternative. The CEQA Guidelines require an environmentally superior alternative be identified when compared to the Project and other alternatives. It states that if the alternative with the least environmental impact is determined to be a "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. In addition to comparing the environmental impacts associated with each alternative, this section also analyzes whether and to what extent each alternative would meet the Project objectives. Project objectives are provided below in Section 6.2 and in **Chapter 3.0, Project Description**.

According to the CEQA Guidelines, if mitigation measures or a feasible project alternative that would meet most of the basic project objectives would substantially lessen the significant environmental effects of a proposed project, then the Lead Agency should not approve the project unless it determines that specific technological, economic, social, or other considerations make the mitigation measures and/or the project alternative infeasible (CEQA Guidelines Section 15091(a)(3)). The analysis in Section 6.5 below describes the potential impacts and mitigation measures required for each alternative and provides a comparison against the Project's impacts and required mitigation.

The EIR must also identify alternatives that were considered by the Lead Agency and rejected as infeasible during the scoping process. The EIR should briefly explain the reasons underlying the lead agency's determination (CEQA Guidelines Section 15126.6(c)). Therefore, this Chapter briefly explains the reasons why certain alternatives were rejected as infeasible (see Section 6.4).

6.1 PROJECT OBJECTIVES AND ENVIRONMENTAL IMPACTS

OBJECTIVES

The Project would improve east-west local roadway connectivity between the Dublin, the County, and Livermore, and improve mobility, multimodal access, and efficiency for all roadway users. The Project would also support an integrated corridor management strategy.

Thus, the objectives for the Project are as follows:

- Eliminate a gap in local roadway network connectivity between the cities of Dublin and Livermore, and improve interconnectivity between Dublin and Livermore priority development areas (PDAs)
- Establish transportation facilities and other public infrastructure to serve planned development in the Dublin and Livermore General Plans, the Eastern Dublin Specific Plan (EDSP), and Plan Bay Area
- Reduce demand on the local highway system by providing local access to existing and planned land uses, including residential, commercial, industrial, and business uses, and local destinations on an alternate local route that is complementary to Interstate 580 (I-580)
- Reduce local trip lengths in Dublin and between Dublin and Livermore by diverting localized inter-city trips from I-580

- Provide complete streets and mutimodal access between Dublin and Livermore, particularly for key public facilities such as Las Positas College, consistent with the requirements of Senate Bill (SB) 375 and regional complete streets policies on multimodal roadways and sustainable transportation
- Indirectly relieve congestion on I-580 by providing a completed local route on the north side of I-580 between west of Interstate 680 (I-680) in Dublin to State Route 84 (SR-84) in Livermore

POTENTIALLY SIGNIFICANT IMPACTS

Table 1-2 in **Chapter 1.0, Executive Summary**, provides a summary of potentially significant impacts of the Project and mitigation measures that would reduce significant impacts. Environmental topic areas that would be impacted by the Project include aesthetics, air quality, biological resources, cultural resources, geology and soils, hazardous materials, noise, public services, and traffic. With the exception of some traffic impacts discussed below under Significant Unavoidable Impacts, all other potentially significant impacts would be reduced to a less-than-significant level with mitigation.

Biological resources and cultural resources are two of the key environmental topic areas that would be affected by the Project. The Project site and surrounding area include habitat for protected wildlife species and protected plant species. Implementation of the Project would result in temporary direct impacts to protected species, permanent direct impacts to habitat areas, and permanent indirect impacts to habitat areas. These impacts would result from Project construction and the permanent changes to the Project site. As the Project would include an at-grade roadway, existing habitat areas would be converted to a roadway and ancillary facilities. Additionally, the existing habitat area between the rolling hills to the north and I-580 to the south would be segmented by the Project. A detailed discussion of these impacts is provided in **Section 5.3, Biological Resources** of this Draft EIR. Mitigation presented in this Draft EIR would reduce these impacts to less than significant.

The Project site includes a portion of a historic-period archeological resource. This resource is near the existing intersection of Dublin Boulevard and Fallon Road. Project implementation would require excavation and the construction of a roadway through a portion of this resource. Additionally, based on the known paleontological sensitivity of the study area, Project construction could encounter previously unidentified paleontological resources when excavation and grading work takes place. A detailed discussion of these impacts is provided in **Section 5.4, Cultural and Tribal Cultural Resources** of this Draft EIR. Mitigation presented in this Draft EIR would reduce these impacts to less than significant.

SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires that an EIR disclose all significant impacts, including those where no feasible mitigation measures exist to reduce these impacts to a less-than-significant level. Accordingly, this Draft EIR presents mitigation measures to avoid potentially significant impacts. However, implementation of the Project would result in significant and unavoidable impacts related to traffic, as described below.

Transportation and Traffic

The Project would result in the following significant and unavoidable impacts related to traffic:

- **Existing (2017) Plus Project Traffic Conditions**: The change in travel patterns resulting from the Project would result in unacceptable traffic operations at the intersection of Airway Boulevard and North Canyons Parkway in Livermore (labeled intersection #8 in the traffic analysis) during the AM peak hour when compared to existing conditions. With implementation of the Project, this intersection would experience significant growth to the northbound left turn with the demand exceeding 800 vehicles per hour during the AM peak hour. The existing lane configuration of a single shared left and through lane for the northbound approach is insufficient to handle this demand. The Project would cause the level of service (LOS) at this intersection to degrade from LOS D to LOS F in the AM peak hour. An intersection operation of LOS F would be below the LOS E standard for this intersection. This would be a significant impact. Implementation of **Mitigation Measure TRAF-3** would improve the operation of this intersection to LOS D during the AM peak hour. However, because the intersection is in Livermore, outside of Dublin's jurisdiction, Dublin as the Lead Agency cannot guarantee the implementation and timing of the mitigation measure. Therefore, this impact would be significant and unavoidable.

- **2025 Plus Project Traffic Conditions:** The Project would result in unacceptable operations at the intersection of Airway Boulevard and North Canyons Parkway (#8) in Livermore during the AM peak hour under 2025 Plus Project conditions. As one of the primary access points for the Project, this intersection would experience significant increased demand in the northbound left turn, with the demand exceeding 800 vehicles per hour during the AM peak hour. The existing lane configuration is insufficient to handle this demand. This would be a significant impact. Implementation of **Mitigation Measure TRAF-3** would improve the operation of this intersection to LOS D during the AM peak hour. However, because the intersection is in Livermore, outside of Dublin's jurisdiction, Dublin as the Lead Agency cannot guarantee the implementation and timing of the mitigation measure. Therefore, this impact would be significant and unavoidable.

- **Cumulative (2040 Plus Project) Traffic Conditions:** The Project would result in unacceptable operations at the intersection of Airway Boulevard and North Canyons Parkway in Livermore (#8) during the AM and PM peak hours under the cumulative (2040 Plus Project) condition. Implementation of **Mitigation Measure TRAF-3** would improve the operation of this intersection to LOS C during the AM peak hour and LOS D during the PM

peak hour, reducing this impact to less than significant. However, because the intersection is in Livermore, outside of Dublin's jurisdiction, Dublin as the Lead Agency cannot guarantee the implementation and timing of the mitigation measure. Therefore, this impact would be significant and unavoidable.

- **Cumulative (2040 Plus Project) Queuing Impact:** The Project would cause the westbound queue at Airway Boulevard and North Canyons Parkway (#8) in Livermore to extend beyond the capacity of the turn pocket by 29 feet during the PM peak hour under the cumulative (2040 Plus Project) condition. The queue length modeled at this intersection for 2040 No Project would exceeds the available storage, and implementation of the Project would further extend the queue length. This represents a significant impact. Implementation of **Mitigation Measure TRAF-3** would reduce this impact to a less-than-significant level. However, because the intersection is in Livermore, outside of Dublin's jurisdiction, Dublin as the Lead Agency cannot guarantee the implementation and timing of the mitigation measure. Therefore, this impact would be significant and unavoidable.

- **Cumulative (2040 Plus Project) Queuing Impact:** The Project would cause the westbound right turn queue at the intersection of Isabel Avenue and I-580 Westbound off-ramps (labeled intersection #11 in the traffic analysis) to exceed the available turn pocket storage by 58 feet during the AM peak hour under cumulative conditions. This represents a significant impact. Implementation of **Mitigation Measure TRAF-4** would reduce this impact to a less-than-significant level. However, this intersection is under the jurisdiction of Caltrans and outside of Dublin's jurisdiction. Therefore, Dublin as the Lead Agency cannot guarantee the implementation and timing of the mitigation measure and this impact would be significant and unavoidable.

