8.0 ALTERNATIVES TO THE PROPOSED PROJECT

8.1 INTRODUCED

8.1.1 PURPOSE

Sections 15126.6(a) and (b) of the California Environmental Quality Act (CEQA) Guidelines (14 *California Code of Regulations* [CCR]) provide guidance on the scope of alternatives to a proposed project that must be evaluated:

> (a) Alternatives to the Proposed Project. An EIR shall 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. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.
>
> (b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

8.1.2 SUMMARY

This Alternatives section includes a history of the evolution of the proposed Project over time. This includes the Project as originally conceived in the first application to the County and the evolution to its current state based on input from the County, other agencies, organizations, and members of the public.

Following the Project history is an analysis of the Project Alternatives. The State CEQA Guidelines direct the Alternatives section to be both consistent with the objectives and " . . . avoid or substantially lessen any of the significant effects of the project". The following list of alternatives for the Project are included in the EIR for these purposes. The analyzed alternatives are:

1. Alternative A – No Project

2. Alternative B – Previously Proposed Project
3. Alternative C – Additional Drainage Avoidance
4. Alternative D – Infrastructure Relocation
5. Alternative E – Density Clustering/East of Aqueduct
6. Alternative F – Central EOA Development

As required by CEQA, each Alternative has a description and a summary of the impacts compared to the proposed Project, and Alternative E (Density Clustering/East of Aqueduct) is considered an environmentally superior alternative to the Project in relation to some impact topics.

8.1.3 SECTION FORMAT

Due to the nature of the analysis, this section is organized differently than other sections. A description of the Project alternative is followed by its impacts under each environmental issue category as listed in Section 5 (i.e., Sections 5.1–5.21), which are listed as separate subheadings. Although the categories are listed in order of importance, the category titles match those in Section 5.0 (e.g., Land Use, Entitlements, and Planning [Section 5.8] and Land Resources [Section 5.5]). This section is arranged in the following manner:

- Introduction
  - Purpose
  - Summary
  - Section Format
  - References
- Summary of the Proposed Project
- Project History
- Alternatives to the Proposed Project
- Alternatives Considered but not Carried Forward
- Alternatives Analyzed
- Alternatives Analysis
- Environmentally Superior Alternative

8.1.4 REFERENCES

All references cited for preparation of this analysis are listed in Section 8.7.

8.2 SUMMARY OF THE PROPOSED PROJECT

The Project site is approximately 12,323 acres and is proposed to include developed or graded areas (6,699 acres) and preserved open space (5,624 acres). The proposed Project would allow for the development of a maximum of 19,333 dwelling units on approximately 4,987 acres. Additional land uses include approximately 7,363,818 square feet (sf) of Business Park uses on 597 acres; 1,034,550 sf of Commercial uses on 102 acres; 1,568,160 sf of Institutional/Civic uses on 110 acres; and 130,680 sf of Recreation/Entertainment uses

on 75 acres. The Project also proposes approximately 146 acres for Kindergarten through 12th grade schools and approximately 191 acres for Utility facilities. In addition, approximately 5,787 acres (approximately 47 percent) of the 12,323-acre Project site are proposed for Open Space for natural resource protection and greenways, and Parks for active and passive recreational use (i.e., 163 acres of Park Overlay) or (i.e., 5,624 acres of Open Space designation). For a complete Project description, refer to Section 4.0, Project Description.

The Project objectives are directed toward the development of a new community in a feasible, environmentally sensitive, and fiscally sound manner. The Project objectives (as included in in Section 4.3 of Section 4.0, Project Description) are as follows:

1. Implement the Antelope Valley Area Plan (AVAP) by creating an environmentally and economically sustainable master-planned community on the Project site to help accommodate planned regional population and economic growth within the West EOA.
2. Design the Project to maximize efficient utilization of regional infrastructure while preserving hundreds of thousands of acres of contiguous natural open space and important biological resources.
3. Size the Project to include a broad range of employment, residential, institutional, and recreational land uses to encourage walkability and wellness, while reducing off-site employment-related commuter trips.
4. Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers.
5. Integrate a multi-modal transportation network, renewable energy, water conservation, community wellness, and other green development features into the Project's design, build out, and ongoing operations.

8.2.1 SUMMARY OF PROPOSED PROJECT IMPACTS

The potential environmental impacts that would result from the Project have been evaluated in Sections 5.1 through 5.21 of this EIR. With implementation of the respective Project design features (PDFs) and mitigation measures (MMs) identified for each topical issue, many of the potentially significant impacts that could result from the Project would be reduced to a level considered less than significant. The impacts below would be considered significant and unavoidable after mitigation.

Construction-Related Significant and Unavoidable Impacts

Air Resources: Construction-related emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) would result in significant impacts. Mitigation measures would be implemented to reduce emissions; however, the impacts would remain significant and unavoidable.

Construction emissions could cause a potential temporary exceedance of federal, State, and South Coast Air Quality Management District (SCAQMD) standards for respirable particulate matter with a diameter of 10 microns or less (PM10) and fine particulate matter with a diameter of 2.5 microns or less (PM2.5) at Project residences that would be completed and occupied; this would be a significant impact. Implementation of Antelope Valley Air Quality Management District (AVAQMD) and SCAQMD dust control rules would substantially reduce dust, but it cannot be quantitatively demonstrated that the impact would be reduced to a less than significant level. This impact would be significant and unavoidable.

During construction of the Project, construction emissions of PM10 and PM2.5 could exceed the federal and State ambient air quality standards and SCAQMD-established local significance thresholds, exposing sensitive receptors to substantial pollutant concentrations. This impact would be significant and would be reduced with implementation of standard conditions and mitigation measures; however, they would not reduce impacts to a level considered less than significant.

Operational Significant and Unavoidable Impacts

Air Resources: Long-term operational emissions of carbon monoxide (CO), VOCs, NOx, PM10, and PM2.5 would result in significant impacts. Mitigation measures would be implemented to reduce emissions; however, the impacts would remain significant and unavoidable after mitigation.

Land Resources (Agricultural): The Project would result in the conversion of approximately 642 acres of on-site Prime Farmland, for which there is no feasible mitigation to reduce this impact to a less than significant level. Therefore, this would be a significant and unavoidable impact related to conversion of farmland.

Population and Growth Inducing-Impacts: The Project would result in a maximum resident population of approximately 57,150 persons at Project buildout, which is estimated to occur in 2035. This would represent 14.1 percent of the buildout population of the Antelope Valley's unincorporated area, and would result in a population increase that would be consistent with anticipated population increases under the *Antelope Valley Area Plan* (AVAP). Implementation of the Project is considered growth accommodating rather than growth inducing at a regional level based on Southern California Association of Governments (SCAG) projections. Therefore, would be less than significant in relation to planned growth in the region. However, because the Project would substantially increase population and housing relative to the existing Project site conditions, this increase in population and housing on the Project site is considered significant and unavoidable. However, no mitigation would be appropriate because the Project is consistent with approved growth plans in the region.

Regarding growth-inducing impacts, the existence of the Project makes it reasonably foreseeable that additional development proposals seeking AVAP amendments would be made outside the West Economic Opportunity Area (EOA), which is considered a significant adverse indirect growth-inducing impact.

Solid Waste: The Project's incremental contribution to the County's solid waste stream during construction, which is a finite waste stream, would be nominal in comparison to available capacity (i.e., less than one percent). However, the permitted Class III landfill capacity in the County cannot be guaranteed at the time of Project buildout and through the life of the Project, which are beyond the County of Los Angeles Department of Public Works' (LACDPW's) 15-year planning horizon for solid waste disposal. Therefore, while the County is committed to handling all solid wastes generated within the County now and in the future, to be conservative, this EIR concludes that the Project buildout would result in a significant impact on the County's anticipated Class III landfill capacity. The Project would result in significant and unavoidable impact related to municipal solid waste during operation of the Project.

Visual Resources: The Project would result in significant and unavoidable impacts related to a change in visual character experienced from public vantage points (primarily transportation thoroughfares including State Route (SR) 138, 300th Street West, 290th Street West, and Malinda Avenue). Visual character impacts related to grading and development of the Project would be reduced through implementation of mitigation measures; however, the change of the Project site from a rural to urban condition and the varying degrees of obstruction of existing views of local foothills and the Tehachapi Mountains would be considered a significant unavoidable impact, for which no additional feasible mitigation exists. Since the Project site is in an undeveloped area with few existing light sources, implementation of the Project would result in significant and unavoidable impacts by introducing new sources of daytime and nighttime light and glare into the area. Project implementation would also cause a significant and unavoidable impact regarding a new source of sky glow, even after mitigation.

Significant and Unavoidable Impacts with Mitigation Outside the Control of the Lead Agency

Traffic, Access, and Circulation: The on-site roadway network has been designed to accommodate projected traffic from the proposed land uses. However, if improvements at Project access points on SR-138 are not constructed by the California Department of Transportation (Caltrans), impacts would be significant and unavoidable. Also, Project buildout would result in significant traffic impacts on off-site roadways and freeways, including SR-138, I-5 mainline segments and interchange ramps, and arterial roadway intersections. Mitigation measures have been identified to reduce all significant Project impacts. However, it is outside the County's control to implement these measures. If Caltrans does not implement the needed improvements, the Project would result in significant and unavoidable impacts.

Noise: Increases in the ambient noise environment adjacent to SR-138 between Gorman Post Road and Old Ridge Route Road would exceed the applicable significance criterion at identified noise-sensitive receptors. Feasible mitigation measures would involve alterations to private property and/or within Caltrans' right-of-way, which are not in the County's or the Project Applicant's control. Therefore, the impact would be significant and unavoidable.

Significant and Unavoidable Cumulative Impacts

The assessment of cumulative impacts requires forecasting future potential population and economic growth trends, and future projects, and conclusions about the significance of cumulative impacts is accordingly inherently less certain. The AVAP Environmental Impact Report (EIR) concluded that the following cumulative impacts were significant and unavoidable: agricultural resources (conversion of farmland), air quality (short-term/construction and long-term/operation), biological resources (special status species, sensitive vegetation types, wildlife movement), cultural resources (historic resources), mineral resources, noise (traffic noise), greenhouse gas emissions/climate change, traffic (mitigation outside of lead agency jurisdiction), and water supply.

Cumulative impacts of the proposed Project that are considered potentially significant and unavoidable include the following:

Land Resources (Agricultural): A significant, unavoidable impact on Important Farmland would occur through the Project's conversion of approximately 642 acres of Prime Farmland to urban uses. The on-site conversion of farmland is part of the total of 6,169 acres of Important Farmland the Antelope Valley Area Plan (AVAP) EIR would be converted as part of future growth consistent with the AVAP. Thus, the Project's contribution to conversion of agricultural resources is cumulatively considerable and is considered a significant and unavoidable impact.

Air Resources: Construction annual emissions of NOx (an O3 precursor), construction daily emissions of VOC and NOx (O3 precursors), and operational emissions of PM10, PM2.5, VOC, and NOx, would be directly significant and therefore cumulatively considerable and significant. Feasible mitigation measures to reduce the impacts from construction and operation emissions would be implemented for the proposed Project; however, even after mitigation, the direct and cumulative impact would be significant and unavoidable.

Biological Resources: Development of the Project would result in impacts on several sensitive vegetation types including oak woodlands, native grasslands, and wildflower fields. It is likely that most of the identified cumulative projects would also have impacts on sensitive vegetation types. Although cumulative impacts would occur, these are expected to be less than significant after mitigation for all but one vegetation type due to the regulatory requirements which substantially minimize such impacts. Specifically, due to the cumulative loss of native grasslands in the larger region and the State as a whole, and the lack of a widely accepted definition for "native grassland" or a published standard for a mitigation ratio, impacts on native grasslands are considered cumulatively significant after mitigation.

The Project would result in an impact on regional wildlife movement that would be reduced to a less than significant level following mitigation. Because the movement events for some larger species may occur very rarely, the success of each event may be particularly important. Due to the potentially heightened sensitivity of movement through the region for some species, the potential for a project or set of projects to substantially interfere with a wildlife corridor is greater. As such, as a conservative assessment, wildlife movement impacts are considered to be cumulatively significant for the Project.

Noise: The noise analyses in Section 5.12 of this EIR identify the future traffic noise exposures that would occur in the Project traffic noise study area both with and without the Project. The analysis of traffic noise is inherently a cumulative analysis because the calculation of buildout traffic noise exposures considers the anticipated future traffic volumes based on regional growth models. At the completion of Project buildout (2035), operation of the Project would expose some existing off-site noise-sensitive receptors adjacent to SR-138 between Gorman Post Road and Old Ridge Route Road to increases in exterior ambient noise levels that exceed the 3 A-weighted decibels (dBA) threshold criterion due to Project-related traffic. The impact would be considered significant and unavoidable because feasible mitigation to reduce these impacts is not within County jurisdiction. Therefore, when considering the additional regional traffic to the SR-138, the Project would contribute to a significant and unavoidable cumulative impacts to these receptors.

Visual Resources: The cumulative impacts on visual resources from the Project were assessed based on projected growth in Antelope Valley and projected future projects in the vicinity of the Project site (e.g., expansion of SR-138). This growth and development may not necessarily be considered adverse to the visual character of the area, since development would occur in areas planned for development (such as EOAs in the Antelope Valley and City centers). However, the Project is the development of a new community in a largely undeveloped area, and the accompanying visual change is considered significant and unavoidable after mitigation. While the related projects in the region would not all be visible within the same viewsheds as the Project, visual changes in the surrounding areas that would result from continued development would contribute to the Project's impact. Thus, cumulative impacts on visual resources would be significant and unavoidable.

Project implementation would introduce development at a scale that would result in significant increases in lighting levels, and the related projects would also increase lighting levels at individual development sites. While these related projects would not be located adjacent to the site, increases in ambient lighting levels would occur throughout the Project area. Regulations that prevent glare and light spillover into adjacent properties, including Project design standards and guidelines, would reduce impacts but increases in sky glow are expected to occur. However, this impact would be significant and unavoidable with the Project and would be cumulatively significant and unavoidable with mitigation.

Climate Change: The Project is consistent with each of the *Los Angeles County Community Climate Action Plan's* (CCAP's) goals and policies, with SCAG's 2012–20 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2016–2040 RTP/SCS, the AVAP policies, and State regulatory programs that reduce greenhouse gas (GHG) emissions, including those that, as CARB has concluded, put California on a trajectory toward meeting the 2050 GHG reduction goals set forth in several Executive Orders. The Project would nonetheless emit GHGs at an estimated rate of 244,379 metric tons of carbon dioxide equivalent per year, and would contribute to the global inventory of GHGs. The Project's GHG efficiency would be 3.02, which would not exceed the SCAQMD-staff-proposed "plan-level" 4.1 GHG efficiency threshold, but would exceed the SCAQMD-staff-proposed "project-level" 3.0 GHG efficiency threshold. To date, the vast majority of other states and nations have not followed California's lead in mandating GHG emission reductions across a

broad spectrum of economic sectors and have not enacted regulations similar to those adopted in California, which already has nearly the lowest level of GHG per capita of any state. The County of Los Angeles has no jurisdictional control or responsibility for GHG reductions from many types of products and activities (e.g., passenger vehicles, consumer products) both on site and elsewhere in California, nor does the County have jurisdiction or control of GHG emissions outside California within or outside the United States. Therefore, because of the global context of GHG emissions and the Project's forecasted GHG emission rate, the environmental impact related to greenhouse gas emissions is considered to be cumulatively significant.

Solid Waste: Waste generation from new developments requiring landfill disposal are expected to decrease landfill capacity over time. There is remaining capacity of approximately 133.14 million cubic yards (mcy) at the 4 major landfills serving the Project area. Two of these landfills are expected to close by 2037, in the same timeframe as Project buildout. County of Los Angeles, County of Kern, and State waste reduction and recycling programs and regulations are expected to reduce solid waste generation, resulting in less landfill disposal demand and, in turn, extend of the life of existing landfills. However, permitted Class III landfill capacity cannot be guaranteed at the time of Project buildout and through the life of the Project, which are beyond the required 15-year LACDPW planning horizon for solid waste disposal. Therefore, while the County is committed to handling all solid waste generated within the County now and in the future, to be conservative, this EIR concludes that the Project would result in a significant impact on the County's anticipated Class III landfill capacity. The Project's contribution to solid waste disposal and associated landfill capacity would be cumulatively considerable.

Water Resources: As discussed in Section 5.18, Water Resources, the Project's water supplies would sustainably meet buildout potable and recycled water demands and maintain an average annual reserve supply of more than 79,000 acre-feet (af) after buildout has been achieved. Potential Project impacts to water supplies will be less than significant with mitigation. The construction of off-site systems would not result in significant impacts to water supplies and no mitigation is required. Nevertheless, as determined during the AVAP and General Plan update CEQA review process, assuming buildout of the AVAP and General Plan within the Antelope Valley, regional water demands could exceed existing and planned supplies under post-2035 conditions. The Project has sufficient supplies to meet demand, Project-level impacts to water supply are less than significant with mitigation, and the Project will result in an increment of regional growth that incorporates state of art water use and conservation measures that would reduce per capita demand below existing levels. These conservation and efficiency measures would reduce, but not eliminate, the cumulative regional water supply impacts identified in the AVAP and General Plan EIRs be significant and unavoidable.