6.2 ALTERNATIVES TO THE PROJECT

Based on the goal of reducing significant impacts, as listed above, two project alternatives are evaluated in this Draft EIR: a "No Project" alternative and an Aerial Structure – Alternative 2. **Table 6-1** provides a summary of key features of the Project and each alternative. Further details regarding each alternative are provided below. The two alternatives to the Project analyzed in this section are as follows:

- **No Project Alternative 1**: The existing conditions at the Project site would remain unchanged.
- **Aerial Structure – Alternative 2**: This alternative contemplates reducing the Project's permanent physical footprint by implementing an elevated, aerial roadway instead of an at-grade roadway. The roadway would connect Dublin Boulevard to North Canyons Parkway along the same alignment as the Project, or a very similar alignment.

Table 6-1 Comparison of Project Alternatives

Alternative	New Roadway (Y/N)	New At-Grade Roadway (Y/N)	Transit Facilities (Y/N)	Bicycle and Pedestrian Facilities (Y/N)	Connection to Livermore (Y/N)	Right-of-Way Acquisitions	Utility Extensions
No Project 1	No	N/A	No	No	No	No	No
Aerial Structure – Alternative 2	Yes	No	Yes	Yes	Yes	Yes	Yes
Project (Dublin Boulevard Extension)	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Circlepoint, 2019

NO PROJECT ALTERNATIVE 1

Under No Project Alternative 1, the existing conditions at the Project site would remain. The Project site and surrounding area currently consists of primarily undeveloped grazing ranchland and open space, with intermittent agricultural structures and outbuildings. Improvements to the agricultural lands generally consist of private paved and unpaved roads used to access private property, fences, barns, corrals, wells, water tanks, and various outbuildings. These existing uses would remain in place, and no construction activities would occur at the Project site under No Project Alternative 1.

AERIAL STRUCTURE – ALTERNATIVE 2

Alternative 2 has been developed to lessen impacts associated with biological resources and cultural resources. Potential impacts to biological and cultural resources would primarily result from large areas of grading required for an at-grade roadway, direct impacts to habitat areas from the permanent at-grade roadway, and indirect impacts to habitat from the placement of an at-grade roadway within a large habitat area (which would restrict the north-south movement of protected wildlife species).

Alternative 2 would include an elevated roadway extension generally following the same alignment of the Project. Alternative 2 would use an aerial structure and piers similar to overpasses and roadway bridges to traverse the area between Fallon Road and Doolan Road. Alternative 2 would not connect to Croak Road. Alternative 2 would include pedestrian and bicycle facilities similar to those described for the Project. Proposed utility extensions and hydromodification controls would need to be contained within the aerial structure.

6.3 ATTAINMENT OF PROJECT OBJECTIVES

The following analysis describes the extent to which the alternatives meet or do not meet the Project objectives as described in **Chapter 3.0, Project Description**, and discussed above in Section 6.1.

NO PROJECT ALTERNATIVE 1

Under this alternative, the existing gap in the local roadway network between Dublin and Livermore would remain. Interconnectivity between PDAs in Dublin and Livermore would not be improved. No new transportation facilities or other public infrastructure would be implemented to support planned development in Dublin, or indirectly support implementation of Livermore's General Plan. Local trips between Dublin and Livermore would continue to be completed via a longer-than-necessary route utilizing I-580. This would continue to place demand on this segment of I-580, which is heavily congested. No multimodal access between Dublin and Livermore would be added. Based on the above, No Project Alternative 1 would not fulfil any of the Project objectives.

AERIAL STRUCTURE – ALTERNATIVE 2

Alternative 2 would eliminate the gap in the local roadway network between Dublin and Livermore, and would improve connectivity to PDAs in Dublin and Livermore. Alternative 2 would provide local access between Dublin and Livermore as an alternative to I-580. This would indirectly reduce demand along this congested segment of the highway. This in turn would allow for a shorter, more direct route between the two municipalities. Alternative 2 would provide multimodal access between Dublin and Livermore through the addition of pedestrian and bicycle access, similar to the Project. Therefore, Alternative 2 would fulfil the Project objectives of eliminating a gap in the local roadway network, improving connectivity between PDAs, indirectly reducing demand on the local highway system, reducing local trip lengths, and providing multimodal access between Dublin and Livermore.

An aerial structure would provide the access described above, but would not provide convenient transportation or utility access to developable areas of eastern Dublin. With an aerial structure, future ground-level development along the roadway would be confronted with engineering feasibility challenges when attempting to connect to the roadway and utility lines. Alternative 2 would indirectly place limitations on how and to what extent future land uses could be accessed in eastern Dublin, as designing and constructing access points from the aerial structure would require a larger footprint for future projects than connecting to an at-grade roadway. This would affect the amount of developable land in eastern Dublin and could result in some sites being less accessible, or require the addition of secondary roadways to access developable areas. In this way, Alternative 2 would not meet the objective of establishing transportation facilities and other public infrastructure to serve planned development in eastern Dublin. Furthermore, an aerial structure unconnected to Croak Road would not support local bicycle, pedestrian, and automobile connectivity along Croak Road.

6.4 ALTERNATIVES CONSIDERED AND REJECTED

CEQA Guidelines Section 15126.6(c) requires that an EIR identify any alternatives that were considered by the Lead Agency but rejected as infeasible. The EIR must briefly explain the reasons underlying the Lead Agency's determination to reject an alternative. The following factors may be used to eliminate alternatives from further consideration:

(i) Failure to meet most of the basic project objectives
(ii) Infeasibility
(iii) Inability to avoid significant environmental impacts

As stated in Section 15126.6(f)(1) of the Guidelines, factors that may be considered when a lead agency is assessing the feasibility of an alternative include:

> "Site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent)."

The Project has been developed to meet the previously identified objectives while avoiding or minimizing environmental impacts. The Project alignment was chosen based on the multiple planning efforts listed in **Chapter 3.0, Project Description**, which considered site constraints such as sensitive biological habitats and the existing grade and topography of the area. The Project was developed with a goal to provide developable parcels of a reasonable size. The selected roadway alignment, and the proposal to connect Dublin Boulevard to North Canyons Parkway, is supported by the General Plan documents of Dublin, the County, and Livermore.

Due to the hills and ridgeline to the north and I-580 to the south, Cottonwood Creek, and the location of existing parcel lines, the roadway alignment selected for the Project best meets the Project objectives and best aligns with Dublin's planning efforts for eastern Dublin. Project alternatives considered but rejected are summarized in **Table 6-2** and detailed further below.

Table 6-2 Project Alternatives Considered but Rejected

Alternative Type	Description	Reason for Elimination
Alignment Alternatives		
Croak Road and Collier Canyon Road	Widen the existing segments of Croak Road and Collier Canyon Road along I-580 and close the gap (connect the roadways) between Livermore and Dublin.	• Incompatible with approved City and County programmatic-level planning documents (general plans and EDSP) • Impacts to planned land use • Conflicts with other planned projects (commuter rail extension from Dublin/Pleasanton BART station) • Traffic operations/connectivity impacts • Impacts to biological resources • Safety/Design impacts – non-standard geometry • Inconsistent with transit and bicycle and pedestrian master plans
Northerly Alignment	Extend a west-east connection straight from Fallon/Dublin Blvd intersection to Doolan Road (T-intersection).	• Incompatible with approved City and County programmatic-level planning documents (general plans and EDSP) • Impacts to current land use • Impacts to scenic hills and ridgeline • Impacts to biological resources • Traffic operations/connectivity impacts • Additional right-of-way required • Inconsistent with transit and bicycle and pedestrian master plans
Southerly Alignment	Provide an east-west s-curve connection from North Canyon Pkwy/Collier Canyon Road to Fallon Road/ Fallon Gateway.	• Incompatible with approved City and County programmatic-level planning documents (general plans and EDSP) • Impacts to planned land use • Requires relocation of businesses and residences • Impacts to biological resources • Traffic operations/connectivity impacts, including freeway ramp operations for I-580/Fallon/El Charro interchange, as well as the Fallon Road/Dublin Blvd intersection. • Additional right-of-way required (Fallon Gateway) • Inconsistent with transit and bicycle and pedestrian master plans
Capacity Alternatives		
6-Lane Alternative	Six lanes of travel – three in each direction – for the full length of the Project alignment	Alameda County and Plan Bay Area travel demand forecasts for cumulative conditions were used to determine 6 lanes are not needed between North Canyons Parkway and Croak Road to meet future travel demand. As such – the 6-Lane Alternative was considered but has been eliminated.

Alternative Type	Description	Reason for Elimination
Modal Alternatives		
Dedicated Transit Lane	Dedicated transit lane in each direction for the full length of the Project alignment	Travel demand forecasts for cumulative conditions found that with the Project as proposed, travel speeds would remain at close to free flow without a dedicated transit lane. The addition of a dedicated transit lane would not notably improve transit travel times or traffic flow. As such, a dedicated transit lane was considered but has been eliminated. However, the Project design does not prohibit or eliminate the future possibility for right turn pockets at major intersections to be converted to shared/dedicated transit lanes (queue jumps). And the provision of Transit Signal Priority.

Source: Circlepoint, 2019; BKF, 2019; City of Dublin, 2019

Impacts to Current and Planned Land Uses

The Northerly Alignment would conflict with existing Dublin land use which protects the hillside and ridgelines and prohibits both development of the hillside or degradation of its aesthetic quality. To construct the Northerly Alignment, major portions of the hills would have to be significantly graded. The Southerly Alignment and Croak Road and Collier Canyon Road connection alternatives would conflict with planned land uses in eastern Dublin by creating irregular parcels (Southerly Alignment) and failing to provide adequate access to developable parcels (Croak Road and Collier Canyon Road connection).

Conflicts with Other Planned Projects

Connecting Croak Road and Collier Canyon Road to provide access from Dublin Boulevard to Livermore would require widening both existing roadways and new right-of-way to connect the roadways. Separate from this Project, relocation of Croak Road and Collier Canyon Road is proposed to accommodate new rail transit along the I-580 corridor between the Dublin/Pleasanton BART station and eastern Alameda County.[1] The addition of a new rail system would require widening of I-580 right-of-way to the north and would require the relocation of these two roadways. If the Croak Road and Collier Canyon Road option was selected, it would directly conflict with planned changes to these roadways, and could later require removal of the Project improvements to accommodate the rail system. Similarly, the Southerly Alignment could conflict with roadway realignments needed to accommodate the rail extension, which creates a risk for the later relocation of the Southerly Alignment.

[1] Although proceeding with the BART to Livermore project has been voted down by the BART Board, Tri Valley San Joaquin Valley Regional Rail Authority (www.acetobart.org) is proceeding with exploring a regional rail solution, called Valley Link, along the I-580 corridor connecting to North Lathrop in the first phase and then to Stockton in the second phase.

Traffic Operations/Connectivity Impacts

Connecting Croak Road and Collier Canyon Road to provide access from Dublin Boulevard to Livermore would require widening the existing roadways from two lanes to four and six lanes. Croak Road would be widened to six lanes and would need a nine lane configuration at the Dublin Boulevard/Fallon Road intersection. This would be geometrically infeasible, as Croak Road runs parallel to Fallon and would need to make a 90-degree turn to meet this intersection. The widening of Croak Road parallel to Fallon Road would also create potential safety issues as a result of additional glare; motorists traveling along Fallon Road would be subject to additional lighting and glare from the conversion of Croak Road into a local arterial roadway. In addition to the Dublin Boulevard/Fallon Road intersection, Croak Road and Collier Canyon Road would have very sharp turns and T-intersections, which present safety and capacity issues.

Similarly, the Southerly Alignment would have issues with roadway geometry and connections to the existing roadway system. Where the Southerly Alignment would connect to Fallon Road, westbound drivers would merge onto Fallon Road within the potential operational area of the I-580 off ramp, and would have to traverse the eight-lane segment of Fallon Road to make a left-hand turn and continue traveling westward on Dublin Boulevard. The Northerly Alignment would include similar operational issues at its terminus in Livermore, where eastbound drivers would have to traverse Doolan Road to continue on North Canyons Parkway. This type of traffic circulation for two major arterials is considered an unsafe option not only for the vehicular movement but also for bicycle and pedestrian circulation. From a traffic operations and safety standpoint, this alignment would be infeasible.

Dedicated Transit Lane

Given that the Project could be utilized to provide new transit route access north of I-580, the potential for including a dedicated transit lane was explored. Travel demand forecasts for cumulative conditions found that travel speeds remain at close to free flow without a dedicated transit lane. Since the corridor would operate at close to free flow conditions in the future, a dedicated transit lane would not provide substantial additional benefit; the transit vehicle would be traveling at approximately the same speed as regular vehicles both with and without a dedicated transit lane.

While transit vehicles will travel at similar speeds with or without the dedicated transit lane, there is some advantage to providing queue jump lanes at the intersections where most of the delay due to congestion usually occurs. To allow for this possibility, the Project design has incorporated longer right turn lanes at the signalized intersections that can function as queue jump lanes in the future. With transit vehicles able to run at free flow speeds in the general purpose lanes between intersections and access to queue jump lanes at the intersections, transit travel times are anticipated to improve as routes shift from I-580 onto the Project. The Project would not prohibit Transit Signal Priority, thus maintaining additional benefits to Transit.

With the above findings, this design feature has been eliminated from consideration at the present time based on the determination that dedicated transit lanes are not needed to provide an adequate LOS for vehicles and transit. However, the Project design allows for the flexibility to add dedicated transit lanes through widening of the roadway at a future time should travel demand change sufficiently to warrant their construction.

Off-Site Alternatives

CEQA Guidelines Section 15126.6(f)(2) states that an EIR must consider off-site alternatives if such alternatives are deemed to be feasible by the Lead Agency. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. As the basic Project objectives include a local roadway connection between eastern Dublin and Livermore, an off-site alternative would not be feasible. For the reasons presented in **Table 6-2**, the significant effects of the Project would not be avoided or substantially lessened by a more northerly or southerly alignment between eastern Dublin and Livermore.

6.5 IMPACT ASSESSMENT

This section evaluates whether the alternatives would reduce the significant impacts of the Project to less-than-significant levels. This analysis also considers whether the alternatives would generate impacts other than those that would occur as a result of the Project. For each environmental topic, the study area discussed below is the same as the study area established for the topic in **Chapter 5.0, Environmental Impact Analysis**, unless otherwise noted. Mitigation measures developed for the Project are referred to in the analysis below; these mitigation measures are fully described in each resource section within **Chapter 5.0, Environmental Impact Analysis**. A summary comparison of Project impacts and impacts from alternatives is provided in **Table 6-3** at the end of this section.

NO PROJECT ALTERNATIVE 1

Under No Project Alternative 1, the existing conditions at the Project site would remain unchanged.

Aesthetics

As existing conditions in the study area would remain unchanged under No Project Alternative 1, this alternative would not result in construction-period visual impacts, changes to the existing visual character of the study area, or a new source of substantial light or glare. No Project Alternative 1 would have no impact to aesthetics, while the Project would result in less-than-significant impacts with mitigation.

Air Quality

No Project Alternative 1 would not include the construction of a new roadway and would not directly generate pollutant emissions above baseline conditions. Therefore, No Project Alternative 1 would not exceed the Bay Area Air Quality Management District (BAAQMD)'s significance thresholds for construction criteria pollutants. Existing traffic patterns would remain unchanged under No Project Alternative 1 when compared to existing conditions. Therefore, operational emissions from No Project Alternative 1 would not exceed BAAQMD thresholds for operational air quality. Based on traffic data used to calculate operational air quality impacts (see **Appendix D** of this Draft EIR), in the cumulative (2040) scenario No Project Alternative 1 would result in emissions lower than those of the Project. This alternative would not include new land uses known to generate objectionable odors.

However, No Project Alternative 1 would interfere with implementation of BAAQMD's 2017 Clean Air Plan (Clean Air Plan). The purpose of the Clean Air Plan is to provide a regional strategy to protect public health through attainment of all state and federal air quality standards and protect the climate through greenhouse gas emission reduction. The Clean Air Plan calls for increased multimodal transportation options and relies in part on regional planning efforts such as Plan Bay Area, which includes the Project. This alternative would not conform to the region's air quality planning efforts; the planned roadway extension and multimodal improvements included in the Transportation Improvement Program (TIP), Plan Bay Area, and local planning documents would not be implemented. This represents a conflict with the Clean Air Plan that would contribute to the continuation of air pollutant and greenhouse gas emissions from automobile travel. This is conservatively identified as a significant impact, and no feasible mitigation has been identified to avoid this impact. Therefore, No Project Alternative 1 would have a significant impact related to Clean Air Plan consistency. With mitigation for construction-period impacts, the Project would result in less-than-significant impacts related to air quality.

Biological Resources

No Project Alternative 1 would maintain existing conditions on the Project site, and therefore would not result in temporary or permanent impacts to habitat areas, impacts to wildlife species, or impacts to plant species. This alternative would not include any grading, paving, pile driving, other construction work, or tree removal. The existing habitat areas in the study area would remain in its current state. Therefore, No Project Alternative 1 would have no impact to biological resources, while the Project would result in less-than-significant impacts with mitigation.

Cultural and Tribal Cultural Resources

No Project Alternative 1 would maintain existing conditions on the Project site, and no ground-disturbing activities would occur. Therefore, No Project Alternative 1 would not have the potential to disturb tribal cultural resources or cultural resources, including historic, archeological, or paleontological resources, or human remains. No Project Alternative 1 would have no impact to cultural and tribal cultural resources, while the Project would result in less-than-significant impacts with mitigation.

Geology and Soils

No construction work such as grading would occur under No Project Alternative 1, and the installation and operation of permanent roadway facilities would not occur. A new bridge would not be installed over Cottonwood Creek. The Project site would remain generally inaccessible to the public, with the exception of private land owners who can access their property under existing conditions. Therefore, No Project Alternative 1 would not expose people or structures to any risks related to geology or soils, and this alternative would not exacerbate or accelerate geologic processes such as landslides or substantial erosion. No Project Alternative 1 would have no impact on geology and soils, while the Project would result in less-than-significant impacts with mitigation.