Traffic, Access and Circulation: The traffic analysis indicates that, under 2035 cumulative conditions, the Project contributes to significant impacts along SR-138 in regards to the percent of time-spent-following between the Interstate (I) 5 and SR-14 interchanges, as well as increased delay for side street vehicles, traffic signal requirements and intersection capacity at multiple locations along SR-138 between the westerly access of the Project area to SR-14. Under cumulative conditions, the Project contributes to a significant cumulative

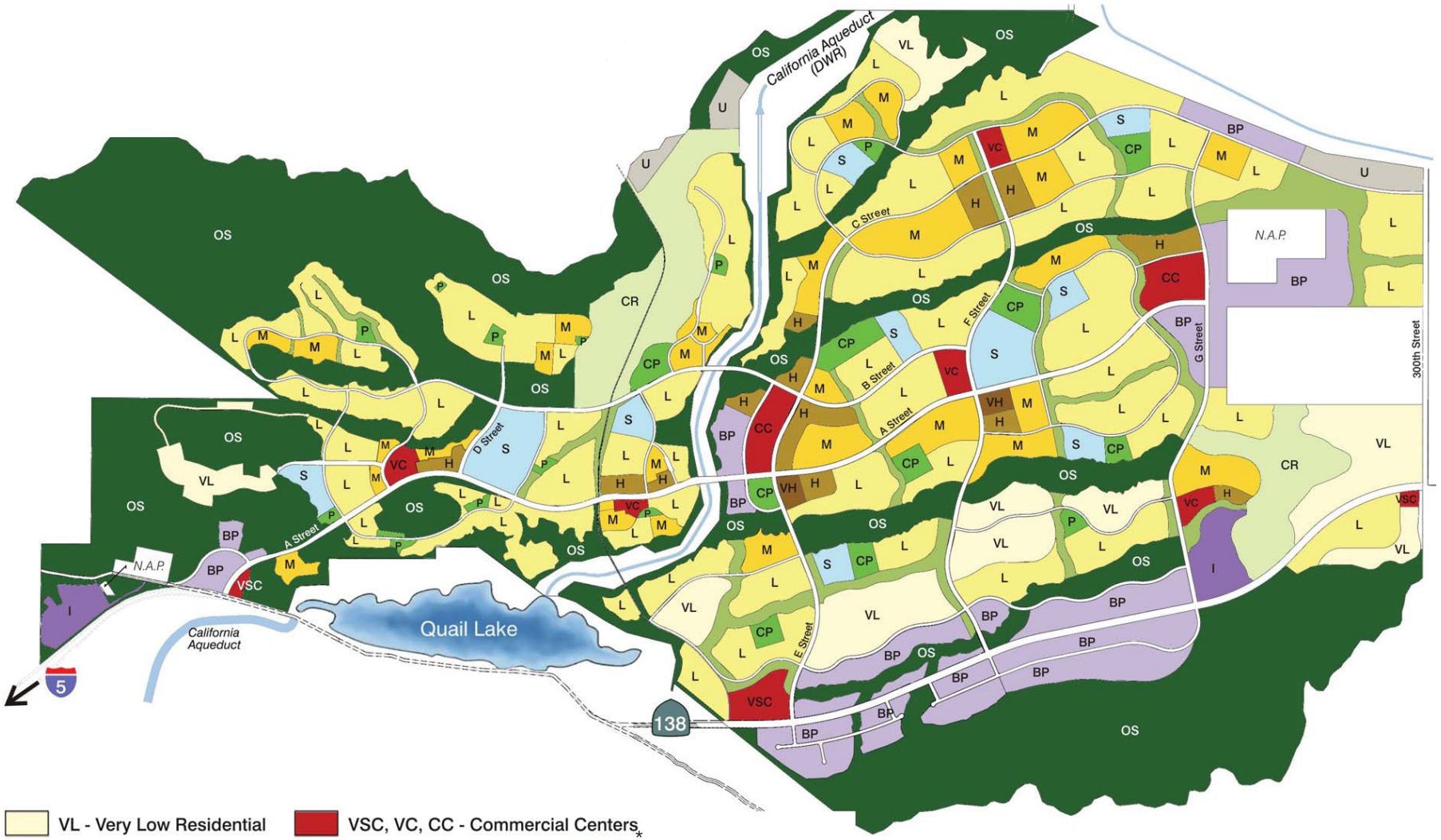
impact to the I-5 mainline freeway; the truck lane in between the Grapevine and Fort Tejon Road interchanges; the segments between SR-138 to Parker Road interchange, as well as segments from Magic Mountain Parkway and SR-14 interchange.

The Project would be fully mitigated with implementation of the Northwest 138 Corridor Project currently being advanced by Caltrans, and mitigation measures for impacts to the I-5 and off-site intersections involving fair share contributions to identified improvements would reduce all cumulative traffic impacts to a less than significant level. The proposed Centennial Transportation Improvement Program (CTIP) Agreement provides a mechanism for the needed transportation improvements to be implemented by providing advance funding for planning, design, and construction of certain improvements and establishing a funding program to collect fair shares for other improvements. With these traffic mitigation assurances, there would not be a significant cumulative impact from Project traffic. However, if Caltrans does not implement planned and needed improvements on State facilities, the Project would contribute to significant unavoidable impacts since the County (as the Lead Agency) has no control over these facilities and cannot enforce the construction of the needed improvements.

8.3 PROJECT HISTORY

An Application for the Centennial Project was formally submitted to the County of Los Angeles in 2003 and the Notice of Preparation (NOP) was sent out for public review in March 2004. Over time the Project Applicant changed the design in response to concerns from the County, other agencies, and members of the public over potential impacts. Development was eliminated from areas with dense woodland, pulled out of major canyons with habitat sensitivity, and designed to avoid the County Significant Ecological Area (SEA) to the south along SR-138. Additionally, off site, nearby open space was added to the mitigation package to further offset Project impacts related to the loss of native grassland. The boundary of the Specific Plan area was modified to include additional property on the east side of the Project site, which increased the acreage of the Project site. However, the Project's development footprint was reduced. Exhibit 8-1, Alternative B – Previously Proposed Project, depicts the design and land uses as described in the NOP dated March 2004.

The Project, as now proposed, is a combination of several of the Alternatives that were considered for the earlier proposed project but now conforms to the AVAP development vision for the Project site component of the West EOA. While the Project site boundary has been expanded by approximately 647 acres to include additional lands to the east of 300th Street West, the Project now proposes 3,665 fewer dwelling units and approximately 4.12 million square feet (msf) less of commercial and business park development, on a development footprint that is approximately 640 acres less than the earlier proposed project. Refer to Table 8-1 below for additional comparison data between the currently proposed Project and the previously proposed project. As the originally proposed project was in the public eye for so long, it seemed appropriate to include it in the Project Alternatives being addressed in this document.



Source: The Planning Center 2011

Alternative B- Previously Proposed Project

Exhibit 8-1

Centennial Project

N W E S

Map Not to Scale

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8.4 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with Section 15126.6(a) of the State CEQA Guidelines (14 CCR), the discussion of alternatives in this section of the EIR focuses on a reasonable range of feasible alternatives.

Because the proposed Project was substantially reduced compared to the previously proposed project (Alternative B) in both development footprint and land use intensity to avoid and/or reduce environmental impacts, further consideration of a reduced development scenario (e.g., reduced grading footprint; reduced dwelling units; reduced non-residential square footage) was not considered reasonable. The current Project design is consistent with the Los Angeles County General Plan 2035 and the AVAP (a component of the General Plan and the applicable Area Plan for the site). Project implementation would require an amendment to the AVAP Highway Plan to show the proposed internal circulation network on the site in the Highway Plan. The Project site would also require a zone change to Specific Plan, consistent with the County's Zoning Ordinance (Title 22 of the County Code), to conform to the General Plan designation as well as the AVAP requirement for a Specific Plan for this EOA. A conditional use permit (CUP) for proposed grading quantities and another CUP for Project-related infrastructure would also be needed. However, the amendment, zone change, and CUPs would not change the land use designation; allow more development; or reduce open space areas. Thus, no conflict with local land use plans, regulations and policies would occur. In addition, the Project would be consistent with applicable SCAG plans and policies, including the 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.

Any reduction in the proposed unit count or in the amount of non-residential development that would be large enough to reduce a potentially significant environmental impact would also result in a development proposal that is not consistent with the goals and policies of the AVAP related to development within the West EOA, or supportive of the Project's objectives. Thus, alternative development scenarios were eliminated from further analysis in this EIR.

The following alternatives were also considered and eliminated from further analysis for the reasons identified in Section 8.4.1 below:

- Alternative Site within or near Tejon Ranch
- Public Input Alternative

Project land use alternatives that are feasible and that are considered in detail in this EIR include:

- **Alternative A:** No Project
- **Alternative B:** Previously Proposed Project (2004 NOP Described Project)
- **Alternative C:** Additional Drainage Avoidance
- **Alternative D:** Infrastructure Relocation
- **Alternative E:** Density Clustering/East of Aqueduct
- **Alternative F:** Central Economic Opportunity Area Development

Based on studies of natural resources (e.g., wildlife habitats and species) and physical constraints (e.g., landform, presence of the California Aqueduct, and the access road to the National Cement Plant) on the Project site, the Applicant recognized that stewardship of site resources should be a major factor in the formulation of any development plan. For this reason, the selection of Project alternatives has focused largely on the identification of changes in aspects of the Project that could avoid and/or minimize impacts on Project site resources.

Although most of the Project alternatives were formulated with the primary objective of avoiding or minimizing Project impacts on natural and physical resources, it should be noted that alternatives would also avoid or reduce other significant adverse impacts of the Project that cannot be mitigated to below a level of significance (as previously described in Section 5.0). Additionally, there are three environmental issues that have mitigation measures to minimize environmental impacts, but the ability to implement the mitigation measures is outside the authority of the County of Los Angeles, the Lead Agency under CEQA.

The first issue is traffic. Implementation of the needed improvements to SR-138 and I-5 must go through Caltrans review, approval, and implementation. These improvements are currently being evaluated for implementation and are expected to be developed in the future. The Project Applicant is working with Caltrans to ensure that the improvements proceed in the needed timeframe. The second issue is noise impacts on existing noise-sensitive receptors. The Project Applicant has discussed this issue with the County, but the County has no enforcement mechanism on private properties and Caltrans right-of-way to implement noise reduction measures. The third issue relates to compliance with Assembly Bill (AB) 32. Even if the County implements measures to comply with their share of the greenhouse gas reduction, they have no control over the compliance of other areas outside the County and in other areas of the State of California. All of these issues are outside the authority of the County and the ability to mitigation to a less than significant level cannot be assured.

In summary, Project-related significant and unavoidable topical areas that are addressed by the alternatives include:

- Air Resources
- Biological Resources
- Climate Change
- Land Resources (Agricultural)
- Noise
- Population and Growth-Inducing Impacts
- Traffic, Access and Circulation
- Solid Waste
- Visual Resources
- Water Resources

8.4.1 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD

The planning process that formulated the Project identified a variety of alternatives that could meet most Project Objectives. The following alternatives from that group are not being carried forward as viable Project alternatives for the reasons noted.

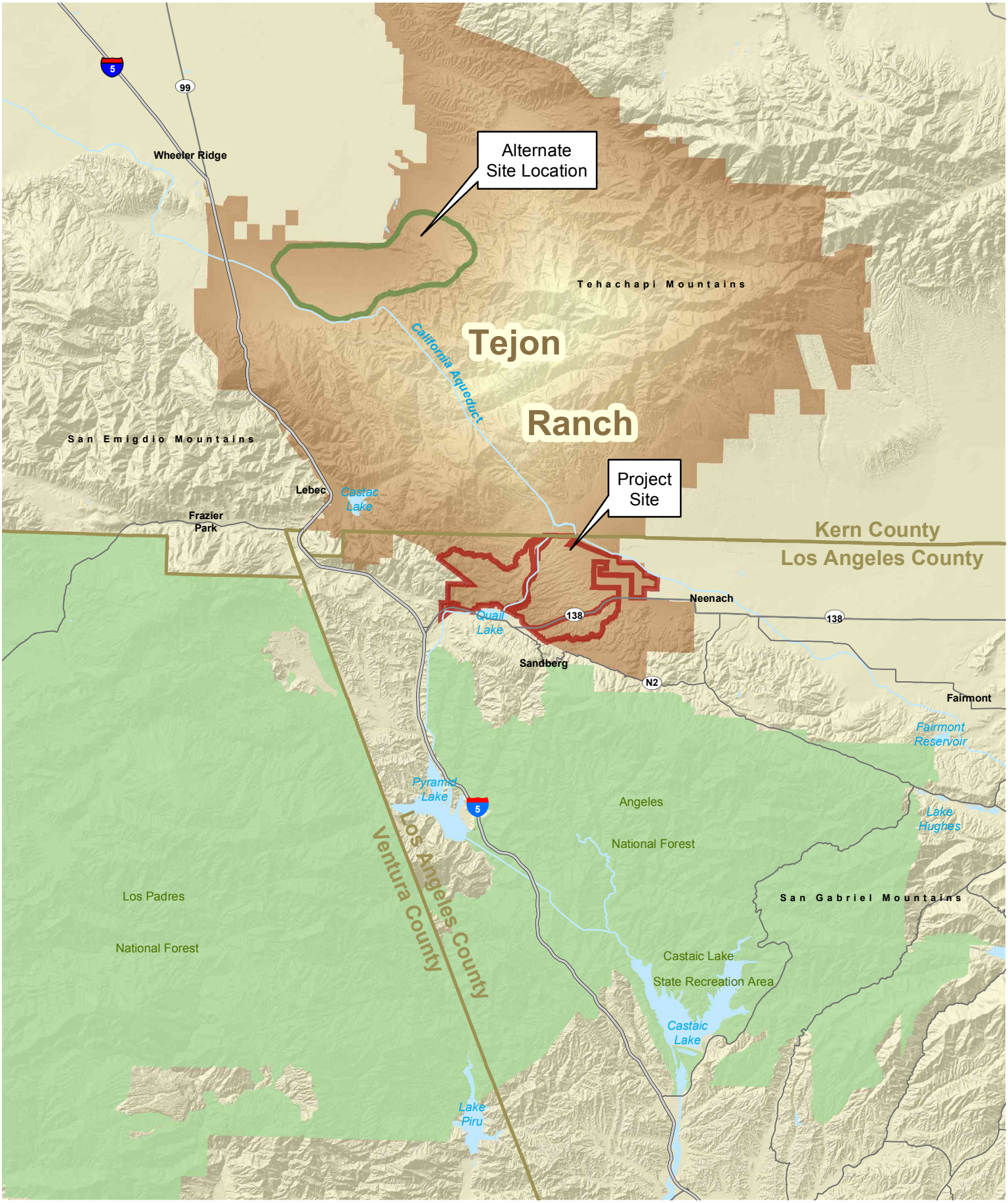
Alternative Site within or Near Tejon Ranch

The use of an Alternative site for development of the Project would lead to the same development intensity and type of land uses as the proposed Project but on a different site within or near Tejon Ranch. The alternative site within Tejon Ranch would be the same approximate size and would be located west of the Tejon Industrial Complex Project in Kern County (See Exhibit 8-2, Alternative Site Location within Tejon Ranch).

Additional sites near the Tejon Ranch were also evaluated, including the area on the north side of SR-138 east of the proposed Project site and outside the Tejon Ranch. Much of the land in the immediate Project vicinity is currently under conservation or public ownership and is not available for development, it is already developed, or it has a development application pending for the property, limiting the options for an alternative site to areas farther east.

This alternative was not carried forward for the following reasons:

1. The biological impacts would be greater as the site within the Tejon Ranch is part of the known San Joaquin kit fox habitat area and movement corridor. The kit fox is a federally listed Endangered species and a State-listed Threatened species. Also, there are some areas east of the Project site and north of SR-138 that are within the Joshua Woodlands SEA, which would have to be avoided by the alternative site.
2. The traffic associated with these alternatives would be difficult to mitigate because regional access to the alternative site within the Tejon Ranch would need to use the Tejon Industrial Complex off-ramps from I-5, which are already planned for extensive use by the development in place and entitled for the Tejon Industrial Complex. The alternative site east of the proposed Project site would be located farther away from the I-5 and a linkage to regional traffic routes would limit accessibility.
3. The site alternative within Tejon Ranch would create greater traffic on I-5 because it would not be accessible from SR-138, a major regional route, resulting in greater traffic impacts. The alternative site east of the Project site would direct more traffic to SR-14, resulting in greater impacts to this freeway.
4. The alternative site within the Tejon Ranch would not address the projected population and housing growth in Northern Los Angeles County, as the alternative site is outside Los Angeles County, in Kern County. The other alternative site would be located outside an EOA and would not be consistent with County and regional growth projections.
5. These alternative sites are not currently zoned for the types and densities/intensities of development proposed by the Project, whereas the proposed Project is consistent with the recently adopted AVAP.