Greenhouse Gas Emissions

No Project Alternative 1 would maintain existing conditions at the Project site, and therefore would not result in any direct change to greenhouse gas (GHG) emissions. This alternative would not result in any changes to the roadway network, and therefore would not alter existing traffic patterns or associated tailpipe emissions. Based on vehicle miles traveled (VMT) data produced by Kittelson & Associates in 2018, operational GHG emissions under No Project Alternative 1 would be slightly higher than those of the Project in the opening year (2025) and then slightly lower than the Project in the cumulative (2040) scenario. The difference between the two scenarios is less than 0.1 percent. These minor differences in GHG emissions are negligible; please see **Section 5.6, Greenhouse Gas Emissions**, and **Chapter 7.0, Other CEQA Considerations**, for a detailed discussion.

However, this alternative would conflict with applicable plans and policies designed to reduce GHG emissions in the region. On a regional level the Project is included in the MTC's RTP, Plan Bay Area, and the TIP. At the local level, the Project is consistent with the Climate Action Plans of Dublin, the County, and Livermore. The Project is included as part of the adopted roadway networks in Dublin, the County, and Livermore's General Plans. No Project Alternative 1 would conflict with each of these documents, as it would not include the planned extension of transit, bicycle, and pedestrian facilities between Dublin and Livermore, and to eastern Dublin. This represents a conflict with GHG reduction plans and policies, and would indirectly contribute to the continuation of GHG emissions from automobile travel. This is conservatively considered to represent a significant impact and no feasible mitigation has been identified to avoid this impact. Therefore, No Project Alternative 1 would result in a significant impact related to GHG emissions, while the Project would have a less-than-significant impact.

Hazards and Hazardous Materials

No construction work such as grading would occur under No Project Alternative 1, and the installation and operation of permanent roadway facilities would not occur. As there would be no change to the Project site, no hazards to the public would be created, and no hazardous materials would be emitted. There would be no potential for construction workers to be exposed to contaminated soils, as no construction would occur. No Project Alternative 1 would not impair or

interfere with an emergency response plan, and would not result in any safety hazard related to airports or private air strips. Therefore, No Project Alternative 1 would have no impact on hazards and hazardous materials, while the Project would result in less-than-significant impacts with mitigation.

Hydrology and Water Quality

No Project Alternative 1 would not result in any new sources of polluted runoff, and would not result in any changes that could impact water quality. A new bridge would not be installed over Cottonwood Creek. No other changes would be made to Cottonwood Creek or elsewhere on the Project site, and therefore this alternative would not affect any watercourse or result in changes to hydrology. This alternative would not require any increased use of water resources, and therefore would not affect groundwater. Therefore, No Project Alternative 1 would have no impact on hydrology and water quality, while the Project would have a less-than-significant impact.

Land Use and Planning

Existing conditions in the study area would remain unchanged under No Project Alternative 1. As no changes would occur under this alternative, No Project Alternative 1 would not have the potential to physically divide and established community. Existing land uses in Dublin are permitted non-conforming uses. Existing land uses in the County are consistent with the County's East County Area Plan. No Project Alternative 1 would conflict with Dublin's General Plan, the EDSP, Livermore's General Plan, the County's General Plan (East County Area Plan), and Plan Bay Area. All of these planning documents call for the extension of Dublin Boulevard eastward to connect with North Canyons Parkway. Further, No Project Alternative 1 would not support the larger goals of Dublin's General Plan and the EDSP to facilitate the development of eastern Dublin. No Project Alternative 1 would conflict with applicable land use plans. This would result in indirect impacts to the environment which these planning documents seek to avoid, such as reductions in GHG emissions and unplanned growth. Therefore, No Project Alternative 1 would result in a significant and unavoidable impact related to land use, while the Project would result in a less-than-significant impact.

Noise and Vibration

No Project Alternative 1 would retain existing conditions at the Project site and no construction would occur. A new roadway would not be implemented, and therefore no associated traffic noise would occur. Therefore, this alternative would not change existing noise levels or expose people to a new source of noise or vibration. No Project Alternative 1 would have no impact related to noise and vibration, while the Project would result in less-than-significant impacts with mitigation.

Population and Housing

No Project Alternative 1 would not result in any direct changes to population and housing. Similar to the Project, No Project Alternative 1 would not include any new residential or employment uses and would not result in the displacement of any existing residences. However, No Project

Alternative 1 would not support the planned population and housing growth established in Dublin's General Plan and the EDSP for areas within Dublin, and would not support regional plans for growth established in Plan Bay Area and Livermore's General Plan. The indirect impact on population and housing resulting from No Project Alternative 1 would be greater than the impact that would occur with implementation of the Project. This impact would be less-than-significant. Both the No Project Alternative 1 and the Project would result in less-than-significant impacts related to population and housing.

Public Services

Implementation of No Project Alternative 1 would not interfere with or increase demand for any public services, including police, fire, schools, parks, or other facilities. Under No Project Alternative 1, existing conditions on the Project site would remain. Therefore, the existing level of demand for public services would not change and there would be no need for new or expanded facilities such as police or fire stations. There would be no change to the physical environment, and therefore no potential for physical interference with emergency services. Therefore, No Project Alternative 1 would have no impact related to public services, while the Project would result in less-than-significant impacts with mitigation.

Recreation

Under No Project Alternative 1, no new recreational facilities, residences, or employment uses would be introduced in the study area. As there would be no change in population or use of the Project site, No Project Alternative 1 would not directly or indirectly impact the use of existing recreational facilities or increase demand for recreational facilities elsewhere. No Project Alternative 1 would have no impact related to recreation, while the Project would have a less-than-significant impact.

Transportation and Traffic

No Project Alternative 1 would not have the potential to alter traffic or transportation conditions in comparison to existing conditions. Under existing conditions, all study area intersections operate at an acceptable LOS. There are no existing pedestrian or bicycle facilities at the Project site, and none would be constructed under this alternative.

In the cumulative scenario (2040), No Project Alternative 1 would result in unacceptable LOS at one intersection (Airway Boulevard/North Canyons Parkway in Livermore). Mitigation has been identified which would reduce this impact to a less-than-significant level. However, because this intersection is outside of Dublin's jurisdiction as the Lead Agency, the timing and implementation of this mitigation measure cannot be guaranteed, and therefore the impact remains significant and unavoidable.

In the cumulative scenario, No Project Alternative 1 would result in vehicle queuing impacts at the intersection of Airway Boulevard/North Canyons Parkway in Livermore. Mitigation has been identified that would reduce this impact to a less-than-significant level. However, for intersections

in Livermore outside of Dublin's jurisdiction as the Lead Agency, the timing and implementation of this mitigation measure cannot be guaranteed, and therefore the impact remains significant and unavoidable.

No Project Alternative 1 would impede the implementation of planned transit services in eastern Dublin, and planned transit service connections between Dublin and Livermore. Similarly, No Project Alternative 1 would prevent the implementation of planned improvements to pedestrian and bicycle connectivity in eastern Dublin and between Dublin and Livermore. Interference with implementation of multimodal and transit access and/or infrastructure results in indirect impacts to the environment through the continued prioritization of vehicle travel. As required by Senate Bill 743, evaluation of transportation impacts under CEQA should consider that in order to meet statewide GHG reduction goals, transportation must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1). Under No Project Alternative 1, the impact related to interference with planned transit service and bicycle and pedestrian facilities would indirectly promote continued vehicle travel. It is conservatively assumed this impact would be significant and unavoidable.

Based on the above and the *Transportation Impact Analysis* completed for the Project, No Project Alternative 1 would result in significant and unavoidable impacts related to LOS, vehicle queuing, transit, pedestrian, and bicycle access. Detailed intersection level of service and queuing information can be found in **Section 5.14, Transportation and Traffic**, and **Appendix D** of this Draft EIR. In comparison, the Project would result in significant and unavoidable impacts related to traffic congestion due to the inability of Dublin to implement identified mitigations outside its jurisdiction, and would have a less-than-significant impact on transit, pedestrian, and bicycle access.

Utilities

No Project Alternative 1 would not require or result in new water, wastewater, or storm drainage facilities being needed at the Project site or elsewhere. As this alternative would retain existing conditions at the Project site, there would be no potential to exceed wastewater treatment requirements or place addition demands on water supply. No Project Alternative 1 would not generate solid waste, and therefore would not require solid waste disposal. Therefore, No Project Alternative 1 would have no impact on utilities, while the Project would have a less-than-significant impact.

Energy Conservation

No construction or operation would occur under No Project Alternative 1; therefore, no consumption of energy would be required in comparison to existing conditions. No Project Alternative 1 would have no impact related to energy conservation, while the Project would have a less-than-significant impact.

Effects Found not to be Significant

No agricultural or mineral resources would be affected under No Project Alternative 1. As existing conditions would remain and there are no agricultural or mineral resources at or near the Project site, there is no potential for this alternative to eliminate, consume, or interfere with access to these resources. Both the Project and No Project Alternative 1 would have no impact on agricultural and mineral resources.

AERIAL STRUCTURE - ALTERNATIVE 2

Alternative 2 would include an elevated roadway extension generally following the same alignment of the Project. Alternative 2 would use an aerial structure and piers similar to overpasses and roadway bridges to traverse the area between Fallon Road and Doolan Road. The roadway extension would include pedestrian and bicycle facilities similar to those described for the Project. Proposed utility extensions and hydromodification controls would need to be contained within the aerial structure. Alternative 2 would not include a new intersection with Croak Road or otherwise connect to Croak Road, to avoid environmental impacts associated with converting Croak Road into a larger, ramp structure.

Aesthetics

Alternative 2 would include new streetlights along an alignment similar to that of the Project, connecting Dublin Boulevard to the Doolan Road/North Canyons Parkway intersection. This would result in similar lighting impacts as described for the Project. Implementation of an aerial structure would reduce the need for surface grading along the Project alignment and in particular would minimize grading work in the scenic hills to the north. This would avoid or reduce direct impacts to the scenic hills. However, an aerial alignment would obscure scenic views of the hills to a greater extent than the Project, as the alignment would be approximately 20 feet high in some areas. Mitigation such as surface aesthetic treatments along the aerial structure could be employed to minimize visual impacts, and a detailed design for Alternative 2 would need to be developed to fully evaluate the effect of an aerial structure on views of the scenic hills. Further, an elevated roadway with streetlights would have greater potential for light pollution. This would generally be avoided through the same light-shielding measures required for the Project based on each jurisdiction's exterior lighting requirements. Therefore, for the purposes of this analysis, it is assumed this impact would be reduced to a less-than-significant level with mitigation for Alternative 2, and would require development of a new mitigation measure addressing surface aesthetic treatments or other aesthetic design elements to minimize the visual change. Both the Project and Alternative 2 would result in impacts to aesthetics that would be reduced to a less-than-significant level with mitigation, with Alternative 2 requiring additional mitigation to reduce visual impacts.

Air Quality

Construction of Alternative 2 would require a different mix of construction activities when compared to the Project. Major construction activities for the Project would include areas of grading and new pavement. Project construction would require mitigation to avoid impacts from

fugitive dust. For Alternative 2, major construction work would include pile driving, drilling, and/or other construction methods to install footings and piers for the aerial structure. Alternative 2 would also require more extensive concrete, rebar, and formwork. It is unknown whether this alternative would ultimately require a larger construction area or longer duration when compared to the Project.

Based on the above, it is conservatively assumed that implementation of Alternative 2 would result in construction air quality impacts requiring mitigation for fugitive dust. Alternative 2 may also require construction-period mitigation measures to reduce pollutant emissions from construction equipment, based on the type of construction work required. Both the Project and Alternative 2 would result in temporary construction-period impacts to air quality, which would be less-than-significant with mitigation.

Operation of Alternative 2 can reasonably be assumed to be similar to the Project, as this alternative would include a new local roadway connection between eastern Dublin and Livermore. As described above, this alternative would present future access issues for planned development along the roadway in Dublin, which may reduce the number of vehicles that access the roadway. Therefore, operational emissions for Alternative 2 are anticipated to be similar to or less than the Project, which would be less than significant. This alternative would not include new land uses; therefore it would not have the potential to include land uses known to generate objectionable odors.

Alternative 2 would not interfere with implementation of the Clean Air Plan. The Clean Air Plan calls for increased multimodal transportation options and relies in part on regional planning efforts such as Plan Bay Area, which include the Project. Alternative 2 would conform to the region's air quality planning efforts as it would include implementation of the planned roadway extension included in the TIP, Plan Bay Area, and local planning documents, and would include multimodal improvements. Both the Project and Alternative 2 would result in less-than-significant impacts related to consistency with the Clean Air Plan.

Biological Resources

Alternative 2 would include an elevated roadway along the same or similar alignment as the Project. An aerial structure would allow existing wildlife species to continue moving north-to-south across the study area, from breeding habitat to the north to foraging and dispersal habitat in the south. This would greatly reduce indirect impacts to protected species. The placement of an aerial structure over existing habitat areas would result in shading, and for the purposes of this analysis it's assumed the shaded areas would no longer be considered as habitat. Therefore, Alternative 2 would result in permanent impacts to existing habitat to a similar extent as the Project.

Construction of Alternative 2 would likely require less grading than the Project, but would require more drilling and potential pile driving. Less grading work would minimize some temporary direct impacts, however, intensive work such as drilling and pile driving would result in increased noise

and vibration levels. Construction-period mitigation measures identified for the Project would be applicable to Alternative 2 and would reasonably be anticipated to reduce construction impacts to a less-than-significant level.

A detailed design for Alternative 2 has not been completed. In lieu of a detailed design, for the purposes of this analysis it is assumed that the majority of indirect impacts identified in **Section 5.3, Biological Resources** would be avoided under Alternative 2, and the permanent direct impacts to habitat from conversion to roadway facilities would be similar to the Project. These are conservative estimates only; with a detailed design, permanent direct impacts could likely be reduced further. Under Alternative 2, remaining permanent direct impacts and permanent indirect impacts would be reduced to less-than-significant through the same mitigation measures as those required for the Project. In comparison to the Project, less compensatory mitigation would be required under this alternative as impact areas would be reduced.

An aerial structure would need to span Cottonwood Creek, similar to the Project. However, an aerial structure may provide more flexibility to place piers further away from the edges of the Creek. As a detailed design for Alternative 2 has not been developed, it is conservatively assumed that the design of this alternative would have similar pier structures at Cottonwood Creek. A more detailed design would likely show that piers could be placed entirely outside of Cottonwood Creek including bank areas. This impact would be less than significant, and impacts to Cottonwood Creek under the Project would be less than significant with mitigation.

Cultural and Tribal Cultural Resources

Alternative 2 would include an elevated roadway along the same or similar alignment as the Project. An elevated structure would greatly reduce the amount of ground disturbance required in comparison to the Project. It is anticipated that an aerial structure would reduce the amount of grading needed both along the roadway alignment and to the north along the foot of the hills. As the Project site is known to have sensitivity for buried paleontological resources, and could have buried archeological and/or historic-period archeological resources, limiting the area of ground-disturbing work would reduce the potential for the discovery of unidentified buried cultural resources. However, the potential to encounter buried resources would still exist under Alternative 2. Implementation of Alternative 2 would require the same mitigation measures as those identified for the Project in **Section 5.4, Cultural and Tribal Cultural Resources**, and these measures would reduce potential impacts to a less-than-significant level.

There is one known historic-period archeological site that overlaps the Project site. Based on the location of this resource, it would also overlap the footprint required for Alternative 2. Therefore, Alternative 2 would not avoid impacts to this resource. Mitigation identified for the Project to reduce impacts to this resource would equally apply to Alternative 2. With mitigation, this impact would be less than significant. Neither the Project nor Alternative 2 would result in indirect effects to historic resources, as potential historic structures within the area of potential effects are not eligible based on their existing setting. Based on Native American coordination completed to-date, no tribal cultural resources are present at the Project site or in the surrounding area. In the event

that unrecorded tribal cultural resources are encountered during construction, mitigation identified in **Section 5.4, Cultural and Tribal Cultural Resources** would be implemented and would reduce this impact to a less-than-significant level for both the Project and Alternative 2.

Geology and Soils

Construction of Alternative 2 would require ground-disturbing work similar to the Project, and would additionally require more pile driving or other foundation work to construct piers. Alternative 2 would potentially require less grading work in comparison to the Project, as the Project requires extensive grading to provide a reasonably flat and safe at-grade road bed. The final layout and design of the roadway under Alternative 2 is reasonably anticipated to encounter similar types of geology and soils as the Project, as the alternative would be constructed along the same or similar alignment.

Therefore, similar to the Project, potential risks associated with geology and soils would be reduced to a less-than-significant level through mitigation, including preparation of a design-level geotechnical and geologic report that would include subsurface field work and laboratory testing. Recommendations from the design-level report would be incorporated into the design for Alternative 2. Based on the above, both the Project and Alternative 2 would have similar impacts related to geology and soils, which would be reduced to a less-than-significant level with mitigation.

Greenhouse Gas Emissions

Under Alternative 2, the primary source of GHG emissions would be operational emissions from VMT. Alternative 2 would connect the intersection of Dublin Boulevard/Fallon Road to Doolan Road/North Canyons Parkway in Livermore. This alternative would not connect to Croak Road, or provide convenient access to developable areas of eastern Dublin. In comparison, the Project would connect intersection of Dublin Boulevard/Fallon Road to Doolan Road/North Canyons Parkway in Livermore, would create a new intersection with Croak Road, and would provide access to developable areas of eastern Dublin. Therefore, Alternative 2 would be less interconnected to the existing roadway network and areas of future development. This would reasonably result in fewer vehicles using the aerial structure when compared with the Project.