Alternative Site Location Within Tejon Ranch

Exhibit 8-2

Centennial Project

N W E S

5 2.5 0 5 Miles

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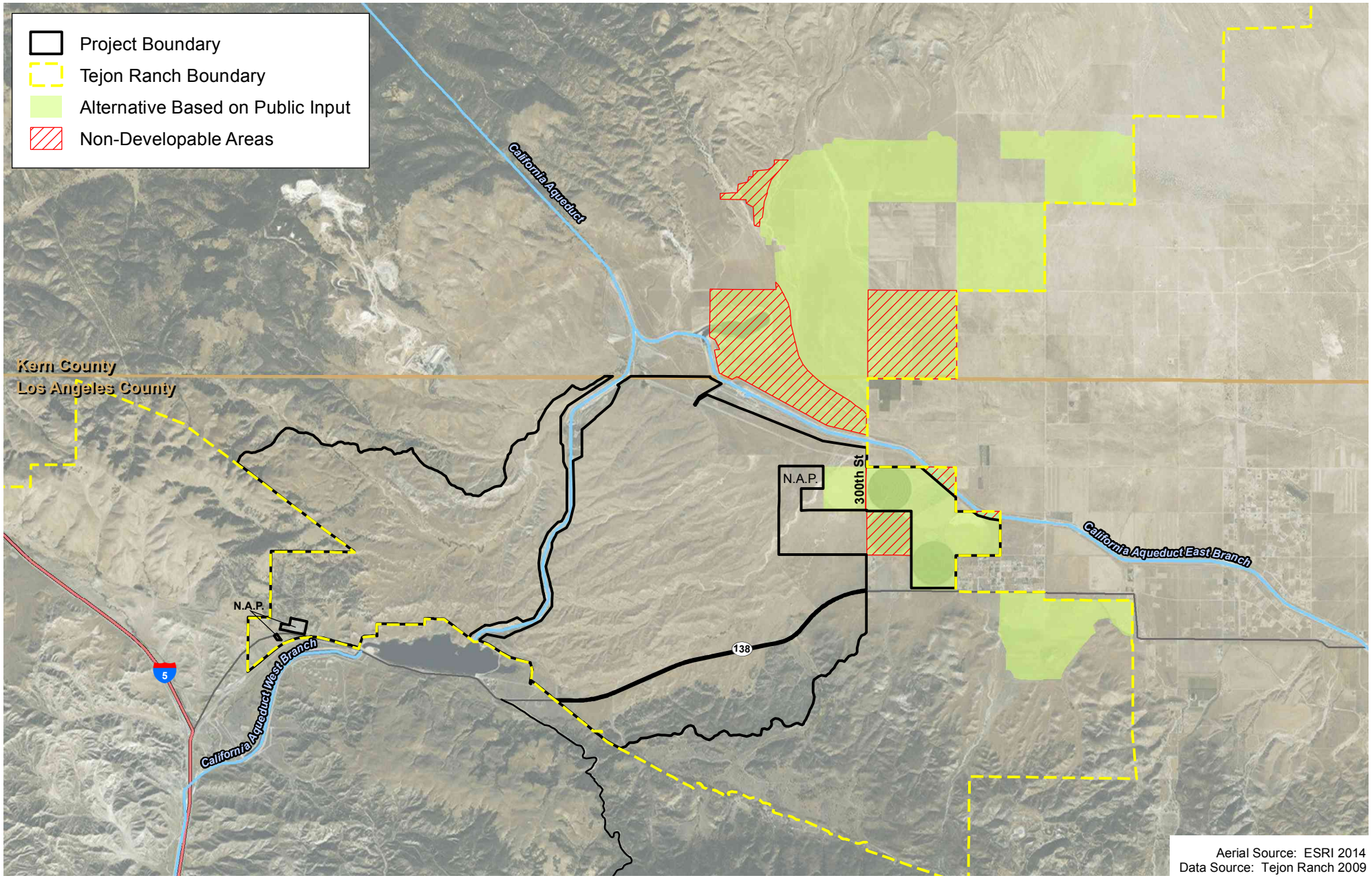
6. The Project's planned development is not allowed in areas east of the site that are designated as Rural Preserve Areas and Agricultural Reserve Areas by the AVAP.
7. Multiple ownerships of lands east of the site may not allow for the assembly of a contiguous 12,323-acre alternative site east of the Project site.
8. An alternative site within or near the Tejon Ranch would not lessen or avoid significant impacts to visual resources, traffic, noise, and air quality, and offers no substantial benefits that are not addressed by other alternatives.

Thus, alternative sites for the Project within or near Tejon Ranch were considered infeasible and eliminated from further consideration.

Public Input Alternative

The Public Input Alternative would include the development of approximately 4,990 acres of land located east and northeast of the Project site within 5 separate and noncontiguous areas, as shown on Exhibit 8-3, Public Input Alternative. This alternative was originally suggested by the Conservation Biology Institute and South Coast Wildlands as part of a review of development proposals within the Tejon Ranch (CBI and SCW 2006), prior to approval of the AVAP. The report, entitled *Proposed Reserve Design for Tejon Ranch: A Threatened California Legacy,* indicates that the primary purpose of this approach would be to design a wildland reserve for Tejon Ranch that would conserve a connection among grassland areas in the San Joaquin Valley. The overall plan, presented as the Ranchwide Planning Analysis in the report, encompasses the entire 270,000-acre Tejon Ranch property. The Ranchwide Planning Analysis would set aside the majority of the Tejon Ranch property as open space, with only 5 parcels totaling approximately 6,820 acres identified for future development. Of the total 6,820 acres identified for development, approximately 1,835 acres were eliminated from this Alternative due to land use conflicts. Therefore, this Public Input Alternative would encompass approximately 4,990 acres of developable land as identified on Exhibit 8-3. This Alternative would reflect an approximate 33 percent decrease in developable acreage and does not provide enough acreage to include both Project-proposed land uses and on-site natural open space areas. Because of the reduction in developable acreage, and because this Alternative would leave a substantial amount of off-site land within the Ranch undeveloped, this Alternative includes no on-site natural open space preserve areas.

This alternative does not meet the objectives of the Project and is not consistent with the Land Use Policy Map of the AVAP (e.g., portions of the alternative site are designated as Open Space Conservation). This alternative would also lead to the unavoidable loss of agricultural land, similar to the Project. Therefore, it would not reduce or avoid the significant impacts of the Project and was not carried forward as a viable alternative.



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Public Input Alternative

Exhibit 8-3

Centennial Project

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8.4.2 ALTERNATIVES ANALYZED

Included among the six alternatives evaluated in this Draft EIR are: the No Project Alternative, as required by CEQA, and five development alternatives to the proposed Project. The alternatives that would involve development on the Project site have been formulated to provide distinctly different approaches to managing on-site resources and constraints. The mix of land uses proposed for each of the alternatives is generally the same, although they have different densities and/or configurations. The land uses allowed in each land use category are assumed to be the same as those described in Section 4.0, Project Description. Similarly, the restrictions associated with each of the land uses (as contained in the Specific Plan) would also apply to each of the alternatives. These alternatives are summarized in Table 8-1, Centennial Specific Plan Alternatives Comparison, and a description of each follows the table.

TABLE 8-1
CENTENNIAL SPECIFIC PLAN ALTERNATIVES COMPARISON

	Centennial Project	Alternative A No Project	Alternative B Previously Proposed Project	Alternative C Additional Drainage Avoidance	Alternative D Infrastructure Relocation	Alternative E Density Clustering/East of Aqueduct	Alternative F Central EOA Development
Project Site	12,323 ac	12,323 ac	11,676 ac	12,323 ac	12,323 ac	12,323 ac	12,323 ac (within 23,930-ac EOA)
Open Space	5,624 ac	12,323 ac[a]	3,829 ac	5,661 ac	5,612 ac	6,280 ac	5,624 ac
Residential Area	4,987 ac	0 ac	3,982.5 ac	4,952 ac	4,984 ac	4,519 ac	4,987 ac
Dwelling Units	19,333 du	0 du	22,998 du	19,241 du	19,333 du	19,333 du	19,333 du
Non-Residential Area[a]	699 ac	0 ac	884.5 ac	678 ac	699 ac	650 ac	699 ac
Non-Residential Floor Area (msf)	10.10 msf	0 msf	14.22 msf	9.90 msf	10.10 msf	10.10 msf	10.10 msf
Civic and Institutional Uses[b]	684 ac	0 ac	943.3 ac	699 ac	720 ac	632 ac	684 ac
Public Rights-of-Way[c]	327 ac	0 ac	2,036.7 ac[c]	327 ac	327 ac	303 ac	327 ac

EOA: Economic Opportunity Area; ac: acres; du: dwelling unit; msf: million square feet

[a] includes Commercial, Business Park, and Employment areas
[b] includes Schools, Golf Course, Parks, and Utilities
[c] includes roads, greenways, internal slopes

Note: Acreage for all categories is conceptual gross acreage and does not include transitional slopes and/or internal slopes. Actual totals may vary with future detailed planning. Total for Project site may not add due to rounding.

Alternative A: No Project Alternative

Alternative A assumes that existing cattle grazing and agricultural land uses would remain and that no new development would occur on the Project site.

Alternative B: Previously Proposed Project (2004 NOP Described Project)

Alternative B covers approximately 11,676 acres and was proposed to include 7,847 acres of development planning areas and 3,829 acres of natural open space. Alternative B would allow for the development of a maximum of 22,998 dwelling units on approximately 3,982.5 acres; approximately 12,233,390 square feet (sf) of employment-generating uses (office, research and development, and warehousing or light manufacturing uses) on approximately 702.1 acres; and approximately 1,986,336 sf of retail-serving centers on approximately 182.4 acres. Proposed sites for civic and institutional land uses, such as schools, fire and police stations, transit centers, and a library would cover approximately 943.3 acres. Approximately 1,917.5 acres (16.4 percent) of the 11,676-acre site is for active and passive recreational use (in the form of parks, commercial recreation, greenways, and slopes) and 3,829.1 acres (approximately 32.8 percent of the site) as natural open space. Alternative B also includes vehicular and non-vehicular circulation systems and proposed improvements to SR-138, Gorman Post Road, and 300th Street West. The conceptual site plan for Alternative B, the Previously Proposed Project, is shown in Exhibit 8-1. This is a larger alternative than the proposed Project, and would have accommodated a greater share of the County's anticipated growth within the same overall urbanized area, and potentially reduce the need for urbanized development in other areas in Antelope Valley.

Alternative C: Additional Drainage Avoidance

In order to lessen the significant biological resource impacts requiring mitigation, Alternative C includes additional avoidance of drainages on the site that are not being preserved as natural open space in the proposed Project. By decreasing the impact footprint to avoid some of the tributaries to Oso Canyon and the drainage channel running north of and roughly parallel to SR-138, biological resource impacts to riparian communities and wetlands, including jurisdictional resources, would be minimized. These drainages would be designated as Open Space.

Under Alternative C, the development scenario would reduce the development footprint by approximately 37 acres, mainly consisting of the following:

- Two locations in the business park area south of SR-138 (one location west of 300th Street West and the other location east of Old Ridge Route).
- Residential areas north of SR-138 and east of the Institutional/Civic Area.
- A business park area north of SR-138 and west of the Institutional/Civic Area.
- A residential area north of SR-138 near National Cement Plant Road.

- Residential areas north of SR-138 and east and west of the main entry driveway to the site.
- Residential areas west of the Aqueduct.

These areas cover approximately 37 acres that would not be developed and would instead be preserved as open space under Alternative C. The main benefit of Alternative C is that it would reduce impacts to jurisdictional drainages that indirectly function as wildlife movement corridors and serve important ecological functions. Alternative C focuses primarily on reducing impacts to drainages or wetlands with high habitat value or those providing connectivity with other high value open space areas. Exhibit 8-4, Alternative C – Additional Drainage Avoidance, depicts the impact and avoidance areas.

Alternative D: Infrastructure Relocation

Alternative D involves the relocation of the two water tanks and the water treatment plant (WTP) to other areas on the Project site. The proposed relocated infrastructure is depicted in Exhibit 8-5, Alternative D – Infrastructure Relocation Alternative. The water tank at the western section of the Project site would be relocated to a higher elevation, west of its current location and in the San Andreas SEA. This location would eliminate the need to grade the tank site and avoid the need for a hydro-pneumatic pumping system. A hydro-pneumatic system uses more energy and also requires stable ongoing energy to avoid pump operational disruptions in the event of a power outage. This type of system has backup generators; however, it is subject to potential outages, even if temporary. Locating the tank at a higher location would result in a more reliable system due to the ability to rely on a gravity system.

The water tank in the proposed Project located to the north of SR-138 would be relocated south of the SR-138 and of the Business Park to a higher elevation, and also located within the San Andreas SEA. At the new location, the tank would be less visible from SR-138 and other areas to the north, since this location is behind a ridge. Approximately 16 acres of additional land would be disturbed and reduced from preservation.

For the water treatment facility, even though the proposed site is outside the San Andreas SEA boundaries, it is located within the Oso Creek drainage, a sensitive habitat. Alternative D would relocate the facility further south to avoid the Oso Creek drainage, thereby eliminating potential Project impacts to the creek and sensitive habitats in the creek. It would also avoid impacts associated with access roads that would be located in the creek. The new location would be at a higher elevation, which would require less pumping of water to the higher elevations, resulting in cost savings and air quality emissions and GHG reductions. While this location is within the San Andreas SEA, it supports less sensitive biological resources than the currently proposed location. No change in development capacity would occur under this Alternative.

Kern County
Los Angeles County
W Avenue A
W Avenue A-8
W Avenue B
W Avenue B-8
W Malinda St
Malinda
Mimi Ln
Benjie Way
Margelo Dr
300th Street West
290th Street West
East Branch
Edison Teson Mountain Rd
Gorman Post Rd
Telephone Rd
Quail Lake
NAP
138
Old Oak Rd
Old Ridge Route

Area of Reduced Impact
Alternative Project Footprint
Jurisdictional Features
Project Boundary
Significant Ecological Area (SEA)

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Alternative C- Additional Drainage Avoidance

Exhibit 8-4

Centennial Project

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Kern County
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Malinda
Mimi Ln
Benjie Way
Margalo Dr
300th Street West
290th Street West
East Branch
Alternate
Water Treatment Plant
Location
Alternate
Water Tank
Location
Edison Teson Mountain Rd
Gorman Post Rd
NAP
Quail Lake
Telephone Rd
138
Old Oak Rd
Old Ridge Route
Alternate
Water Tank
Location
Area of Reduced Impact
Area of Additional Impact
Alternative Project Footprint
Project Boundary
Significant Ecological Area (SEA)
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Alternative D – Infrastructure Relocation Alternative

Exhibit 8-5

Centennial Project

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Alternative E: Density Clustering/East of Aqueduct

Alternative E involves relocating proposed land use development from the east and west portions of the Project site to the central portion of the site, while maintaining the same number of dwelling units, employment-generating uses, and other land uses, in a higher density cluster development pattern. As shown on Exhibit 8-6, Alternative E – Density Clustering/East of Aqueduct Alternative, all development on the west side of the California Aqueduct, except the Cement Plant Road realignment, would be transferred to the areas located east of the Aqueduct. This includes proposed Village 9 and the small area of Commercial, totaling approximately 656 acres of land that would remain undeveloped. Additionally, the new bridge crossing would be eliminated under this alternative.

To the east of 300th Street West, the Low Density Residential-designated lands would instead be designated as Very Low Density Residential. The net reduction in dwelling units and the small area of Commercial would be transferred to areas located west of 300th Street West. The transferred dwelling units would be accommodated within the existing residential land use density ranges in Village 3 (i.e., the town center); the transferred Commercial land uses would be accommodated in the Business Park designation along SR-138. The 44-acre WTP (located west of the Aqueduct) would be relocated to the westernmost portion of the 102-acre on-site water bank/infiltration basin in the Utility-designated area along the northeastern border of the Project site (refer to Exhibit 4-13, Centennial Project – Conceptual Domestic Water System).

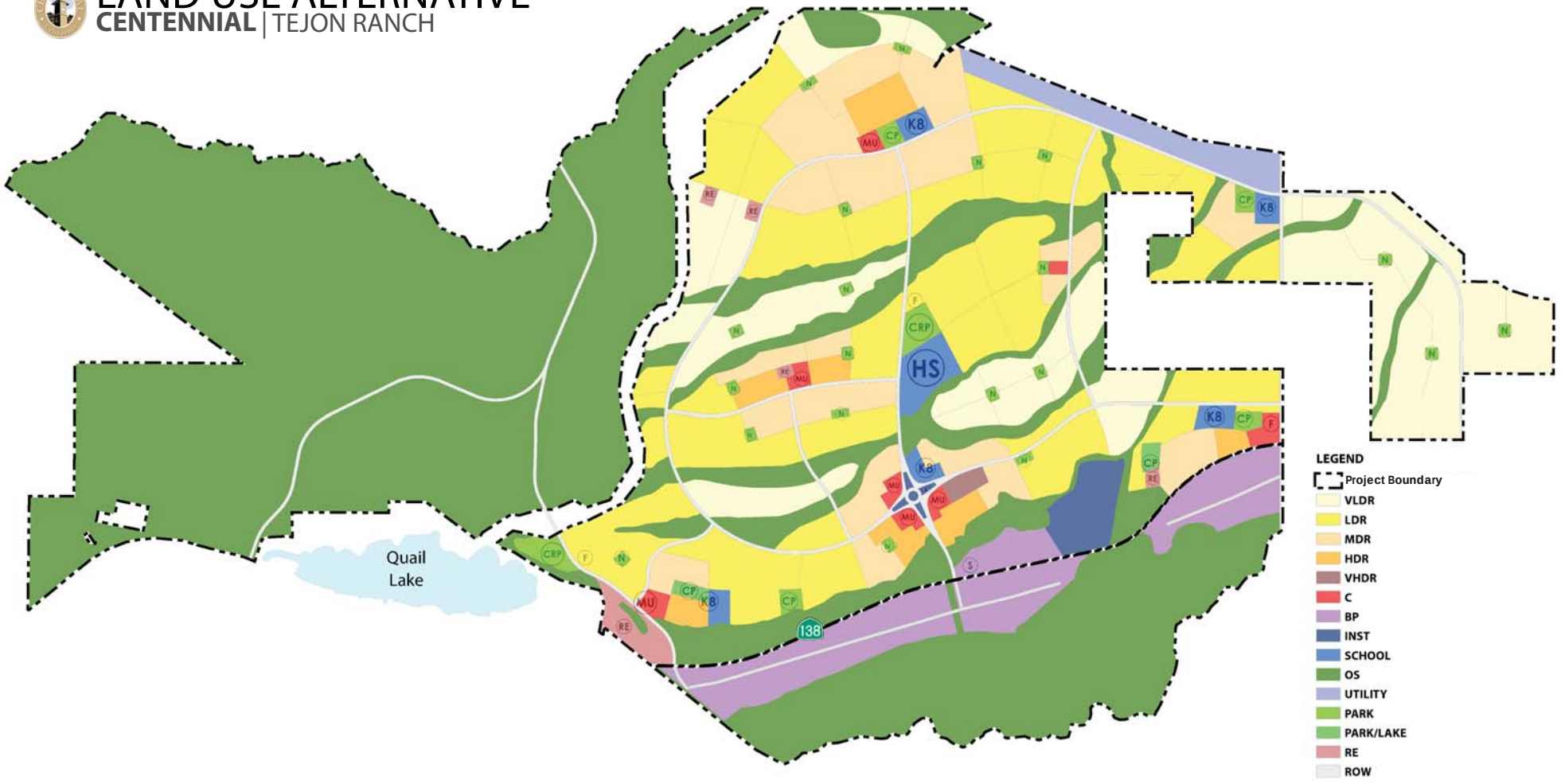
Alternative F: Central Economic Opportunity Area Development

Alternative F considers the AVAP's Central EOA as an alternative location. As shown in Exhibit 8-7, Alternative F – Central Economic Opportunity Area Development, the 23,930-acre Central EOA is an irregularly shaped area located generally between the northern boundary of the City of Lancaster and the Los Angeles County-Kern County border. It is traversed by SR-138 in an east-west direction, and by SR-14 and Sierra Highway in a north-south direction. This alternative assumes that the same types of land uses, amount of development, public facilities, and other amenities as the proposed Project (see Table 4-3 in Section 4.0, Project Description) would be developed within an approximate 12,323-acre, contiguous portion of the EOA.