Based on this assumption, Alternative 2 would result in extremely limited changes to regional VMT. As discussed in **Section 5.6, Greenhouse Gas Emissions**, the Project would not result in a notable change to GHG emissions from changes in regional VMT. By comparison, Alternative 2 would be reasonably anticipated to have an even lower effect on regional VMT.

As this alternative would connect to Livermore, it would have the potential to reduce localized VMT in the same way as the Project. As described above, the Project would provide local travelers with a more direct route between Dublin and Livermore, thereby reducing localized VMT and associated GHG emissions. Based on the above, both the Project and Alternative 2 are anticipated to have less-than-significant impacts related to GHG emissions from VMT.

Alternative 2 would be somewhat consistent with applicable plans and policies designed to reduce GHG emissions in the region. On a regional scale, the Project is included in the MTC's RTP, Plan Bay Area, and the TIP. At the local level, the Project is consistent with Dublin, County, and Livermore's Climate Action Plans. The Project is included as part of the adopted roadway networks in Dublin, the County, and Livermore's General Plans. Alternative 2 would be generally consistent with each of these documents, as it would include implementation of the planned roadway extension between Dublin and Livermore, including multimodal infrastructure for transit, bicycles, and pedestrians between these two jurisdictions. However, Alternative 2 would indirectly limit accessibility to developable land uses in eastern Dublin, including bicycle, transit, and pedestrian access to this area. Both Alternative 2 and the Project would have a similar, less-than-significant impact related to plan consistency for GHG reduction.

Hazards and Hazardous Materials

Based on the Phase I Environmental Site Assessment completed for the Project, contaminated soils may be encountered during construction (see **Section 5.7, Hazards and Hazardous Materials**). Construction of Alternative 2 would encounter the same or similar risks associated with potentially contaminated soils at or near the Project site. Transportation of potentially hazardous soils within 0.25 mile of a school would pose the same risk as under the Project. Similarly, during construction a traffic management plan would be required to ensure emergency access would be maintained. These impacts can be reduced to less than significant with implementation of construction-period mitigation measures identified in **Section 5.7, Hazards and Hazardous Materials**.

Operation of this alternative would be similar to the Project in that it would include vehicles traveling on a roadway network. New roadways under this alternative would be subject to the same standard engineering requirements for roadway slope, curvature, speeds, storm water treatment, lane orientation, and other standard roadway design criteria as the Project. Compliance with these standards would minimize the potential for hazardous material or waste release under accident conditions. Based on the above, both the Project and Alternative 2 would have similar impacts related to hazards and hazardous materials, which would be reduced to a less-than-significant level with mitigation.

Hydrology and Water Quality

Implementation of Alternative 2 would be subject to permitting requirements to protect water quality and hydrology during both construction and operation. This alternative would introduce new impervious surfaces to the Project site, which would in turn require stormwater retention and treatment controls to avoid increased stormwater runoff and to maintain water quality. These would be required as a part of the roadway design based on permitting requirements. In comparison to the Project, Alternative 2 would introduce a similar amount of new impervious surface area. Similar to the Project, operation of this alternative would not increase water demand that would contribute to lowering of the groundwater table, as operation would not require the regular use of water. Based on the above, both the Project and Alternative 2 would have a similar, less-than-significant impact related to hydrology and water quality.

Land Use and Planning

Alternative 2 would not have the potential to physically divide an established community. Rather, this alternative would provide new roadway access between Dublin and Livermore. This alternative would be somewhat consistent with the roadway alignment adopted in Dublin's General Plan, the EDSP, the County's General Plan, Livermore's General Plan, and Plan Bay Area. These documents identify an at-grade alignment to allow access to developable land uses in Dublin, which Alternative 2 would not provide. However, this alternative would connect the two jurisdictions. Any potential conflicts with local General Plans could reasonably be resolved through amendments to these documents if necessary. An amendment to the TIP would also be required. Therefore, this impact would be less than significant. Based on the above, both the Project and Alternative 2 would have less-than-significant impacts related to land use, with Alternative 2 presenting greater inconsistency with adopted plans.

Noise and Vibration

Construction of Alternative 2 would result in temporary noise increases that could exceed local standards. Construction of Alternative 2 would require a different mix of construction activities when compared to the Project. Major construction activities for the Project would include large areas of grading and new paving. The Project may require pile driving to construct the bridge over Cottonwood Creek, but would not require pile driving in any other locations. For Alternative 2, major construction work would include pile driving, drilling, and/or other construction methods to install footings and piers for the aerial structure as well as concrete, rebar, and formwork. Pile driving is one of the loudest construction activities (see **Section 5.10, Noise and Vibration**). Therefore, construction of this alternative would result in more instances of maximum construction noise levels in comparison to the Project. As the Project would also include drilling and pile driving, mitigation measures were developed to reduce temporary noise impacts to a less-than-significant level. Construction-period impacts under Alternative 2 would reasonably be anticipated to be reduced to a less-than-significant level through the same construction noise control measures as those identified for the Project.

Pile driving results in the highest amount of temporary vibration in comparison to other construction activities. Under the Project, construction vibration levels were estimated and found to be less than significant. However, given the amount of pile driving that could be needed to implement Alternative 2, it is conservatively anticipated that new mitigation would need to be developed to avoid construction vibration impacts. This mitigation measure could include construction protocols to monitor vibration levels during pile driving and temporarily stop work if vibration levels exceed acceptable levels. With mitigation, this impact would be reduced to a less-than-significant level for Alternative 2. Overall, construction of this alternative would generate slightly greater temporary noise and vibration levels in comparison to the Project.

The amount of construction vehicles needed at any one time to implement this alternative is anticipated to be similar to the Project, as both options include construction of a linear roadway project along the same or similar alignment. Alternative 2 is anticipated to require less grading

work than the Project, and as a result would have fewer soil hauling trips leaving the site. Conversely, Alternative 2 may require more trips to deliver construction materials such as concrete, rebar and formwork. As discussed in **Section 5.10, Noise and Vibration**, local traffic levels would need to double during construction in order to result in a perceptible noise increase. Based on the above, Alternative 2 is anticipated to generate construction trips similar in magnitude to the Project. Under the Project, construction trips would not have the potential to result in a temporary noise impact. Therefore, construction traffic noise is anticipated to be less than significant for Alternative 2, similar to the Project.

Operation of Alternative 2 would result in noise from vehicle circulation. Under the Project, noise from vehicle circulation was determined to be less than significant, as the vehicle volumes were not great enough to cause a noticeable increase in ambient noise levels. As this alternative would provide a connection between Dublin and Livermore but would not provide convenient access to developable areas of eastern Dublin or a connection to Croak Road, traffic volumes are anticipated to be the same as or less than those of the Project. While the aerial structure would place vehicles higher above the existing grade and therefore may increase the potential for noise propagation, the vehicle volumes are reasonably not anticipated to be great enough to result in a noticeable change in ambient noise levels. Therefore, this alternative would generate operational noise levels equivalent to or slightly less than those of the Project. This impact would be less than significant.

Alternative 2 would occupy generally the same area as the Project. The Project site and surrounding area is located within the 55 CNEL noise contour for the Livermore Municipal Airport. As this alternative does not propose noise sensitive land uses, it would not contribute to the exposure of persons to excessive noise levels. This impact would be less than significant under the Project and Alternative 2.

Population and Housing

Alternative 2 would not displace existing housing or people, as the Project site and surrounding areas of eastern Dublin (east of Fallon Road, south of the rolling hills) and the County are not developed with residential uses. This alternative does not include new residential or employment uses, and therefore would not directly increase population. Implementation of this alternative could result in a temporary increase in construction-related job opportunities in the local area. Since the opportunities provided by construction would be temporary, this is not reasonably anticipated to result in the relocation of construction workers to the region. Operation of this alternative would not generate jobs.

This alternative would support implementation of the County's General Plan (East County Area Plan) or Livermore's General Plan, both of which include the extension of Dublin Boulevard through the County to Livermore. However, Alternative 2 would not adequately support planned development in eastern Dublin. An elevated roadway structure would present design challenges and limitations for future development projects which would need to connect to the roadway. However, this would not represent a significant impact related to population and housing. Based on the above, similar to the Project, Alternative 2 would have a less-than-significant impact related to population and housing.

Public Services

Alternative 2 would not include the provision of new or physically altered government facilities. There are no government facilities within the Project site or surrounding areas. Therefore, this alternative would not result in direct physical impacts related to the construction or expansion of government facilities.

As discussed in **Chapter 3.0, Project Description** and **Chapter 7.0, Other CEQA Considerations**, of this Draft EIR, reasonably foreseeable indirect growth resulting from roadway access to eastern Dublin is already planned for and forecasted in land use regulating documents (Dublin's General Plan and the EDSP). Because this alternative would not encourage growth beyond what is already planned for and forecasted, the propose improvements would not result in an indirect increased demand for public services. This alternative would provide a planned roadway connection between Dublin and Livermore, indirectly supporting planned growth in PDAs in Dublin and Livermore, and indirectly supporting implementation of Livermore's General Plan.

Similar to the Project, construction of this alternative could temporarily result in interference with emergency services access. This could result from temporary roadway or intersection closures. This impact would be reduced to a less-than-significant level through the same mitigation measure identified for the Project, which requires the creation and implementation of a traffic management plan (see **Section 5.14, Transportation and Traffic**). Based on the above, both the Project and Alternative 2 would have a less-than-significant impact related to public services with implementation of mitigation.

Recreation

Alternative 2 would not include the construction or expansion of any recreational facilities, nor does it include any housing or major employment uses, and therefore would not generate new users or demand for local parks or other recreational facilities. This alternative would provide roadway access connecting eastern Dublin to Livermore. Dublin has taken the implementation of this roadway extension into account in its General Plan, the EDSP, and Fallon Village SEIR. Similarly, the County and Livermore have accounted for the extension of Dublin Boulevard to North Canyons Parkway in their respective General Plan documents. This alternative would not result in unplanned demand for local and regional parks or recreational facilities, or an incremental increase in demand that would reasonably be expected to necessitate new or expanded recreational facilities. Similar to the Project, this impact would be less than significant.

Transportation and Traffic

Under Alternative 2, a new roadway connection between eastern Dublin and Livermore would be implemented using an aerial structure. This Alternative would not create a new connection to Croak Road or provide convenient access to developable areas of eastern Dublin, and therefore would be less integrated into the existing roadway network when compared with the Project. This is reasonably anticipated to result in fewer vehicles using the roadway under Alternative 2. Detailed LOS and vehicle queuing analyses have not been completed for Alternative 2.

As detailed analysis is not available, for the purposes of this analysis it is conservatively assumed that Alternative 2 would have similar impacts to local intersections as the Project. The Project would result in significant and unavoidable impacts related to intersection LOS and vehicle queuing in Livermore. Alternative 2 is conservatively assumed to result in similar impacts. A detailed analysis would likely show that Alternative 2 would result in fewer LOS and queuing impacts, as fewer drivers would use the roadway.

Alternative 2 would include new roadway access between Dublin and Livermore, and would include pedestrian and bicycle facilities similar to the Project but would not support convenient bike and pedestrian access to developable areas of eastern Dublin. This impact would be less than significant. This alternative would allow for future implementation of planned transit service between Dublin and Livermore, but would interfere with transit access to developable areas of eastern Dublin. Therefore, this alternative would impede the implementation of planned transit services. Interference with implementation of multimodal and transit access and/or infrastructure results in indirect impacts to the environment through the continued prioritization of vehicle travel. As required by Senate Bill 743, evaluation of transportation impacts under CEQA should consider that in order to meet statewide GHG reduction goals, transportation must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1). Under Alternative 2, the impact related to interference with planned transit service in eastern Dublin would indirectly promote continued vehicle travel. It is conservatively assumed this impact would be significant, but could be mitigated through the development of new mitigation measures. This might include a fair share contribution to the cost of future connections between the aerial structure and developable areas of eastern Dublin, to support transit access to these areas. By comparison, the Project would result in a less-than-significant impact related to transit service.

Utilities

Alternative 2 would include the extension of water, recycled water, electrical, and communication utilities into eastern Dublin and the extension of an existing water line to Livermore. Proposed utility extensions would need to be enclosed within the aerial structure, as Dublin requires undergrounding of new or relocated utility lines. As the roadway would be on an aerial structure, containing utility lines within the structure would achieve a similar effect (avoiding the use of telephone poles and similar catenary structures). Utilities would be extended to support future development in eastern Dublin; however, the design of Alternative 2 would present technical obstacles for future connections between utilities within the aerial structure and ground-level development.

Similar to the Project, operation of this alternative would not include the regular use of water or recycled water services. Water may be used intermittently for maintenance purposes such as street sweeping and landscape irrigation. This would not require water or water services to the extent that new or expanded treatment facilities would be required. Similarly, operation of this alternative would not generate wastewater, as no habitable structures or other facilities such as restrooms are proposed. Operation of this alternative would not require use of domestic water, recycled water, or the expansion of water, recycled water, or wastewater treatment facilities. As a result of the project

type, construction and operation of Alternative 2 would not significantly alter water and recycled water use or wastewater generation compared to existing conditions. Therefore, similar to the Project, impacts related to utilities would be less than significant under Alternative 2.

Energy Conservation

Construction of Alternative 2 would require electricity usage, diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road work commute and vendor trips. The precise amount of construction equipment and associated energy consumption needed for this alternative has not been determined as it would require a more detailed design. However, as demonstrated in **Section 5.16, Energy Conservation**, energy consumption for roadway construction is generally not held to be wasteful or inefficient when the construction would be typical compared to other similar projects. As this alternative would be constructed on and/or adjacent to the Project site, and would include the construction of new roadway access, it is reasonably assumed that construction of this alternative would not have unique characteristics which would result in the wasteful or inefficient use of energy. As described above, this alternative is anticipated to require less grading work than the Project, but more concrete, rebar, and formwork.

Direct consumption of energy during operation of this alternative would be limited to electricity needed to power street lights and traffic signals. This alternative would include high-efficiency streetlights, as required by Dublin. Indirect energy consumption as a result of Alternative 2 would result from any increases in VMT. As described under Greenhouse Gas Emissions above, this alternative is not anticipated to notably change VMT in the region and would slightly reduce VMT locally. Therefore, this alternative is not anticipated to increase indirect energy consumption when compared to existing conditions, but rather may result in a slight decrease in indirect energy consumption. Based on the above, similar to the Project, Alternative 2 would have a less-than-significant impact related to energy conservation.

Effects Found not to be Significant

No agricultural or mineral resources would be affected under Alternative 2. As existing conditions would remain and there are no existing agricultural or mineral resources at or near the Project site, there is no potential for this alternative to eliminate, consume, or interfere with access to these resources. Both the Project and Alternative 2 would have no impact on agricultural and mineral resources.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 21002 of the CEQA Guidelines requires lead agencies to adopt feasible mitigation measures or feasible environmentally superior alternatives in order to substantially lessen or avoid otherwise significant adverse environmental effects, unless specific social or other conditions make

such mitigation measures or alternatives infeasible. CEQA also requires that an environmentally superior alternative be identified among the alternatives analyzed. In general, the environmentally superior alternative is the project that avoids or substantially lessens some or all of the significant and unavoidable impacts of the proposed project (CEQA Guidelines Section 15126.6). If one of the No Project Alternatives is the environmentally superior alternative, the EIR must also specify which of the other build alternatives (including the project) would be environmentally superior.

Each of the evaluated alternatives would result in lesser environmental impacts to some environmental resources and greater impacts to others when compared to the Project. None of the alternatives presented would only reduce impacts associated with the Project. When considering objectives, the Project would best meet the stated objectives. In contrast, Alternative 1 would not provide interconnectivity between PDAs in Dublin and Livermore, new transportation facilities or other public infrastructure to support planned development in Dublin, or multimodal access between Dublin and Livermore. Alternative 2 would indirectly place limitations on how and to what extent future land uses could be accessed in eastern Dublin, as designing and constructing access points from the aerial structure would require a larger footprint for future projects than connecting to an at-grade roadway. In this way, Alternative 2 would not meet the objective of establishing transportation facilities and other public infrastructure to serve planned development in eastern Dublin. Furthermore, an aerial structure unconnected to Croak Road would not support local bicycle, pedestrian, and automobile connectivity along Croak Road.

On the basis of comparing the extent to which the alternatives would reduce or avoid the significant impacts of the Project, No Project Alternative 1 would be the environmentally superior alternative. However, No Project Alternative 1 would not attain the primary objectives of the Project. As required by State CEQA Guidelines (California Code of Regulations Section 15126.6 [e][2]), because the environmentally superior alternative was identified as the No Project Alternative, another environmentally superior alternative must be identified among the other alternatives considered.

Alternative 2 would result in a smaller permanent footprint compared to the Project, which would lower direct and indirect impacts to biological resources and somewhat reduce the likelihood of encountering buried cultural resources. While the permanent footprint area would be smaller, construction-period noise and vibration levels would be greater than those under the Project. Alternative 2 would be less consistent with local and regional land use policies and objectives, particularly related to the development of eastern Dublin. Alternative 2 would also interfere with planned transit service, and would not support local bicycle and pedestrian infrastructure in eastern Dublin. Alternative 2 would be more visually prominent and would obscure the scenic hills to the north to a greater extent than the Project. All other environmental impacts under Alternative 2 would be generally similar to those of the Project.