8.4.3 COMPARISON OF ALTERNATIVES

Table 8-2 provides a summary comparison of each alternative's impacts to those that would occur as a result of the Project. The comparison states whether an alternative has a level of impact that is "less than", "similar" (i.e., generally similar in scale and/or scope), or "greater than" the proposed Project and also identifies each alternative's associated net level of impact: "no impact", "less than significant impact", "impact mitigated", or "significant and unavoidable". When considered together, these factors define the comparative impact for each environmental topic and those of the proposed Project.

LAND USE ALTERNATIVE
CENTENNIAL | TEJON RANCH



Source: Placeworks 2016, Psomas 2017

Alternative E – Density Clustering/East of Aqueduct

Exhibit 8-6

Centennial Project

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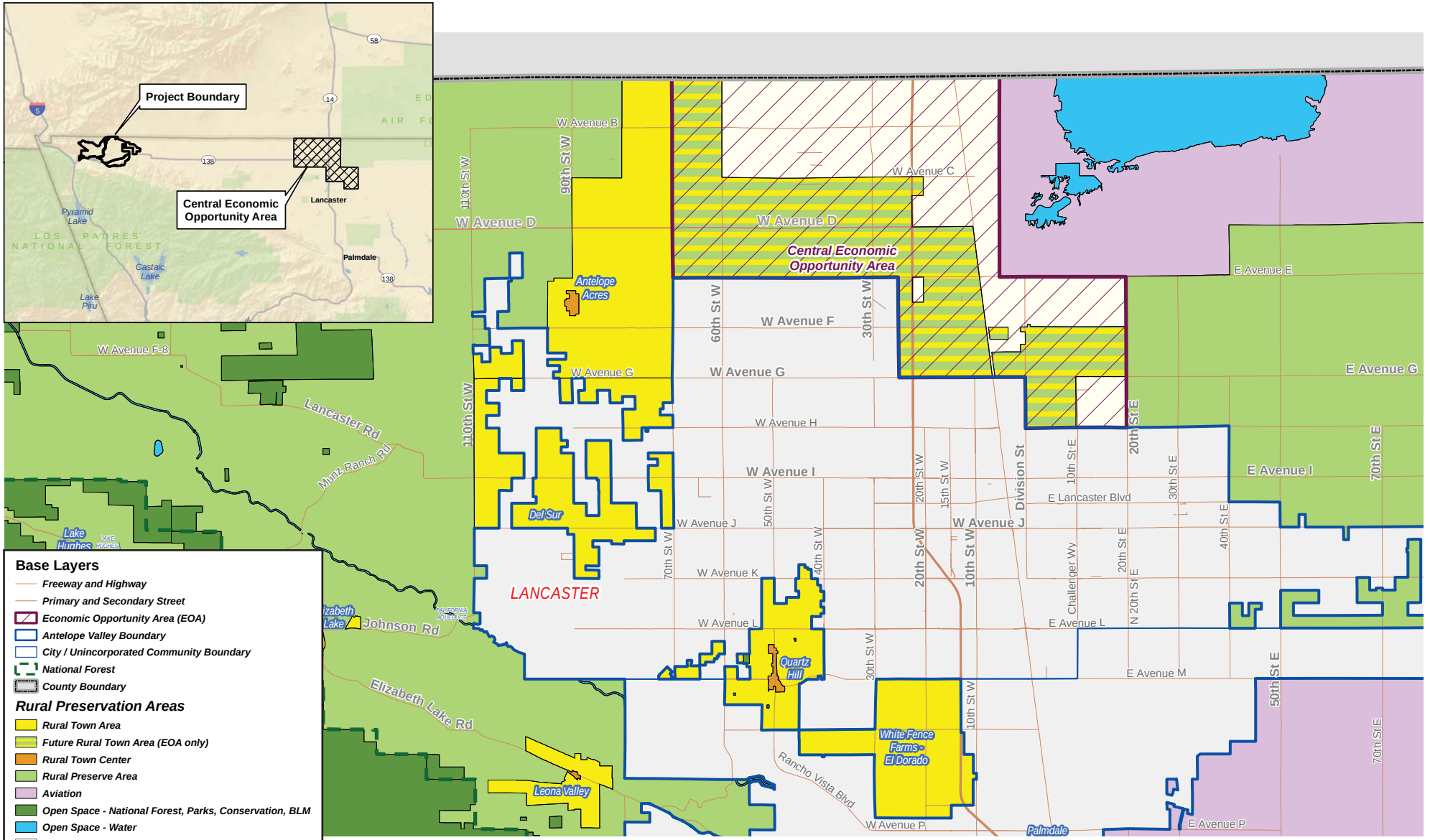

Source: LACDRP 2015

Alternative F – Central Economic Opportunity Area Development

Exhibit 8-7

Centennial Project

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TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
5.1 Geotechnical							
Rupture of earthquake fault	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Seismic ground shaking and liquefaction, lateral spreading	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Less than Significant
Landslides	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated
Erosion and Loss of Topsoil	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Unstable or expansive soils	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Conflict with hillside standards	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ No Impact
5.2 Hydrology and Flood							
Drainage patterns: erosion and siltation	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Drainage patterns: flooding	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Storm water runoff	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated
Conflict with LID standards	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Storm drainage capacity	Less than Significant	Less than/ No Impact	Greater than/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant
100-Year Floodplain: housing	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Greater than/ Impact Mitigated
100-Year Floodplain: structures	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Greater than/ Impact Mitigated
Flooding hazards	Impact Mitigated	Less than/No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Greater than/ Impact Mitigated

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
Inundation: seiche, tsunami, or mudflow	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Standing water	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
5.3 Hazards and Fire Safety							
Hazardous materials	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Listed on hazardous materials site	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Airport or airstrip hazards	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Greater than/ Impact Mitigated
Emergency response plan	Impact Mitigated	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
Wildland fires and fire hazards	Impact Mitigated	Greater than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
5.4 Water Quality							
Surface water standards or waste discharge requirements	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Surface water and groundwater quality	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than / Impact Mitigated	Greater than / Impact Mitigated	Less than / Impact Mitigated	Similar/ Impact Mitigated
Pollutant discharges to Areas of Biological Significance	No Impact	Less than/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Wastewater treatment systems	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Water quality	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than / Impact Mitigated	Greater than / Impact Mitigated	Less than / Impact Mitigated	Similar/ Impact Mitigated
5.5 Land Resources (Agriculture and Mineral Resources)							

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
Farmland conversion	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Conflict with Williamson Act contract or zoning	Less than Significant	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Conflict with zoning for forest land or timberland	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Loss of forest land	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Indirect conversion of Farmland or Forest land	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Loss of mineral resources	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
5.6 Cultural and Tribal Resources							
Historical and archaeological resources	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated
Paleontological resources	Impact Mitigated	Less than/No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated
Human remains	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated
5.7 Biological Resources							
Sensitive species	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Riparian or other sensitive community	Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ No Impact	Greater than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Greater than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ Impact Mitigated (direct)/Impact mitigated (cumulative)
Wetlands	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Wildlife movement	Impact Mitigated (direct)/Significant	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Less than/	Less than/

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	Alternative A No Project	Alternative B Previously Proposed Project	Alternative C Additional Drainage Avoidance	Alternative D Infrastructure Relocation	Alternative E[a] Density Clustering/East of Aqueduct	Alternative F Central EOA Development
	and Unavoidable (cumulative)		(direct)/Significant and Unavoidable (cumulative)	(direct)/Significant and Unavoidable (cumulative)	(direct)/Significant and Unavoidable (cumulative)	Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Impact Mitigated (direct and cumulative)
Oak woodlands and ordinances to protect biological resources (oak trees)	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated
Habitat conservation plan	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
5.8 Land Use, Entitlements, and Planning							
Division of a community	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
Conflict with land use policies	No Impact	Similar/ No Impact	Greater than/ Less than Significant	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Greater than/ Significant and Unavoidable
Conflict with zoning	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
Conflict with SEA and hillside criteria	Less than Significant	Less than/ No Impact	Greater than/ Less than Significant	Similar/ Less than Significant	Greater than/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
5.9 Population, Housing, and Employment and Growth-Inducing Impacts							
Induce population growth or cumulatively exceed population projections	Significant and Unavoidable	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Greater than/ Significant and Unavoidable
Displace housing or people	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than significant	Similar/ Less than Significant	Similar/ Less than Significant	Greater than/ Less than Significant
Growth-Inducing	Significant and Unavoidable	Less than/ No Impact	Greater than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Greater than/ Significant and Unavoidable
5.10 Traffic, Access, and Circulation							
Circulation system performance	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Greater than/ Significant and Unavoidable

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
CMP consistency	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Greater than/ Significant and Unavoidable
Air Traffic	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Greater than/ Less than Significant
Traffic hazards and emergency access	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Alternative transportation policies	No Impact	Less than/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact
5.11 Air Resources							
Air quality standards	Significant and Unavoidable	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Less than Significant
Sensitive receptors	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Less than Significant
Air quality plan	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
Odors	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Greater than/ Less than Significant
Cumulative increase in criteria pollutants	Significant and Unavoidable	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Less than Significant
5.12 Noise							
Noise standards	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Groundborne vibration or noise	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Permanent increase in ambient noise	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Temporary increase in ambient noise	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Public airport noise	No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Similar/ No Impact	Greater than/ Less than Significant

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	Alternative A No Project	Alternative B Previously Proposed Project	Alternative C Additional Drainage Avoidance	Alternative D Infrastructure Relocation	Alternative E[a] Density Clustering/East of Aqueduct	Alternative F Central EOA Development
Private airstrip noise	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Less than/ No impact
5.13 Visual Resources							
Scenic vista and visual quality	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Views from trails	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Damage to scenic resources within scenic highway	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant
Light and glare	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable
5.14 Recreation							
Increase use of existing parks	Less than Significant	Less than/ No Impact	Greater than/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
Recreational facilities	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated
Regional open space connectivity	Less than Significant	Less than/ No Impact	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
Park capacity or service levels	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Greater than/ Impact Mitigated	Similar/ Impact Mitigated
5.15 Education							
School services	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
5.16 Fire and Law Enforcement							
Fire Services	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Law Enforcement Services	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
5.17 Other Public Services (Library, Solid Waste, Other Public Facilities)							
Library Services	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Solid Waste Management	Significant and Unavoidable (direct and cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Other public facilities	Less than Significant	Less than/ No Impact	Greater than/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant	Similar/ Less than Significant
5.18 Water Resources							
Water supplies	Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable (direct)/Significant and Unavoidable (cumulative)	Less than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Similar/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Less than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)	Greater than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)
Groundwater supplies	Less than Significant	Less than/ No Impact	Greater than/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant	Less than/ Less than Significant	Greater than/ Impact Mitigated (direct)/Significant and Unavoidable (cumulative)
5.19 Wastewater							
Wastewater treatment requirements	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Wastewater facilities	Impact Mitigated	Less than/ No Impact	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
5.20 Dry Utilities (Electricity, Fossil Fuels, Telephone, and Cable Television)							
Electrical capacity	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Natural gas capacity	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Telephone service	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated
Cable services	Impact Mitigated	Less than/ No Impact	Greater than/ Impact Mitigated	Less than/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated	Similar/ Impact Mitigated

TABLE 8-2
COMPARISON OF ALTERNATIVES' IMPACTS TO THE CENTENNIAL PROJECT

Topic	Centennial Project	**Alternative A** No Project	**Alternative B** Previously Proposed Project	**Alternative C** Additional Drainage Avoidance	**Alternative D** Infrastructure Relocation	**Alternative E**[a] Density Clustering/East of Aqueduct	**Alternative F** Central EOA Development
5.21 Climate Change							
Significant emissions	Significant and Unavoidable (cumulative)	Less than/ No Impact	Greater than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Less than/ Significant and Unavoidable	Similar/ Significant and Unavoidable	Similar/ Significant and Unavoidable
Conflict with a policy or regulation	Less than Significant	Less than/ No Impact	Greater than/ Impact Mitigated	Similar/ Less than Significant	Less than/ Less than Significant	Similar/ Less than Significant	Greater than/ Significant and Unavoidable

[a] "Environmentally Superior" as defined by CEQA.

Note: Cumulative impacts for each threshold summarized above are less than significant unless otherwise indicated by notation of a cumulative significant and unavoidable impact in parentheses.

8.4.4 ALTERNATIVE A: NO PROJECT

Alternative A assumes that existing cattle grazing and agricultural land uses would remain and that no new development would occur on the Project site.

Geotechnical

There would be no building, grading activities, or increase in residential population or development with this Alternative. While impacts to seismic hazards (e.g., ground shaking, liquefaction), geologic hazards (e.g., landslides, expansive soils), and hillside management standards would be mitigated to less than significant under the proposed Project, no impacts would occur under this Alternative.

Hydrology and Flood

Alternative A would not involve changes to the existing hydrological conditions on the site. No urban runoff would be generated. While impacts related to hydrology would be mitigated to a less than significant level under the proposed Project, no impact on the existing hydrology would occur and no development would be exposed to flood hazards under this Alternative.

Hazards and Fire Safety

Hazards and Hazardous Materials

Because Alternative A would not involve any development on the Project site, no impacts related to hazardous material uses or exposure to hazards would occur. The risk from existing hazards, Valley Fever, and wildlife-borne disease vectors would be avoided under this Alternative. Since there would be no construction, there would not be residents or construction workers on site that are exposed to risks. While the proposed Project would result in potentially significant impacts that would be mitigated to a less than significant level, no impacts related to hazards and hazardous materials would occur with this Alternative.

Fire Safety

The potential for wildland fire within the Project site would be greater under this Alternative than with the proposed Project because no fire prevention program would be in place. However, without development on the site, the risk of injury to persons or major damage to structures would be less. Still, while the risk to persons would not be as great under this Alternative, the overall likelihood of a wildfire on the Project site would be increased under the No Project Alternative. No development-related impacts, per CEQA, would occur given implementation of Alternative A.

Water Quality

Because Alternative A would not involve new development on the site, no impacts on existing surface or ground water quality would occur.

Land Resources

Agriculture

This Alternative would allow current grazing activities to continue, it would not eliminate ongoing agricultural production on Prime Farmland. The proposed Project would result in significant and unavoidable impacts, but no impacts on farmland would result with this Alternative.

Mineral Resources

As with the Project, Alternative A would not involve the loss of availability of a known mineral resource. No impact on mineral resources would result from implementation of either the proposed Project or this Alternative.

Cultural and Tribal Resources

Because Alternative A would not involve any ground disturbance on the Project site, there would be no impacts related to historical, archaeological, tribal cultural, and paleontological resources or human remains.

Biological Resources

Alternative A would not involve any disturbance to the Project site, although existing agricultural activities and other on-site land uses would continue. Therefore, no impacts to biological resources would occur.

Land Use, Entitlements, and Planning

Under Alternative A, no changes to existing land uses would take place and no significant physical land use impacts would occur. The No Project Alternative would not disrupt or divide a community, create on-site land use incompatibility, or allow for development to meet the future housing and employment needs in Los Angeles County; therefore, it would not further regional planning efforts. Additionally, this Alternative would not be consistent with the intent of the AVAP or the West EOA within the Project's development footprint.

Population, Housing, and Employment and Growth-Inducing Impacts

This Alternative would not help meet the projected housing needs of the region and no affordable housing units would be provided on-site. With no proposed residential development, Alternative A would not generate additional population even though an increased population is projected in the region. Also, this alternative would not create any long-term employment opportunities to balance out the employment demands associated with the residential population in the vicinity. No impacts would result from implementing this Alternative with respect to exceeding population projections or displacing housing, households or businesses, or growth-inducing impacts. However, this Alternative would not support the creation of jobs-housing balance in the Antelope Valley.

Traffic, Access, and Circulation

Alternative A would not generate any new off-site daily trips and there would be no impacts to regional transportation systems (e.g., freeways, interchanges and arterials). Also, no changes to existing roads or access to SR-138 would occur under this Alternative.

Air Resources

Because Alternative A would not involve new development or any changes to the existing land uses on the Project site, no impacts to air quality would occur.

Noise

Because Alternative A would not involve new development or any changes to the land uses on the Project site, no impacts associated with noise would occur.

Visual Resources

Because Alternative A would not involve new development or any changes to the physical characteristics of the Project site, no impacts on views of the site would occur. Also, no new sources of light and glare would be introduced to the area. As such, unlike the significant and unavoidable impacts projected to occur given implementation of the proposed Project, no impact to visual resources would occur under this Alternative.

Parks and Recreation

Because Alternative A would not involve the generation of new residential population, no demand for parks or recreational facilities would be generated, and no impacts would occur.

Education

Because Alternative A would not involve the generation of new residential population, no impacts to schools and educational services are expected.

Fire and Law Enforcement Services

Given the lack of development on the site under the No Project Alternative, no impacts to fire and law enforcement services would occur under this Alternative, unlike the proposed Project, under which the related impacts to fire and law enforcement services would be mitigated to a less than significant level.

Other Public Services

Because Alternative A would not involve new development on the site or the generation of new residential or business population, no impacts to other public services (e.g., library services, solid waste management, and other public facilities) would occur.

Water Resources

Because Alternative A would not involve the generation of new residential or business population, no demand for water or impacts to water resources are expected with this Alternative.

Wastewater

Because Alternative A would not involve the generation of new residential or business population, no impacts related to the generation of wastewater and the need for wastewater treatment are expected.

Dry Utilities

Because Alternative A would not involve the generation of new residential or business population, no impacts related to the provision of new utility infrastructure would be required, and there would be no impacts.

Climate Change

Because Alternative A would not involve new development or any changes to the land uses on the Project site, no impacts associated with GHG and climate change would occur.

Summary Conclusion

Implementation of Alternative A would result in fewer impacts compared to the Project because no new development would occur on the site. Alternative A would not result in significant impacts related to most of the environmental issues, except for land use and fire safety. This Alternative is not consistent with the AVAP and the development anticipated on the site for the West EOA. As indicated above, the potential for wildland fire on the Project site would be greater under this Alternative due to the presence of large areas with brush vegetation and because no fire prevention program would be put in place.

The Project is proposed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community; however, implementation of this Alternative would not support this primary goal due to the lack of new development or provision of any housing and employment opportunities on the site.

8.4.5 ALTERNATIVE B: PREVIOUSLY PROPOSED PROJECT

The site under Alternative B covers approximately 11,676 acres in the same general area as the Project site. This Alternative would allow for the development of a maximum of 22,998 dwelling units on approximately 3,982.5 acres; approximately 12,233,390 square feet (sf) of employment-generating uses (office, research and development, and warehousing or light manufacturing uses) on approximately 702.1 acres; and approximately 1,986,336 sf of retail-serving centers on approximately 182.4 acres. Proposed sites for civic and institutional land uses, such as schools, fire and police stations, transit centers, or a library would cover

approximately 943.3 acres. Approximately 1,917.5 acres (approximately 16.42 percent) of the 11,676-acre site was proposed for active and passive recreational use (in the form of parks, commercial recreation, greenways, and slopes) and 3,829.1 acres (approximately 32.79 percent of the site) as natural open space. The Previously Proposed Project Alternative also included vehicular and non-vehicular circulation systems and proposed improvements to SR-138, Gorman Post Road, and 300th Street West.

Geotechnical

As with the proposed Project, development of Alternative B would be subject to the same seismic hazards (e.g., ground shaking, liquefaction), geologic hazards (e.g., landslides, expansive soils), and hillside management standards. Because Alternative B has a larger grading impact area (e.g., approximately 640 additional acres) and would have a larger population that would be exposed to geotechnical hazards, including hazards located in the northwest portion of the Project site, all impacts would be greater under Alternative B. There would be less than significant impacts with the incorporation of mitigation for seismic and geologic hazards under this Alternative, similar to the Project. Less than significant impacts with respect to hillside grading would occur under this Alternative, similar to the Project.

Hydrology and Flood

Implementation of Alternative B would create more impervious area than the proposed Project and changes to the existing hydrological conditions on the site would be greater than the proposed Project. Incrementally more urban runoff would also be expected with the greater amount of development on the site. As with the proposed Project, impacts related to hydrology would be less than significant under this Alternative with mitigation. Similar to the proposed Project, impacts related to floodplains would be less than significant with mitigation.

Hazards and Fire Safety

Hazards and Hazardous Materials

Risks from existing hazards, Valley Fever, wildlife-borne disease vectors, and the use of urban-related hazardous materials would be greater for Alternative B than the proposed Project, as this Alternative would result in a 19 percent increase in the number of dwelling units and a 40.8 percent increase in non-residential development (commercial and employment-generating land uses). As with the proposed Project, impacts would be mitigated to a less than significant level. Similar to the proposed Project, this Alternative would result in less than significant impacts related to airport/airstrip hazards and emergency response or emergency evacuation plans.

Fire Safety

Exposure to wildland fire risks related to location in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) and High Fire Hazard Severity Zones (HFHSZs) would be greater than those with the proposed Project, given the proposed development in hillside

areas. The implementation of a fuel modification zone established with a Fire Management Plan would mitigate impacts to a less than significant level.

Water Quality

The potential surface and groundwater quality impacts associated with Alternative B would be greater than those anticipated to occur from implementation of the proposed Project since Alternative B would disturb more acres than the proposed Project and would result in more development. However, the impacts under both the proposed Project and this Alternative to water quality would be less than significant with mitigation. This Alternative would result in similar impacts related to waste discharge requirements and wastewater treatment systems, as there would be the same types of land uses and number of WRFs as the proposed Project.

Land Resources

Agriculture

This Alternative would have a reduced impact to agricultural resources when compared to the proposed Project since the site for this alternative does not include existing farmlands east of 300th Street West. The proposed residential development would eliminate ongoing agricultural production on approximately 120 acres of Prime Farmland, a reduction of 522 acres compared to the proposed Project. Like the proposed Project, this Alternative would not conflict with any Williamson Act contracts. As with the proposed Project, impacts related to the conversion of farmland would be significant and unavoidable under this Alternative.

Mineral Resources

As with the proposed Project, Alternative B would not involve the loss of availability of a known mineral resource. No impacts to mineral resources would occur under this Alternative.

Cultural and Tribal Resources

Alternative B would result in disturbance of a larger area and impacts on unknown archaeological, tribal cultural, and paleontological resources or human remains would be greater than the proposed Project. It is anticipated that cultural resource-related impacts from implementation of Alternative B would be mitigated in the same manner as those for the proposed Project. Impacts related to cultural resources would be mitigated to a less than significant level.

Biological Resources

Alternative B would disturb a substantially larger number of acres (approximately 640 acres of additional grading) than the proposed Project. In addition to the larger total area, approximately 500 acres of impacts are of much higher biological value for a variety reasons. Alternative B would shift impacts on nearly 500 acres of agricultural area to areas composed primarily of grasslands and other native vegetation types. Total impacts on grasslands would

increase by approximately 675 acres. Alternative B would also result in increased impacts of nearly 100 acres of riparian habitat, 174 acres of oak woodland, 31 acres of jurisdictional features, and 3,486 regulated oak trees. Two additional special status plant species (i.e., Piute Mountains navarretia and Lemmon's syntrichopappus) would be directly impacted and direct impacts to other special status plant populations would be substantially increased. Wildlife species impacts would also increase in general due to the shift from low diversity agricultural lands to higher diversity grasslands and other native vegetation. Also, there would be development impacts within the San Andreas SEA lands and the total open space preserve would be reduced compared to the proposed Project. Lastly, the location of the Alternative B impact area results in a reduced buffer of open space between the Project development areas and higher biological value areas and regional wildlife movement corridors associated with the higher elevation slopes to the west of the site. This reduced buffer would result in greater indirect impacts to these areas, a loss of connectivity through Oso Canyon for local movement, and a reduction in connectivity between open space preserve areas. Like the proposed Project, this Alternative would result in no impact related to habitat conservation plans and natural community conservation plans.

Land Use, Entitlements, and Planning

Implementation of Alternative B would result in the development of a new master planned community at the northwestern section of Los Angeles County. However, this Alternative is not consistent with the land use designations for the site, as contained in the AVAP. A General Plan Amendment would be needed to reflect the proposed land uses. As with the proposed Project, this Alternative would not disrupt or divide a community, but would allow for development to meet the future housing and employment needs in Los Angeles County. Alternative B would exceed the approved population, housing, and employment projections included in the AVAP for the area. As with the proposed Project, a zone change and CUPs would be required under this Alternative. Impacts would be greater under this Alternative than with the Project.

Population, Housing, and Employment and Growth-Inducing Impacts

With a Project site that is 5.3 percent smaller than the proposed Project site, this Alternative may initially appear to be less impactful. However, Alternative B would have 3,665 more residential units, over 4.12 million sf more commercial and business park development, and approximately 1,795 acres less of natural open space. Alternative B would have a larger residential population than would occur with the proposed Project. With the same 10 percent of units as affordable, this Alternative would develop more affordable housing units on-site. This alternative would accommodate more population and related development in a single urbanized community which, like the proposed Project, is designed to achieve a jobs-housing balance, and accordingly could reduce demand for growth elsewhere in the Antelope Valley. This alternative has greater population-related impacts relative to the existing setting than the proposed Project. Alternative B would exceed the approved population, housing, and employment projections included in the AVAP for the area, a significant impact not found for the proposed Project. As with the proposed Project,

displacement of housing would also be less than significant. Also, this Project would result in a greater significant and unavoidable impact related to growth-inducing impacts.

Traffic, Access, and Circulation

Alternative B would provide 19 percent more dwelling units and 41 percent more employment-generating uses, both of which are the primary trip-generating land uses for the proposed Project. Therefore, this Alternative would result in increased off-site vehicle trips. Because this Alternative would have higher off-site trip generation levels, impacts to freeway mainline segments, freeway ramps, and arterial highway intersections would be greater. Significant impacts to the existing transportation system and Congestion Management Plan (CMP) highways would also occur under this Alternative.

This Alternative includes improvements to SR-138, Gorman Post Road, and 300th Street West (on and near the site) and payment of fair share fees for other improvements to Caltrans facilities as mitigation for the impacts of this Alternative. While some improvements would be implemented by this Alternative, it is outside the County's control to implement the other needed highway system improvements. Thus, if Caltrans does not construct the necessary improvements, impacts would also be significant and unavoidable, similar to the Project.

As with the proposed Project, impacts related to emergency access and traffic hazards can be mitigated and impacts on air traffic would be less than significant. No conflict with alternative transportation policies would occur, similar to the Project.

Air Resources

Implementation of Alternative B would require a greater amount of grading over the site with the increased amount of development proposed than the Project. As with the proposed Project, this alternative would result in significant unavoidable construction-related emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Operational emissions would be greater when compared to the Project due to the increase in vehicular traffic. As with the proposed Project, this Alternative would also result in significant unavoidable operational emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Consistency with the applicable Air Quality Management Plan and exposure to odors would also represent a less than significant impact under this Alternative.

Noise

Development of Alternative B would involve more construction than the proposed Project, and noise impacts and exposure to groundborne vibration that would result from construction would also be greater. Impacts related to noise increases in excess of Los Angeles County standards at sensitive receptors would be significant, similar to those of the proposed Project. Mitigation would reduce these impacts to less than significant levels.

Off-site traffic noise would be increased when compared to the proposed Project because of the increase in vehicular traffic. This Alternative would also result in a greater increase in long-term stationary noise than would the proposed Project because of the increase in

development associated with this Alternative. Noise impacts on adjacent off-site residences would be significant and unavoidable under this Alternative because it is outside the County's control to implement improvements on private properties or Caltrans right-of-way. Airport noise exposure would be similar to that of the Project and considered less than significant.

Visual Resources

Visual changes to the Project site associated with the implementation of Alternative B would be similar to those anticipated to occur under the proposed Project, since a smaller area would be converted from an undeveloped to a developed condition but more intensive development is proposed. Under the proposed Project and this Alternative, significant and unavoidable impacts would result with respect to alterations to a scenic vista, degradation of the visual quality of the site, and the creation of light and glare due to the size and intensity of development proposed in a largely undeveloped area. Under both the proposed Project and this Alternative, less than significant impacts would occur related to AVAP-designated scenic drives (e.g., I-5, Gorman Post Road, SR-138, Old Ridge Road [Highway N-2], and Three Points Road)This Alternative would have increased light and glare impacts, due to the greater amount of development proposed on site, when compared to the proposed Project. This impact would be significant and unavoidable even after mitigation.

Parks and Recreation

Implementation of Alternative B would result in a greater demand for parks and recreational facilities due to the higher number of proposed dwelling units and anticipated resident population. As with the proposed Project, less than significant impacts would occur with the provision of on-site parks and recreational facilities. Similar to the proposed Project, Alternative B would result in a less than significant impact related to regional open space connectivity, as a connection to the proposed realignment of the Pacific Crest Trail would also be part of this Alternative.

Education

The demand for school facilities and services associated with Alternative B would be greater than those of the proposed Project because of the increase in residential development. As such, more school sites would be provided on site. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative through school facilities and funding agreements with the affected school districts.

Fire and Law Enforcement Services

The demand for fire and law enforcement services associated with Alternative B would be greater than that for the proposed Project because of the increased amount of development. However, overall impacts to fire and law enforcement services would be mitigated through the provision of on-site fire stations and a Sheriff's station, similar to the proposed Project. Impacts to fire and law enforcement services would be mitigated to a less than significant level under this Alternative.

Other Public Services

Library

The demand for library services under this Alternative would be greater than those of the proposed Project. With the development of 22,998 residential units on site, this Alternative would require, and include, the development of a permanent community library, as with the proposed Project. Therefore, while both the proposed Project and this Alternative would result in less than significant impact, this Alternative would require a larger library due to the increased population size.

Solid Waste

The solid waste demands associated with Alternative B would be greater than those of the proposed Project because of the increased level of development. This demand for landfill capacity would be considered significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of Project buildout and through the life of the Project, which would occur beyond the required 15-year LACDPW planning horizon. Like the proposed Project, this Alternative would result in a significant and unavoidable impact related to solid waste.

Other Public Facilities

Alternative B would create a demand for County services and facilities but will be subject to the payment of fees for any needed services. Alternative B will provide a maintenance yard on the site for County use for public park and facility maintenance, County-owned roadway maintenance, public right-of-way maintenance, flood-control infrastructure maintenance, and other maintenance activities. Impacts would be less than significant, similar to the Project.

Water Resources

The water demands associated with Alternative B would be greater than those of the proposed Project because of the increased level of development. Direct impacts would be greater than the proposed Project since demand would exceed available supplies and would represent a new significant and unavoidable impact. Impacts to groundwater supplies would be similar to the proposed Project and would remain less than significant. As with the proposed Project, significant unavoidable cumulative impacts to water supplies would result from Alternative B.

Wastewater

Wastewater generation associated with Alternative B would be greater than the Project due to the increase in development. As such, impacts related to wastewater treatment requirements and wastewater facilities would be greater. However, both the proposed Project and this Alternative would result in less than significant impacts with the provision of an on-site sewer system and a WRF.

Dry Utilities

Demands for dry utility services associated with Alternative B would be greater than those of the proposed Project because of the increased level of development. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Climate Change

With an increase in development associated with Alternative B, greenhouse gas emissions would also be increased by a comparable amount. Cumulative impacts to climate change under Alternative B would be significant and unavoidable, similar to the Project. This Alternative would require a General Plan Amendment, and may result in greater impacts related to conflict with County's Climate Action Plan.

Summary Conclusion

Implementation of Alternative B would result in greater impacts compared to the proposed Project due to an increased intensity of development. Thus, none of the significant and unavoidable impacts of the Project would be reduced by this Alternative. Alternative B would result in greater impacts on all issue areas, except for Agriculture Resources. Due to the exclusion of farmlands east of 300th Street West from the Project site boundaries, this Alternative would decrease the amount of farmland that would be converted to urban uses.

The Project is proposed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community. Implementation of this Alternative would fully support this underlying goal; however, there would be greater impacts associated with the increased development under this Alternative. In addition, no significant and unavoidable impacts of the Project would be avoided, and there would be a new significant and unavoidable direct impact to water supplies.

8.4.6 ALTERNATIVE C: ADDITIONAL DRAINAGE AVOIDANCE

The main benefit of Alternative C is that it would reduce impacts to jurisdictional drainages. Jurisdictional drainages are ecologically important as they indirectly function as wildlife movement corridors, among other important ecological functions. This alternative focuses primarily on reducing impacts to drainages or wetlands with high habitat value (according to the Functional Assessment) or drainages containing connectivity with other large or high value drainages. The Project development footprint would be reduced in size by avoiding natural open space area at various locations around the it's perimeter, as seen in Exhibit 8-4, Alternative C – Additional Drainage Avoidance. As such, impacts related to jurisdictional drainages would be incrementally be reduced. This Alternative would reduce impacts to jurisdictional drainages by 8 acres, and would have an overall reduction on the Project impact footprint by 37 acres. Alternative C would provide 0.5 percent fewer dwelling units (92 units less) and 2 percent fewer employment-generating uses (198,634 sf/0.2 msf).

Geotechnical

As with the proposed Project, development of Alternative C would be subject to the same seismic hazards (e.g., ground shaking, liquefaction), geologic hazards (e.g., landslides, expansive soils), and hillside management standards on the site. Mitigation would reduce potential impacts to less than significant levels, similar to the Project. Impacts related to erosion, grading, and topographic changes would be less than those anticipated to occur with the proposed Project, since development would stay away from major drainage corridors on the site. However, these impacts can be mitigated to less than significant levels. Less than significant impacts would occur under this Alternative with respect to geologic hazards with the implementation of mitigation, similar to the Project.

Hydrology and Flood

Implementation of Alternative C would create less impervious area than the proposed Project and changes to the existing hydrological conditions on the site would be less due to avoidance of grading and disturbance of major drainage channels. Incrementally less urban runoff would also be expected with the decrease in development on the site. As with the proposed Project, impacts related to hydrology would be less than significant under this Alternative with mitigation. Similar to the proposed Project, impacts related to conflict with Low Impact Development (LID) standards, floodplains, inundation, and standing water would be less than significant with mitigation.

Hazards and Fire Safety

Hazards and Hazardous Materials

Impacts associated with hazards for Alternative C would be less than those associated with the proposed Project. The risk from existing hazards, Valley Fever, and wildlife-borne disease vectors would be less than the proposed Project, as Alternative C would result in 92 fewer dwelling units and a reduction of 198,634 sf of employment-generating land uses (e.g., commercial and business park development) and approximately 37 more acres of natural open space. As with the proposed Project, impacts would be mitigated to a less than significant level. Similar to the proposed Project, this Alternative would result in less than significant impacts with mitigation related to hazardous materials sites and less than significant impacts related to airport/airstrip hazards and emergency response or emergency evacuation plans.

Fire Safety

Exposure to wildland fire risks related to location in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) and High Fire Hazard Severity Zones (HFHSZs) would be slightly less than those with the proposed Project given the decrease in development proposed on the site. The implementation of a fuel modification zone established with a Fire Management Plan would mitigate impacts to a less than significant level.