On balance, the environmentally superior alternative would be either the Project or Alternative 2, depending on Dublin's decisions weighing types of environmental benefits and adverse effects. The Project would result in greater temporary and permanent indirect impacts to biological resources,

and Alternative 2 would result in greater construction noise and aesthetic impacts. Additionally, Alternative 2 would be less consistent with local and regional planning documents created to reduce or avoid environmental impacts from GHG emissions. In weighing the consideration of the environmentally superior alternative, decision-makers must weigh the relative importance of greater biological resource impacts associated with the Project, compared to the greater construction-period noise impacts and multimodal transportation associated with Alternative 2. Both Alternative 2 and the Project would result in long-term, significant and unavoidable impacts related to intersection level of service and vehicle queuing. Therefore, the environmental impact differences between these two alternatives are not substantial enough that one is clearly superior over the other.

Table 6-3 Comparison of Impacts between Project Alternatives

Environmental Topic	Project	No Project Alternative 1		Aerial Structure Alternative 2	
		Significance	Comparison	Significance	Comparison
Key: NI = No Impact LTS = Less than Significant SU = Significant Unavoidable LTS/M = Less than Significant with Mitigation = Equal to ↓ Lesser Impact than Project ↑ Greater Impact than Project					
Aesthetics					
Cause a substantial adverse effect on a scenic vista	LTS/M	NI	↓	LTS/M	=
Substantially degrade the existing visual character or quality of the site and its surroundings	LTS/M	NI	↓	LTS/M	=
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings with a State scenic highway	LTS/M	NI	↓	LTS/M	=
Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area	LTS/M	NI	↓	LTS/M	↑
Cumulative	None	None	=	None	=
Air Quality					
Conflicts with or obstructs implementation of the BAAQMD 2017 Clean Air Plan	LTS	SU	↑	LTS	=
Violates any air quality standard or contributes substantially to an existing or projected air quality violation	LTS/M	NI	↓	LTS/M	=
Exposes sensitive receptors to substantial pollutant concentrations, including those that increase health risks such as cancer	LTS	NI	↓	LTS	=
Creates objectionable odors affecting a substantial number of people	LTS	NI	↓	LTS	=

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Cumulative impact of any criteria pollutant	LTS	NI	↓	LTS	=
Cumulative Impacts	None	None	=	None	=
Biological Resources					
Have an adverse effect, either directly or through habitat modifications, on any species listed as endangered, threatened, or proposed or critical habitat for these species	LTS/ M	NI	↓	LTS/M	↓
Have a substantial adverse effect, either directly or through habitat modifications on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS	LTS/ M	NI	↓	LTS/M	↓
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS	LTS/ M	NI	↓	LTS/M	↓
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marshes, vernal pools, etc.) through direct removal, filling, hydrological interruption, or other means	LTS/ M	NI	↓	LTS/M	↓
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	LTS/ M	NI	↓	LTS/M	↓

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Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances	LTS	NI	↓	LTS	=
Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state HCP	LTS/ M	NI	↓	LTS/M	=
Cumulative Impacts	None	None	=	None	=
Cultural and Tribal Cultural Resources					
Cause a substantial adverse change in the significance of a historic resource (CEQA Guidelines Section 15064.5)	LTS/ M	NI	↓	LTS/M	=
Cause a substantial adverse change in the significance of an archaeological resource (CEQA Guidelines Section 15064.5)	LTS/ M	NI	↓	LTS/M	↓
Directly or indirectly destroy a unique paleontological resource or site or unique geological feature	LTS/ M	NI	↓	LTS/M	↓
Disturb any human remains, including those interred outside of formal cemeteries	LTS	NI	↓	LTS	↓
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 [see Section 5.4 for full significance criteria description]	LTS/ M	NI	↓	LTS/M	↓
Cumulative Impacts	None	None	=	None	=

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Geology and Soils					
Result in soils that are unable to support an on-site wastewater disposal system (septic)	NI	NI	↓	NI	=
Expose people or structures to potential risk of loss or injury where there is high potential for seismically induced ground shaking, landslides, liquefaction, settlement, lateral spreading, and/or surface cracking	LTS/ M	NI	↓	LTS/M	=
Expose people or structures to potential risk of loss or injury where there is high potential for earthquake-related ground rupture near major fault crossings	LTS	NI	↓	LTS	=
Result in triggering or acceleration of geologic processes, such as landslides, substantial soil erosion, or loss of topsoil during construction	LTS/ M	NI	↓	LTS/M	=
Expose people or structures to potential risk of loss or injury where corrosive, expansive or other unsuitable soils are present	LTS/ M	NI	↓	LTS/M	=
Cumulative	None	None	=	None	=
Greenhouse Gas Emissions					
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	LTS	LTS	=	LTS	=
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	LTS	SU	↑	LTS	=
Cumulative	None	None	=	None	=

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Hazards and Hazardous Materials					
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment	NI	NI	↓	NI	=
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	LTS	NI	↓	LTS	=
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	LTS/ M	NI	↓	LTS/M	=
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	LTS/ M	NI	↓	LTS/M	=
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area	LTS	NI	↓	LTS	=
For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area	LTS	NI	↓	LTS	=
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	LTS/ M	NI	↓	LTS/M	=

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Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands	LTS	NI	↓	LTS	=
Cumulative Impacts	None	None	=	None	=
Hydrology and Water Quality					
Result in or be subject to damage from inundation by mudflow	NI	NI	↓	NI	=
Violate any water quality standards or waste discharge requirements, create any substantial new sources of polluted runoff, or otherwise degrade surface water or groundwater quality	LTS	NI	↓	LTS	=
Place within a watercourse or flood hazard area structures which would impede or redirect flood flows, or otherwise substantially alter the existing drainage pattern of an area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation, or flood-related damage on- or offsite	LTS	NI	↓	LTS	=
Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite	LTS	NI	↓	LTS	=
Substantially deplete groundwater supplies or interfere with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)	LTS	NI	↓	LTS	=
Cumulative Impacts	None	None	=	None	=

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Land Use and Planning					
Physically divide an established community	LTS	LTS	=	LTS	=
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect	LTS	SU	↑	LTS	↑
Cumulative Impacts	None	None	=	None	=
Noise and Vibration					
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	LTS/ M	NI	↓	LTS/M	=
A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	LTS	NI	↓	LTS	=
A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project	LTS/ M	NI	↓	LTS/M	=
Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	LTS	NI	↓	LTS/M	↑
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	LTS	NI	↓	LTS	=

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Key: NI = No Impact LTS = Less than Significant SU = Significant Unavoidable LTS/M = Less than Significant with Mitigation = Equal to ↓ Lesser Impact than Project ↑ Greater Impact than Project					
For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels	LTS	NI	↓	LTS	=
Cumulative Impacts	None	None	=	None	=
Population and Housing					
Displace substantial numbers of people and existing housing, necessitating the construction of replacement housing elsewhere	NI	NI	=	NI	=
Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	LTS	LTS	=	LTS	=
Cumulative Impacts	None	None	=	None	=
Public Services					
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: fire protection, police protection, schools, parks, other public facilities	LTS/ M	NI	↓	LTS/M	=
Cumulative Impacts	None	None	=	None	=
Recreation					
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial	LTS	NI	↓	LTS	=

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physical deterioration of the facility would occur or be accelerated					
Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment	LTS	NI	↓	LTS	=
Cumulative	None	None	=	None	=
Transportation and Traffic					
Result in unacceptable LOS conditions at signalized or unsignalized intersections	SU	SU	=	SU	=
Result in an impact to vehicle queuing	SU	SU	=	SU	=
Impede existing or planned transit services	LTS	SU	↑	LTS	↑
Impede pedestrian circulation, access, or safety	LTS	SU	↑	LTS	↑
Impede the circulation, access, or safety of bicyclists or bicycle facilities	LTS	SU	↑	LTS	↑
Cumulative	SU	SU	=	SU	=
Utilities					
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	LTS	NI	↓	LTS	=
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	LTS	NI	↓	LTS	=
Require or result in the construction of a new storm drainage facilities or expansion of existing facilities, the construction of which could cause significant effects	LTS	NI	↓	LTS	=

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Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	LTS	NI	↓	LTS	=
Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	LTS	NI	↓	LTS	=
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	LTS	NI	↓	LTS	=
Comply with federal, state, and local statutes and regulations related to solid waste	LTS	NI	↓	LTS	=
Cumulative	None	None	=	None	=
Energy					
Result in the inefficient, wasteful or unnecessary consumption of energy during project construction or operation	LTS	NI	↓	LTS	=
Cumulative Impacts	None	None	=	None	=
Other Resource Topics					
Agriculture and Forestry					
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use	NI	NI	=	NI	=

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Conflict with existing zoning for agricultural use or a Williamson Act contract	NI	NI	=	NI	=
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))	NI	NI	=	NI	=
Result in the loss of forest land or conversion of forest land to non-forest use	NI	NI	=	NI	=
Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use	NI	NI	=	NI	=
Cumulative Impacts	NI	NI	=	NI	=
Mineral Resources					
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state	NI	NI	=	NI	=
Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan	NI	NI	=	NI	=

Source: Circlepoint, 2019