Water Quality

The potential impacts to surface water and groundwater quality associated with Alternative C would be less than those anticipated to occur from implementation of the proposed Project since Alternative C would disturb 37 acres less than the proposed Project and would result in less development. However, the impacts under both the proposed Project and this Alternative to water quality would be less than significant with mitigation. This Alternative would result in similar impacts related to waste discharge requirements and wastewater treatment systems, as there would be the same types of land uses and number of WRFs as the proposed Project.

Land Resources

Agriculture

This Alternative would have similar impacts to agricultural resources as the proposed Project since the same farmlands would be converted to urban uses. The proposed residential development at the eastern section of the site would eliminate ongoing agricultural production on Prime Farmland, but would not conflict with any Williamson Act contracts. As with the proposed Project, impacts related to the conversion of farmland would be significant and unavoidable under this Alternative.

Mineral Resources

As with the proposed Project, Alternative C would not involve the loss of availability of a known mineral resource. No impacts to mineral resources would occur under this Alternative.

Cultural and Tribal Resources

Alternative C would result in disturbance of a smaller area and impacts on unknown archaeological, tribal cultural, and paleontological resources or human remains would be less than the proposed Project. However, the location of existing cultural sites would still be developed under this Alternative. It is anticipated that cultural resource-related impacts from implementation of Alternative C would be mitigated in the same manner as those for the proposed Project. Impacts related to cultural resources would be mitigated to a less than significant level.

Biological Resources

Alternative C would disturb approximately 37 acres less than the proposed Project. This Alternative substantially reduces impacts to drainages resulting in a reduction of impacts to jurisdictional features of eight acres. In addition, the drainages avoided are predominantly higher order channels that typically indicate a greater functional value. As a result, Alternative C reduces impacts to a number of associated functions including local wildlife movement, riparian corridor connectivity, open space connectivity, and habitat of common and special status plant and wildlife species associated with these areas. In addition, the open space preserve is larger than the proposed Project. This Alternative would result in 92

fewer dwelling units and a reduction of 198,634 sf of employment-generating land uses. Therefore, the associated population decrease and indirect impacts (e.g., light and glare; domestic pets; introduction of non-native plants and wildlife) would be incrementally decreased. Thus, there would be less mitigation required to offset Alternative C impacts.

Potentially significant direct impacts to biological resources from grading and ground disturbance would still include special status species, riparian communities, wetlands, and wildlife movement. All of these impacts would be reduced to less than significant levels after mitigation under both the proposed Project and this Alternative. No direct significant and unavoidable biological impacts related to these thresholds for Alternative C would remain after mitigation. However, like the proposed Project, Alternative C would result in significant and unavoidable cumulative impacts related to grasslands and wildlife movement. This Alternative would result in similar impacts to oak woodlands and oak trees. Like the proposed Project, this Alternative would result in no impact related to habitat conservation plans and natural community conservation plans.

Land Use, Entitlements, and Planning

Implementation of Alternative C would result in the development of a new master planned community at the northwestern section of Los Angeles County. This Alternative is consistent with the land use designations for the site, as contained in the AVAP and would require the same land use approvals as the proposed Project. As with the proposed Project, this Alternative would not disrupt or divide a community, and would allow for development to meet the future housing and employment needs in Los Angeles County, although with slightly less dwelling units and non-residential development than the Project, and is therefore consistent with regional planning efforts. As with the proposed Project, an amendment to the AVAP Highway Plan, a zone change, and CUPs would be required under this Alternative. Impacts would be similar to the Project under this Alternative.

Population, Housing, and Employment and Growth-Inducing Impacts

Alternative C would result in 92 fewer dwelling units and a reduction of 198,634 sf of employment-generating land uses (e.g., commercial and business park development) and approximately 37 more acres of natural open space. Alternative C would have a lower residential population than the proposed Project, and thus, less potential to induce growth in the surrounding area. Also, slightly fewer affordable housing units would be provided on-site. This alternative would create less demand for long-term employment opportunities when compared to the proposed Project. Neither the proposed Project nor this Alternative would exceed approved population projections. As with the proposed Project, less than significant impacts would result with respect to conformity with population projections, but a significant and unavoidable impact would result based on the substantial growth on the Project site relative to the existing setting. Displacement of housing would be less than significant, as with the proposed Project. Tis Alternative would also result in a similar, and significant and unavoidable, impact related to growth-inducing impacts.

Traffic, Access, and Circulation

Alternative C would provide 0.5 percent fewer dwelling units (92 units less) and 2 percent fewer employment-generating uses (198,634 sf), both of which are the primary trip-generating land uses for the proposed Project. Therefore, this Alternative would result in decreased off-site vehicle trips. Because this Alternative would have lower off-site trip generation levels, impacts to freeway mainline segments, freeway ramps, and arterial highway intersections would be less. However, significant impacts to the existing transportation system and CMP highways would still occur under this Alternative. Payment of fair share fees for improvements to Caltrans facilities would be made as mitigation for the impacts of this Alternative, but it is outside the County's control to implement these improvements. Thus, if Caltrans does not construct the necessary improvements, impacts would be significant and unavoidable, similar to the Project.

As with the proposed Project, impacts related to emergency access and traffic hazards can be mitigated and impacts on air traffic would be less than significant. No conflict with alternative transportation policies would occur, similar to the Project.

Air Resources

Implementation of Alternative C would involve less grading on the site with the decreased amount of development proposed than the Project. As with the proposed Project, this alternative would result in significant unavoidable construction-related emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Operational emissions would be less when compared to the Project due to the decrease in vehicular traffic. However, as with the proposed Project, this Alternative would result in significant unavoidable operational emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Consistency with the applicable Air Quality Management Plan and exposure to odors would also represent a less than significant impact under this Alternative.

Noise

Alternative C would involve slightly less construction than the proposed Project, and noise impacts and exposure to groundborne vibration that would result from construction would also be less. Impacts related to noise increases in excess of Los Angeles County standards at sensitive receptors would still be significant, similar to those of the proposed Project. Mitigation would reduce these impacts to less than significant levels.

This Alternative would have fewer off-site vehicle trips due to the slight reduction in on-site population, and a corresponding slight decrease in off-site traffic noise. Noise impacts on adjacent existing residences would still be similar to the proposed Project, and would remain significant and unavoidable under this Alternative because it is outside the County's control to implement improvements on private properties or Caltrans right-of-way. Airport noise exposure would be similar to that of the Project and considered less than significant.

Visual Resources

Visual changes to the Project site associated with the implementation of Alternative C would be slightly less to those anticipated to occur under the proposed Project, since a slightly smaller development footprint would be converted from an undeveloped to a developed condition. Under the proposed Project and this Alternative, significant and unavoidable impacts would result with respect to alterations to a scenic vista and degradation of the visual quality of the site due to the size and intensity of development proposed in a largely undeveloped area. Under both the proposed Project and this Alternative, less than significant impacts would occur related to AVAP-designated scenic drives(e.g., I-5, Gorman Post Road, SR-138, Old Ridge Road [Highway N-2], and Three Points Road) . This Alternative would have decreased light and glare impacts, due to the decrease in development proposed on site, when compared to the proposed Project. However, this impact would be significant and unavoidable with mitigation.

Parks and Recreation

Implementation of Alternative C would result in less demand for parks and recreational facilities due to the lower number of proposed dwelling units and anticipated resident population. As with the proposed Project, less than significant impacts would occur with the provision of on-site parks and recreational facilities. Similar to the proposed Project, Alternative C would result in a less than significant impact related to regional open space connectivity, as a connection to the proposed realignment of the Pacific Crest Trail would also be part of this Alternative.

Education

The demand for school facilities and services associated with Alternative C would be slightly less than those of the proposed Project because of the decrease in residential development. As such, less school capacity would be needed to serve on-site residents. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Fire and Law Enforcement Services

The demand for fire and law enforcement services associated with Alternative C would be less than that for the proposed Project because of the decreased amount of development. Impacts to fire and law enforcement services would be mitigated through the provision of on-site fire stations and a Sheriff's station, similar to the proposed Project. Impacts to fire and law enforcement services would be mitigated to a less than significant level under this Alternative.

Other Public Services

Library

The demand for library services under this Alternative would be less than those of the proposed Project because of the decreased level of development. With 92fewer residential units, this Alternative would require the development of a smaller community library than the proposed Project. Both the proposed Project and this Alternative would result in less than significant impacts after mitigation.

Solid Waste

The solid waste demands associated with Alternative C would be slightly less than those of the proposed Project because of the decreased level of development. This demand for landfill capacity would still be considered significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of Project buildout and through the life of the Project, which would occur beyond the required 15-year LACDPW planning horizon. Like the proposed Project, this Alternative would result in a significant and unavoidable impact related to solid waste.

Other Public Facilities

Alternative C would create a demand for County services and facilities but will be subject to the payment of fees for any needed services. Alternative C will also provide a maintenance yard on the site for County use for public park and facility maintenance, County-owned roadway maintenance, public right-of-way maintenance, flood-control infrastructure maintenance, and other maintenance activities. Impacts would be less than significant, similar to the Project.

Water Resources

The water demands associated with Alternative C would be less than those of the proposed Project because of the decreased level of development. As with the proposed Project, direct impacts to water supplies would be mitigated to a less than significant level under this Alternative, and there would be less than significant impacts to groundwater supplies. However, as with the proposed Project, significant unavoidable cumulative impacts to water supplies would result from Alternative C.

Wastewater

Wastewater generation associated with Alternative C would be less than the Project due to the decrease in development. As such, impacts related to wastewater treatment requirements and wastewater facilities would be less. Both the proposed Project and this Alternative would result in less than significant impacts with the provision of an on-site sewer system and WRFs.

Dry Utilities

Demands for dry utility services associated with Alternative C would be less than those of the proposed Project because of the decreased level of development. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Climate Change

With a decrease in development associated with Alternative C, greenhouse gas emissions would also be decreased by a comparable amount. However, cumulative impacts to climate change would be significant and unavoidable, similar to the Project, because Alternative C would not substantially reduce development to a degree that could eliminate the cumulative impact. This Alternative and the proposed Project would not conflict with the County's Climate Action Plan.

Summary Conclusion

Implementation of Alternative C would result in fewer impacts compared to the proposed Project due to the decreased development. Alternative C would also result in fewer impacts on riparian communities and wetlands due to the exclusion of drainages from the development footprint. The Project is proposed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community. Implementation of this Alternative would fully support this underlying goal; however, significant and unavoidable impacts associated with air quality, agriculture resources, noise, population and growth-inducing impacts, traffic, climate change, visual resources, water supply, and solid waste would still occur under this Alternative, similar to the Project.

8.4.7 ALTERNATIVE D: INFRASTRUCTURE RELOCATION

Alternative D was designed with the objectives of (1) reducing the need for pumping equipment and associated energy demands by relying upon gravity-based water systems; (2) improving the reliability of the water distribution system, especially during a power outage; and (3) reducing biological impacts to the Oso Creek. Exhibit 8-5, Alternative D – Infrastructure Relocation Alternative, shows the proposed relocation sites for the two water tanks and the water treatment plant.

The Project's proposed location of the water treatment facility is outside the boundaries of the SEA; however, it is located within Oso Creek, which contains jurisdictional features and sensitive biological resources. Alternative D would relocate the water facility slightly south to a topographically raised portion of the Project site in order to avoid Oso Creek, but would technically result in an impact to lands within the SEA.

Two water tank sites, one on the east and one of the west side of the Aqueduct, would also be relocated to lands located within the boundaries of the SEA. The location of these water tank sites would be advantageous because they would reduce long-term energy demands associated with water pumping to pressurize the water distribution system. Locating the

water tanks at higher elevations, and thereby decreasing electrical pumping demands, would result in reductions in energy consumption and air pollutants, and would also increase reliability of the system in the instance of a power outage, where back-up generation would otherwise be required to ensure the functioning of the water system. The relocated tanks would be positioned behind ridgelines to make them less visible from public vantage points than they are within the currently proposed Project.

Although Alternative D would reduce impacts on Oso Creek, it would disturb a larger area (approximately 16 acres more) and would increase impacts to SEA-designated lands (on 58 acres). However, the area of Oso Canyon that would be preserved represents an area of high biological value on the site and includes jurisdictional waters, riparian habitat, and a substantial local movement path for wildlife. The preservation of this area would also reduce fragmentation of the Oso Canyon riparian corridor. The relocation of the water treatment plant and water tanks would increase total area of impacts but is expected to affect areas of lower biological value on the site.

Geotechnical

As with the proposed Project, development of Alternative D would be subject to the same seismic hazards (e.g., ground shaking, liquefaction), geologic hazards (e.g., landslides, expansive soils), and hillside management standards. Mitigation would reduce potential impacts to less than significant levels, similar to the Project. Impacts related to erosion, grading, and topographic changes would be greater than anticipated to occur with the proposed Project, since the development footprint would be increased to locate two water tanks at higher elevations on the site. These impacts can be mitigated to less than significant levels. Less than significant impacts would occur under this Alternative with respect to geologic hazards with the implementation of mitigation, similar to the Project.

Hydrology and Flood

Implementation of Alternative D would create slightly more impervious area than the proposed Project and changes to the existing hydrological conditions on the site would be greater due to the increase in the development footprint. Slightly more urban runoff would be expected with the increase in the development area that would occur on the site. As with the proposed Project, impacts related to hydrology would be less than significant under this Alternative with mitigation. Similar to the proposed Project, impacts related to conflict with LID standards, floodplains, and standing water would be less than significant with mitigation.

Hazards and Fire Safety

Hazards and Hazardous Materials

Impacts associated with hazards for Alternative D would be similar to those associated with the proposed Project. The risk from existing hazards, Valley Fever, and wildlife-borne disease vectors would be similar to the proposed Project, as this Alternative would result in the same number of dwelling units and amount of non-residential development (commercial

and employment-generating land uses). As with the proposed Project, impacts would be mitigated to a less than significant level. Similar to the proposed Project, this Alternative would result in less than significant impacts with mitigation related to hazardous materials sites, and less than significant impacts related to airport/airstrip hazards and emergency response or emergency evacuation plans.

Fire Safety

Exposure to wildland fire risks related to location in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) and High Fire Hazard Severity Zones (HFHSZs) would be slightly more than those with the proposed Project, given the increase in the size of the development footprint on the site. The implementation of a fuel modification zone established with a Fire Management Plan would mitigate impacts to a less than significant level.

Water Quality

The potential impacts to surface water and groundwater quality associated with Alternative D would be slightly more than anticipated to occur from implementation of the proposed Project since Alternative D would disturb 16 acres more than the proposed Project but would result in the same development. However, the impacts under both the proposed Project and this Alternative to water quality would be less than significant with mitigation. This Alternative would result in similar impacts related to waste discharge requirements and wastewater treatment systems, as there would be the same types of land uses and number of WRFs as the proposed Project.

Land Resources

Agriculture

Alternative D would have similar impacts to agricultural resources as the proposed Project since the same farmlands would be converted to urban uses. The proposed residential development at the eastern section of the site would eliminate ongoing agricultural production on Prime Farmland but would not conflict with any Williamson Act contracts. As with the proposed Project, impacts related to the conversion of farmland would be significant and unavoidable under this Alternative.

Mineral Resources

As with the proposed Project, Alternative D would not involve the loss of availability of a known mineral resource. No impacts to mineral resources would occur under this Alternative.

Cultural and Tribal Resources

Alternative D would result in disturbance of a slightly larger area where unknown archaeological, tribal cultural, and paleontological resources or human remains may be present, as compared to the proposed Project. Impacts to cultural resources from

implementation of Alternative D would be mitigated in the same manner as those for the proposed Project. Impacts would be less than significant after mitigation.

Biological Resources

Alternative D would disturb approximately 16 acres more than the proposed Project and would locate the water treatment plant and water tanks within 58 acres of the San Andreas SEA. While the water treatment plant would be relocated to a site within the SEA, this new location is lower in biological value than the location proposed by the Project. Similarly, the water tank locations would increase disturbance within the SEA but would largely avoid more sensitive resource areas such as jurisdictional features and riparian habitat. Existing ranch and utility access roads could be used for construction access to the new water tank sites and only minor grading and access improvements would be required. However, improvements to portions of some of the access roads would impact native vegetation and would result in slight increase in quantity of impacts on vegetation and potentially special status species. Consequently, there would be a need for an increased acreage of mitigation to offset some of these impacts. All of these impacts would be reduced to less than significant levels after mitigation under both the proposed Project and this Alternative.

This Alternative would result in the same development on the site. Potentially significant direct impacts to biological resources from grading and ground disturbance would still include special status species, riparian communities, wetlands, and wildlife movement. Also, the introduction of residents to the area and associated indirect impacts on biological resources (e.g., light and glare; domestic pets; introduction of non-native plants and wildlife) would be similar to the Project. All of these impacts would be reduced to less than significant levels after mitigation under both the proposed Project and this Alternative. No direct significant and unavoidable biological impacts would remain after mitigation. However, like the proposed Project, Alternative D would result in significant and unavoidable cumulative impacts related to grasslands and wildlife movement. This Alternative would result in similar impacts to oak woodlands and oak trees. Like the proposed Project, this Alternative would result in no impacts related to habitat conservation plans or natural community conservation plans.

Land Use, Entitlements, and Planning

Implementation of Alternative D would result in the development of a new master planned community at the northwestern section of Los Angeles County. This Alternative is consistent with the land use designations for the site, as contained in the AVAP and would require the same land use approvals as the proposed Project. As with the proposed Project, this Alternative would not disrupt or divide a community and would allow for development to meet the future housing and employment needs in Los Angeles County; it is therefore consistent with regional planning efforts. As with the proposed Project, an amendment to the AVAP Highway Plan, a zone change, and two CUPs would be required under this Alternative. Impacts would be similar to the Project under this Alternative for these thresholds. However, this Alternative would result in a greater impact related to conflict with the SEA Ordinance and hillside management standards, based on the location of the relocated infrastructure in higher elevation sites (i.e., hillside management areas) and within

58 acres of the San Andreas SEA. This impacts would be reduced to a less than significant level with mitigation.

Population, Housing, and Employment and Growth-Inducing Impacts

Alternative D would have the same number of residential units and commercial and business park development but approximately 16 fewer acres of natural open space. Alternative D would have the same residential population than the proposed Project, and thus, the same potential to induce growth in the surrounding area. This Alternative would not exceed approved population projections. As with the proposed Project, less than significant impacts would result with respect to conformity with population projections, but a significant and unavoidable impact would result based on the substantial growth on the Project site relative to the existing setting. Displacement of housing would be less than significant, as with the proposed Project. This Alternative would also result in a similar, and significant and unavoidable, impact related to growth-inducing impacts.

Traffic, Access, and Circulation

Alternative D would provide the same number of dwelling units and employment-generating uses, both of which are the primary trip-generating land uses for the proposed Project. Therefore, this Alternative would result in the same off-site vehicle trips. With the same off-site trip generation, impacts to freeway mainline segments, freeway ramps, and arterial highway intersections would be similar to the proposed Project. Significant impacts to the existing transportation system and CMP highways would occur under this Alternative. Payment of fair share fees for improvements to Caltrans facilities would be made as mitigation for the impacts of this Alternative, but it is outside the County's control to implement these improvements. Thus, if Caltrans does not construct the necessary improvements, impacts would be significant and unavoidable, similar to the Project.

As with the proposed Project, impacts related to emergency access and traffic hazards can be mitigated and impacts on air traffic would be less than significant. No conflict with alternative transportation policies would occur, similar to the Project.

Air Resources

Implementation of Alternative D would involve slightly more grading on the site with the increase in the development footprint, when compared to the Project. As with the proposed Project, this alternative would result in significant unavoidable construction-related emissions associated with CO, VOCs, NOx, PM10, and PM2.5. However, long-term operational emissions would be the less when compared to the Project due to the reduction in the need of pumping water. Back-up diesel generators would be required under the Project and under Alternative D; however, in the event of a power outage, substantially more energy and diesel emissions would be required to maintain the functioning of the water system. This Alternative would have the same land use development and would generate the same amount of vehicular traffic; therefore, vehicular emissions would not change. As with the proposed Project, this Alternative would result in significant unavoidable operational emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Consistency with the applicable

Air Quality Management Plan and exposure to odors would also represent a less than significant impact under this Alternative.

Noise

Alternative D would involve the same construction as the proposed Project, with similar impacts and exposure to groundborne vibration resulting from construction. Impacts related to noise increases in excess of Los Angeles County standards at sensitive receptors would be significant, similar to those of the proposed Project. Mitigation would reduce these impacts to less than significant levels.

Off-site traffic noise would be the same when compared to the proposed Project because of the same off-site vehicular traffic generation. Noise impacts on adjacent existing residences would be significant and unavoidable under this Alternative because it is outside the County's control to implement improvements on private properties or Caltrans right-of-way. Airport noise exposure would be similar to that of the Project and considered less than significant.

Visual Resources

Visual changes to the Project site associated with the implementation of Alternative D would be slightly less than those anticipated to occur under the proposed Project, since the water tanks would be located at higher elevations but behind ridgelines. Thus, they would be less visible from public roadways and trails. Under the proposed Project and this Alternative, significant and unavoidable impacts would result with respect to alterations to a scenic vista, degradation of the visual quality of the site, and the creation of new sources of light and glare due to the size and intensity of development proposed in a largely undeveloped area. Under both the proposed Project and this Alternative, less than significant impacts would occur related to an AVAP-designated scenic drive.

Parks and Recreation

Implementation of Alternative D would result in the same demand for parks and recreational facilities since the same number of dwelling units is proposed, resulting in the same resident population. As with the proposed Project, less than significant impacts would occur with the provision of on-site parks and recreational facilities. Similar to the proposed Project, Alternative D would result in a less than significant impact related to regional open space connectivity, as a connection to the proposed realignment of the Pacific Crest Trail would also be part of this Alternative.

Education

The demand for school facilities and services associated with Alternative D would be similar to those of the proposed Project because the same residential development is proposed. As such, schools needed to serve on-site residents would also be the same. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Fire and Law Enforcement Services

The demand for fire and law enforcement services associated with Alternative D would be similar to that for the proposed Project because the same amount of development is proposed. Impacts to fire and law enforcement services would be mitigated through the provision of on-site fire stations and a Sheriff's station, similar to the proposed Project. Impacts to fire and law enforcement services would be mitigated to a less than significant level under this Alternative.

Other Public Services

Library

The demand for library services under Alternative D would be similar to those of the proposed Project. With the same number of residents on site, this Alternative would require the development of the same size community library as the proposed Project. Both the proposed Project and this Alternative would result in less than significant impacts after mitigation.

Solid Waste

The solid waste demands associated with Alternative D would be similar to those of the proposed Project because the same development is proposed. Also, the demand for landfill capacity would be considered significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of Project buildout and through the life of the Project, which would occur beyond the required 15-year LACDPW planning horizon. Like the proposed Project, this Alternative would result in a significant and unavoidable impact related to solid waste.

Other Public Facilities

Alternative D would create a demand for County services and facilities but would be subject to the payment of fees for any needed services. Alternative D would also provide a maintenance yard on the site for County use for public park and facility maintenance, County-owned roadway maintenance, public right-of-way maintenance, flood-control infrastructure maintenance, and other maintenance activities. Impacts would be less than significant, similar to the Project.

Water Resources

The water demands associated with Alternative D would be similar to those of the proposed Project because the same development is proposed. There would be no landscaping or irrigation associated with the relocation infrastructure sites. As with the proposed Project, direct impacts to water supplies would be mitigated to a less than significant level under this Alternative, and there would be less than significant impacts to groundwater supplies. However, as with the proposed Project, significant unavoidable cumulative impacts to water supplies would result from Alternative D.

Wastewater

Wastewater generation associated with Alternative D would be similar to the Project due to the same development. As such, impacts related to wastewater treatment requirements and wastewater facilities would also be less. Both the proposed Project and this Alternative would result in less than significant impacts with the provision of an on-site sewer system and a WRF.

Dry Utilities

Demands for dry utility services associated with Alternative D would be similar to the proposed Project, except electrical demand. While the same development is proposed on site, the location of the water tanks at higher elevations would reduce the pumping needs and result in a more efficient water distribution system. This Alternative would reduce electrical power demands over those of the Project. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Climate Change

With the same development associated with Alternative D, greenhouse gas emissions from development would be similar to the Project. However, the use of less energy for water pumping based on the location of the water tanks at higher elevations would slightly reduce GHG emissions. However, cumulative impacts to climate change under Alternative D would be significant and unavoidable, similar to the Project. This Alternative and the proposed Project would be consistent with the County's Climate Action Plan.

Summary Conclusion

Implementation of Alternative D would result in the same effects to most of the population-driven impacts (e.g., noise, traffic, water supply, public services, and utility demands) as the proposed Project since the same development is proposed on site. However, Alternative D would result in decreased impacts to visual resources, energy demands, and climate change. Although the relocation of the water treatment plant would avoid sensitive drainage areas, Alternative D would disturb approximately 16 more acres of biological resources and would locate the water treatment plant and water tanks within 58 acres of the San Andreas SEA. The Project was developed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community. Implementation of this Alternative would fully support this underlying goal; however, significant and unavoidable impacts associated with air quality, agriculture resources, noise, population and growth-inducing impacts, traffic, visual resources, climate change, water supply, and solid waste would still occur under this Alternative, similar to the Project.

8.4.8 ALTERNATIVE E: DENSITY CLUSTERING/EAST OF AQUEDUCT

This Alternative focuses on increasing the density of development on the east side of the California Aqueduct and 300th Street West, by decreasing development in the easternmost and westernmost portions of the site. The proposed Project development footprint would be reduced by approximately 656 acres under this Alternative, while maintaining the same number of dwelling units (19,333 units), employment-generating uses (10,097,208 sf/10.10 msf), and other land uses. Alternative E reflects an approximate 4 percent increase (from approximately 46 percent to 50 percent) in conserved natural open space which does not include parks, greenways, and other types of urban open space. Exhibit 8-6, Alternative E – Density Clustering/East of Aqueduct Alternative, depicts the conceptual land use plan for this Alternative.

On the west side of the Aqueduct, all development except for the Cement Plant Road realignment would be transferred to the central portion of the site. This includes 1,574 dwelling units and 87,120 sf of Commercial uses. The 44-acre WTP proposed west of the Aqueduct would be relocated by converting 44 acres of Low-Density Residential land use to Utility, extending the existing U-designated area along the northeastern border of the Project site. This conversion would require the transfer of 147 low-density dwelling units, which would be readily accommodated throughout the remainder of Village 5. Additionally, relocation of the WTP to the east side of the Aqueduct would require a pipeline to be installed from the Aqueduct turnout, located slightly north of the proposed WTP location, across the Aqueduct and to the WTP site. However, the new bridge crossing to land uses on the west side of the Aqueduct would be eliminated under this Alternative.

On the east side of 300th Street West, the Low Density Residential-designated lands would be designated as Very Low Density Residential resulting in a net reduction of 603 dwelling units. These units and 108,900 sf of Commercial uses would be transferred to the central portion of the site. Specifically, all 2,177 transferred dwelling units (not including the 147 units in Village 5) would be accommodated in Village 3—the town center—and all or most transferred Commercial uses (196,020 sf) would instead be accommodated in the Centennial Commerce District (CCD) along SR-138 without changing the conceptual land use plan in these areas.

Geotechnical

As with the proposed Project, development of Alternative E would be subject to the same seismic hazards (e.g., ground shaking, liquefaction), geologic hazards (e.g., landslides, expansive soils), and hillside management standards. Impacts due to ground rupture related to the two unnamed faults on the Project site and erosion, grading, and topographic changes would be less than those anticipated to occur with the proposed Project due to the transfer of land uses on the west side of the California Aqueduct (except the Cement Plant Road realignment) and associated 656-acre reduction in the development footprint. Less than significant impacts would occur under this Alternative with respect to geologic hazards with the implementation of mitigation, similar to the Project.

Hydrology and Flood

Implementation of Alternative E would create less impervious area than the proposed Project and changes to the existing hydrological conditions on the site would be less due to the transfer of land uses on the west side of the California Aqueduct (except the Cement Plant Road realignment) and associated 656-acre reduction in the development footprint. Incrementally less urban runoff would also be expected with the decrease in development on the site. As with the proposed Project, impacts related to hydrology would be less than significant under this Alternative with mitigation. Similar to the proposed Project, impacts related to conflict with LID standards, floodplains, inundation, and standing water would be less than significant with mitigation.

Hazards and Fire Safety

Hazards and Hazardous Materials

Impacts associated with hazards for Alternative E would be similar to those associated with the proposed Project. The risk from existing hazards, Valley Fever, and wildlife-borne disease vectors would be similar to the proposed Project, as this Alternative would result in the same number of dwelling units and amount of non-residential development. As with the proposed Project, impacts would be mitigated to a less than significant level. Similar to the proposed Project, this Alternative would result in less than significant impacts with mitigation related to hazardous materials sites, and less than significant impacts related to airport/airstrip hazards and emergency response or emergency evacuation plans.

Fire Safety

Exposure to wildland fire risks related to location in areas designated as Very High Fire Hazard Severity Zones (VHFHSZs) and High Fire Hazard Severity Zones (HFHSZs) would be less than those with the proposed Project, given the decrease in development proposed on the site. The implementation of a fuel modification zone established with a Fire Management Plan would mitigate impacts to a less than significant level, as with the proposed Project.

Water Quality

The potential impacts to surface water and groundwater quality associated with Alternative E would be less than those anticipated to occur from implementation of the proposed Project since Alternative E would disturb 656 acres less than the proposed Project. However, this Alternative would result in development of the same types and quantity of land uses as the proposed Project within the reduced footprint. The impacts under both the proposed Project and this Alternative to water quality would be less than significant with mitigation. This Alternative would result in similar impacts related to waste discharge requirements and wastewater treatment systems, as there would be the same types of land uses and number of WRFs as the proposed Project.

Land Resources

Agriculture

This Alternative would have similar impacts to agricultural resources as the proposed Project since the same farmlands would be converted to urban uses. The proposed residential development at the eastern section of the site would eliminate ongoing agricultural production on Prime Farmland, but would not conflict with any Williamson Act contracts. As with the proposed Project, impacts related to the conversion of farmland would be significant and unavoidable under this Alternative.

Mineral Resources

As with the proposed Project, Alternative E would not involve the loss of availability of a known mineral resource. No impacts to mineral resources would occur under this Alternative.

Cultural and Tribal Resources

Alternative E would result in disturbance of a smaller area and impacts on unknown archaeological, tribal cultural, and paleontological resources or human remains would be less than the proposed Project. The significant cultural resource sites west of the Aqueduct would not be directly impacted by grading activity. These sites would be located within open space areas under this Alternative; there would be significant indirect impacts to these sites, same as the proposed Project. The location of cultural sites to the east of the Aqueduct would still be developed under this Alternative, and result in the same impacts as the Project. It is anticipated that cultural resource-related impacts from implementation of Alternative E would be mitigated in the same manner as those for the proposed Project. Impacts related to cultural resources would be mitigated to a less than significant level under this Alternative.

Biological Resources

Alternative E would disturb approximately 656 acres less than the proposed Project, and would increase the acreage of open space and preserved lands by approximately 4 percent compared to the proposed Project (from approximately 46 percent to approximately 50 percent). Under this Alternative, no different areas or additional acres would be impacted that would have the potential to result in new or more significant biological resources impacts, despite an overall reduction in the development footprint. The reduced impact area would result in an incremental comparable reduction in impacts to various biological resources including vegetation types, potentially suitable habitat for special status plant and wildlife species, and jurisdictional drainages. Thus, there would be less mitigation required to offset Alternative E impacts. Furthermore, the additional preservation area would increase the buffer area between the development footprint and other on- and off-site preserved lands thereby reducing indirect impacts to biological resources. Consequently, no additional impacts would occur and no additional mitigation would be required with Alternative E.

Potentially significant direct impacts to biological resources from grading and ground disturbance would still include special status species, riparian communities, wetlands, and wildlife movement. All of these impacts would be reduced to less than significant levels after mitigation under both the proposed Project and this Alternative. No significant and unavoidable biological impacts related to these thresholds for Alternative E would remain after mitigation. However, like the proposed Project, Alternative E would result in significant and unavoidable cumulative impacts related to grasslands and wildlife movement. This Alternative would result in similar impacts to oak woodlands and oak trees. Like the proposed Project, this Alternative would result in no impact related to habitat conservation plans and natural community conservation plans.

Land Use, Entitlements, and Planning and Growth-Inducing Impacts

As with the proposed Project, implementation of Alternative E would result in the development of a new master planned community at the northwestern section of Los Angeles County. This Alternative is consistent with the land use designations for the site, as contained in the AVAP and would require the same land use approvals as the proposed Project. Like the proposed Project, this Alternative would not disrupt or divide a community, and would allow for development to meet the future housing and employment needs in Los Angeles County; it is, therefore, consistent with regional planning efforts. As with the proposed Project, an amendment to the AVAP Highway Plan, a zone change, and CUPs would be required under this Alternative. Impacts would be similar under this Alternative as the same land use approvals would be required, and this Alternative would equally allow for development to meet planned growth. Because this Alternative has land dedicated to public parks, roads and infrastructure facilities, it could result in lower costs for public infrastructure categories that correlate with acreage (e.g., road maintenance), and could result in higher costs for public infrastructure categories that correlate with intensity of uses (e.g., sports playfields in parks). This Alternative would lessen, but not avoid, the significant impacts of the proposed Project.

Population, Housing, and Employment and Growth-Inducing Impacts

Alternative E would have the same number of residential units and commercial and business park development within a smaller development footprint, by approximately 656 acres. Alternative E would have the same residential population than the proposed Project, and thus, the same potential to induce growth in the surrounding area. As with the proposed Project, less than significant impacts would result with respect to conformity with population projections, but a significant and unavoidable impact would result based on the substantial growth on the Project site relative to the existing setting. Displacement of housing would be less than significant, similar to the proposed Project. This Alternative would also result in a similar, and significant and unavoidable, impact related to growth-inducing impacts.

Traffic, Access, and Circulation

Alternative E would provide the same number of dwelling units and employment-generating uses, both of which are the primary trip-generating land uses for the proposed Project.

Therefore, this Alternative would result in the same off-site vehicle trips, although the transfer of commercial development would result in reduced crossings across 300th Street and SR-138. With the same off-site trip generation, impacts to freeway mainline segments, freeway ramps, and arterial highway intersections would be similar to the proposed Project. Increased density may also influence on-site travel mode selection (e.g., reduce car trips within the Project site area).

This Alternative would not result in a significant change to how Project-related traffic accesses SR-138, nor would it change the overall distribution of Project-related traffic. While the amount of traffic generated by this Alternative would be identical to the proposed Project, there would be a corresponding increase to the volume of traffic on the central and western intersections with SR-138. However, the overall increase to these roadways would be minor and would be accommodated by augmenting the capacity of these roadways and their intersections with SR-138 (Stantec 2016a). These augments would be feasible within the limits of the Conceptual Land Use Plan and associated grading plan. Therefore, significant impacts to the existing transportation system and CMP highways would occur under this Alternative, similar to the proposed Project. Payment of fair share fees for improvements to Caltrans facilities would be made as mitigation for the impacts of this Alternative, but it is outside the County's control to implement these improvements. Thus, if Caltrans does not construct the necessary improvements, impacts would be significant and unavoidable, similar to the Project.

As with the proposed Project, impacts related to emergency access and traffic hazards can be mitigated and impacts on air traffic would be less than significant. No conflict with alternative transportation policies would occur, similar to the Project.

Air Resources

Implementation of Alternative E would involve less grading on the site commensurate with the 656-acre reduction in the development footprint. However, the SCAQMD thresholds are based on daily construction emissions, and this Alternative would implement the same daily construction activities as the Project. Therefore, as with the proposed Project, this Alternative would result in significant unavoidable construction-related emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Because increased density may result in further mode shifts (e.g., reduce use of cars and increased walking or biking) within the Project site itself, this Alternative could result in a corresponding decrease in air emissions from avoided on-site vehicle trips. However, since the same land uses and trip generation would occur, the primary vehicular-related emissions occur from offsite trips, operational emissions would be similar but slightly lower than the proposed Project, and would continue to result in significant unavoidable operational emissions associated with CO, VOCs, NOx, PM10, and PM2.5. Consistency with the applicable Air Quality Management Plan and exposure to odors would remain a less than significant impact under this Alternative.

Noise

Alternative E would involve less grading on the site commensurate with the 656-acre reduction in the development footprint, and noise and groundborne vibration that would

result from construction would also be less. However, there would be no receptors in the area with less noise and vibration on the west side of the Aqueduct. Noise generation related to building construction would be similar to the proposed Project, as the same amount of development is proposed. Therefore, impacts related to noise increases in excess of Los Angeles County standards at sensitive receptors would still be significant, similar to those of the proposed Project. Mitigation would reduce these impacts to less than significant levels.

Off-site traffic noise would be the same when compared to the proposed Project because of the same vehicular traffic generation. Noise impacts on adjacent existing residences would be similar, and would remain significant and unavoidable under this Alternative because it is outside the County's control to implement improvements on private properties or Caltrans right-of-way. Airport noise exposure would be similar to that of the Project and would be considered less than significant.

Visual Resources

Visual changes to the Project site associated with implementation of Alternative E would be reduced to the west of the Aqueduct, with the realigned Cement Plant Road remaining as the only land use change. However, under the proposed Project and this Alternative, significant and unavoidable impacts would result with respect to alterations to a scenic vista; degradation of the visual quality of the site; and the creation of light and glare due to the size and intensity of development that would be proposed in a largely undeveloped area. Under both the proposed Project and this Alternative, less than significant impacts would occur related to AVAP-designated scenic drives (e.g., I-5, Gorman Post Road, SR-138, Old Ridge Road [Highway N-2], and Three Points Road). This Alternative would have decreased light and glare impacts, due to the decrease in the development footprint, when compared to the proposed Project. However, this impact would be significant and unavoidable with mitigation.

Parks and Recreation

Implementation of Alternative E would result in the same demand for parks and recreational facilities since the same number of dwelling units is proposed, resulting in the same resident population. However, the transfer of development to the west of the Aqueduct eliminates 13.1 acres of Park Overlay and 5.6 acres of the Recreation/Entertainment land use designation. This Alternative would also provide on-site parks and recreation amenities that would meet and exceed County and State parkland standards, when considering both the park acreage and acreage equivalencies (e.g., public park development costs, private recreation facilities) and result in a less than significant impact. However, this Alternative would result in a higher population per acre of parkland than the proposed Project. The higher population per acre of parkland would require more efficient use of parkland space and amenities, with the potential for both lower costs (e.g., from developing and maintaining fewer acres) partly offset by the potential for increased costs (e.g., from more active maintenance required for high-use park areas such as sports playfields). Alternative E would result in a less than significant impact related to regional open space connectivity, as a connection to the proposed realignment of the Pacific Crest Trail would also be part of this Alternative.

Education

The demand for school facilities and services associated with Alternative E would be similar to those of the proposed Project because the same residential development is proposed. However, the transfer of development to the west of the Aqueduct eliminates 11 acres of School Overlay (a K-5 elementary school), which would have to be provided to the east side of the Aqueduct. Any future school development within the Project site would require coordination with and agreement of the affected school districts, as described in the mitigation program. Therefore, as with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Fire and Law Enforcement Services

The demand for fire and law enforcement services associated with Alternative E would be similar to that for the proposed Project because the same amount of development is proposed. Impacts to fire and law enforcement services would be mitigated through the provision of on-site fire stations and a Sheriff's station, similar to the proposed Project. Emergency response times would be slightly improved given the smaller development footprint of this Alternative. Impacts to fire and law enforcement services would be mitigated to a less than significant level under this Alternative.

Other Public Services

Library

The demand for library services under Alternative E would be similar to those of the proposed Project. With the same number of residents on site, this Alternative would require the development of the same size community library as the proposed Project. Both the proposed Project and this Alternative would result in less than significant impact after mitigation.

Solid Waste

The solid waste demands associated with Alternative E would be similar to those of the proposed Project because the same development is proposed. Also, the demand for landfill capacity would be considered significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of Project buildout and through the life of the Project, which would occur beyond the required 15-year LACDPW planning horizon. Like the proposed Project, this Alternative would result in a significant and unavoidable impact related to solid waste.

Other Public Facilities

Alternative E would create a demand for County services and facilities but would be subject to the payment of fees for any needed services. Alternative E would also provide a maintenance yard on the site for County use for public park and facility maintenance, County-owned roadway maintenance, public right-of-way maintenance, flood-control

infrastructure maintenance, and other maintenance activities. Impacts would be less than significant, same as the Project.

Water Resources

The water demands associated with Alternative E would be less than the proposed Project because the elimination of development to the west of the Aqueduct would reduce the amount of landscaping and its associated irrigation demands. As with the proposed Project, direct impacts to water supplies would be mitigated to a less than significant level under this Alternative, and there would be less than significant impacts to groundwater supplies. However, as with the proposed Project, significant unavoidable cumulative impacts to water supplies would result from Alternative E.

Wastewater

Wastewater generation associated with Alternative E would be similar to the Project due to the same development. As such, impacts related to wastewater treatment requirements and wastewater facilities would also be less. Both the proposed Project and this Alternative would result in less than significant impacts with the provision of an on-site sewer system and a WRF.

Dry Utilities

Demands for dry utility services associated with Alternative E would be similar to those of the proposed Project because the same development is proposed. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Climate Change

With the same development associated with Alternative E, greenhouse gas emissions from development would be similar to the Project. Cumulative impacts to climate change under Alternative D would be significant and unavoidable, similar to the Project. Greenhouse gas emissions from vehicle use would be slightly lower based on projected mode shifts (i.e., reduced use of fossil-fired vehicles) for on-site trips as described in Air Quality, above. This Alternative and the proposed Project would result in less than significant impacts at the project-level related to climate change policies.

Summary Conclusion

Implementation of Alternative E would result in similar or slightly reduced effects to most of the population-driven impacts (e.g., noise, traffic, public services, and utility demands) as the proposed Project since the same development, and related population, is proposed on site. However, Alternative E would result in decreased impacts to grading-driven impacts (e.g., biological resources, cultural resources, and visual resources) and would reduce some on-site automobile-driven impacts (e.g., air quality, greenhouse gas emissions).

The Project was developed with the objective of creating a self-contained, self-sustaining community in which people could live and work in the same community. Implementation of this Alternative would fully support this underlying goal; however, significant and unavoidable impacts associated with air quality, agriculture resources, noise, population and growth-inducing impacts, traffic, visual resources, climate change, water supply, and solid waste would still occur under this Alternative, similar to the Project.

8.4.9 ALTERNATIVE F: CENTRAL ECONOMIC OPPORTUNITY AREA DEVELOPMENT

This Alternative considers the AVAP's Central EOA as an alternative location. As shown in Exhibit 8-7, Alternative F – Central Economic Opportunity Area Development, the 23,930-acre Central EOA is an irregularly shaped area located generally between the northern boundary of the City of Lancaster and the Los Angeles County-Kern County border. It is traversed by SR-138 in an east-west direction, and by SR-14 and Sierra Highway in a north-south direction. This alternative assumes that the same types and numbers of land uses, public facilities, and other amenities as the proposed Project (see Table 4-3 in Section 4.0, Project Description) would be developed within an approximate 12,323-acre, contiguous portion of the EOA.

Geotechnical

The majority of the Central EOA has not been evaluated under the Alquist-Priolo Earthquake Fault Zoning Act or the Seismic Hazards Mapping Act. The nearest known active fault to the Central EOA is the San Andreas Fault, located approximate nine miles to the southwest at the nearest point along the foothills of the San Gabriel Mountains. Due to this distance from the nearest known fault, impacts related to seismic hazards (e.g., fault rupture, ground shaking, ground failure) would be less under Alternative F when compared to the proposed Project. Additionally, this Alternative would eliminate development adjacent to the unnamed faults on the Project site. Topographically, the Central EOA is relatively flat with a slope generally towards the east-northeast (i.e., towards Rosamond Lake). There are very limited areas with slopes that are at least 25 percent, and these are related to existing development within the EOA along SR-14 and at the Lancaster Landfill and Recycling Center. As such, the risk of landslides is reduced when compared to the proposed Project. There may be liquefaction and/or other soil engineering constraints present within the Central EOA, but it is expected these would be mitigated with appropriate design and construction methods. As with the proposed Project, there would be less than significant geology and soils impacts through compliance with applicable regulations.

Hydrology and Flood

Implementation of Alternative F would create a similar extent of pervious and impervious areas as the proposed Project. Based on review of aerial photographs, there is one apparent drainage feature, extending in a southwest-northeast direction towards Rosamond Lake from near the intersection of SR-14 and the southern EOA boundary. Because there are less defined drainage channels within the Central EOA compared to the Project site, impacts

related to changes in drainage patterns would be less than the proposed Project. However, the amount of storm water runoff generated would be similar to the Project and would be managed through compliance with LID standards and other regulations. As with the proposed Project, impacts related to hydrology, including storm drainage capacity, would be less than significant under this Alternative with mitigation.

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map designates an approximate one-mile-wide floodplain for this drainage and essentially the entirety of the Central EOA north of SR-138 as within an "A" zone, which has a one percent annual chance of flooding. Similar to the proposed Project, impacts related to floodplains would be less than significant with mitigation. Similar to the proposed Project, impacts related to inundation and standing water would be less than significant with mitigation.

Hazards and Fire Safety

Hazards and Hazardous Materials

Impacts associated with hazards for Alternative F would be similar to those associated with the proposed Project, as both locations are within the Antelope Valley. Specifically, the risk from Valley Fever and wildlife-borne disease vectors would be similar to the proposed Project, as this Alternative would result in the same number of dwelling units and amount of non-residential development requiring ground disturbance in an area with a potential for Valley Fever spores. The precise location and nature of existing hazards within the Central EOA are not known. It is documented that a portion of Edwards Air Force Base (EAFB) is a federally listed Superfund site and is undergoing remediation. However, the extent of groundwater contaminant plume is mapped as being more than 23 miles to the east-northeast of the Central EOA (DTSC 2016). Therefore, this would not represent a hazard for the EOA. For all hazards, impacts would be mitigated to a less than significant level, same as the proposed Project.

As discussed above under "Traffic, Access, and Circulation", the southwestern portion of the Central EOA is within the Airport Influence Area Boundary of the Fox Airfield, and land use compatibility zones C, D, and E overlap the EOA. Therefore, there would be greater impacts associated with hazards due to proximity to a public airport. However, through compliance with Federal Aviation Administration (FAA) regulations and/or avoidance of the Fox Airfield's Airport Influence Area in the hypothetical placement of the alternative location within the EOA, there would be less than significant impacts with this mitigation. As noted above, EAFB is also adjacent to the Central EOA; however, the Central EOA is not within an area with any land use compatibility restrictions (Perry 2016). Therefore, there would be less than significant impacts related to airport/airstrip hazards, similar to the proposed Project. As with the proposed Project, this Alternative would result in less than significant impacts related emergency response or emergency evacuation plans.

Fire Safety

The majority of the Central EOA is designated as a Moderate Fire Hazard Severity Zones, with the remainder not designated as a fire hazard zone. Therefore, exposure to wildland fire risks would be reduced under this Alternative compared to the proposed Project. The

implementation of a fuel modification zone established with a Fire Management Plan would mitigate impacts to a less than significant level with the proposed Project. Alternative F would not require implementation of fuel modification.

Water Quality

The potential impacts to surface water and groundwater quality associated with Alternative F would be similar to the proposed Project because the same development area and land uses would be implemented. However, the Project site would not have ready access to the Project's water supplies or banking infrastructure, this alternative would have a greater impact on regional water supplies relative to the proposed Project. Impacts under both the proposed Project and this Alternative to water quality would be less than significant with mitigation. This Alternative would result in similar impacts related to waste discharge requirements and wastewater treatment systems, as there would be the same types of land uses and number of WRFs as the proposed Project.

Land Resources

Agriculture

The Central EOA contains approximately 469 acres of Prime Farmland, 132 acre of Farmland of Statewide Important, 69 acres of Unique Farmland, and 622 acres of Grazing Land. Dependent on the placement of the contiguous 12,323-acre site within the larger Central EOA, this Alternative has the potential to convert up to 670 acres of Farmland. This Alternative could result in less conversion of Prime Farmland compared to the proposed Project (642 acres), but would result in a similar amount of Farmland whose loss is considered significant under CEQA. As with the proposed Project, conversion of Grazing Land is not considered a significant impact. Therefore, impacts related to the conversion of farmland would be also be significant and unavoidable under this Alternative.

Mineral Resources

As with the proposed Project, Alternative F would not involve the loss of availability of a known mineral resource. No impacts to mineral resources would occur under this Alternative.

Cultural and Tribal Resources

Alternative F would result in disturbance of the same development footprint acreage, where unknown archaeological, tribal cultural, and paleontological resources or human remains may be present, as with the proposed Project. Impacts to cultural resources from implementation of Alternative F would be mitigated in the same manner, or in a different but appropriate manner depending on the resources, as those for the proposed Project. Impacts would be less than significant after mitigation.

Biological Resources

Alternative F would result in the same development footprint acreage within the Central EOA. Although specific details regarding the biological resources occurring within the Central EOA are not known, a review of the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB) and aerial photographs can provide sufficient information for a preliminary determination regarding potential impacts of this Alternative. In general, the impact on some biological resources would be reduced. For example, the Central EOA is expected to contain fewer jurisdictional drainages due to the flatter terrain with fewer topographic changes; this impact would be less than significant after mitigation, same as the proposed Project. Oak trees and oak woodlands are not likely to be present on the Central EOA, which may indicate impacts to oak trees and oak woodlands would be reduced. Other special status vegetation types (such alkaline sink) or associated plants, however, are known to be present in the Central EOA but not the Project site. Due to the fairly extensive distribution in the Central EOA, these resources would likely be impacted by Alternative F. As a result, impacts would increase in some regard to those resources that are different from the Project site. Consequently, there would be a need for different mitigation areas to offset these impacts. It is expected that these impacts would be reduced to less than significant levels after mitigation under this Alternative, same as the proposed Project. With regard to cumulative impacts to special status vegetation types, it is expected this impact would be less than the proposed Project and would be less than significant with mitigation based on the existing disturbance of the lands surrounding the alternative location. Additionally, this Alternative would result in a reduced impact to wildlife movement compared to the proposed Project, based on the continuity of the terrain immediately surrounding the Central EOA.

Land Use, Entitlements, and Planning

The Central EOA is anticipated to have a much lower amount of future development than the West EOA, even when considering buildout of the entire 23,930 acres within the Central EOA, based on the 2016–2040 RTP/SCS as well as the AVAP land use designations and zoning. The majority of the Central EOA has Rural Land designations and an associated agricultural zoning. Alternative F is not consistent with the pattern of land use designations in the Central EOA, as contained in the AVAP. Therefore, this is a new significant impact of this Alternative. Implementation of Alternative F would require a General Plan amendment and a zone change for the entirety of the 12,323-acre footprint within the Central EOA. Like the proposed Project, with adoption of appropriate land use approvals, there would be a less than significant impact. This Alternative would not involve development within an SEA, like the proposed Project, and would not include hillside management areas. Therefore, Alternative F would not conflict with applicable land use criteria, similar to the Project.

Based on the 2016–2040 RTP/SCS, the maximum growth within the Central EOA is estimated at 24,015 people, 8,233 jobs, and 9,505 households (i.e., dwelling units) (Stantec 2016b). Therefore, this alternative would exceed the regional growth projections for this EOA by 33,135 people, 15,442 jobs, and 9,828 dwelling units. Therefore, development of the equivalent land use plan within the Central EOA would be inconsistent with the adopted

RTP/SCS, which is the region's approved land use and transportation plan pursuant to the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375). This inconsistency would represent a new significant and unavoidable impact compared to the proposed Project. Furthermore, the approximate 11,607 acres remaining in the Central EOA with development of the Project's land uses on 12,323 acres, would still be available for development. This would hypothetically result in even higher total development within the Central EOA of the AVAP. In terms of land use compatibility, and as discussed further under relevant topics below, there are two air traffic facilities proximate to the site, the General William J. Fox Airfield (Fox Airfield) immediately to the south and EAFB immediately to the northeast. There would be greater land use and planning impacts under this Alternative, and a new significant and unavoidable impact.

Population, Housing, and Employment and Growth-Inducing Impacts

This Alternative would result in an increase in population, housing stock, and employment that is similar to the Project. As discussed above under Land Use, Entitlements, and Planning, this Alternative would exceed approved growth projections for the Central EOA. Additionally, this Alternative would have a greater potential to induce growth in the surrounding area because the restrictions to development present proximate to the Project site, including topography and presence of public lands, are absent at this alternative location. Therefore, this Alternative would result in a new significant and unavoidable impact with respect to conformity to population projections, and a greater significant and unavoidable impact with respect to growth-inducing impacts. As with the Project, there would be a significant and unavoidable impact based on the substantial growth on the alternative location relative to the existing setting.

There is existing residential and non-residential (primarily the Lancaster Water Reclamation Plant and Lancaster Landfill and Recycling Center) development within the Central EOA. In order to develop a contiguous 12,323-acre site, it is expected that existing households in the scattered residences within the Central EOA would have to be displaced. The proposed Project would result in displacement of one household, which was concluded not be substantial and therefore less than significant. Implementation of this Alternative would likely result in displacement of a greater number of existing households. As such, this would be a greater impact than the proposed Project, but would be also less than significant with implementation of appropriate regulations.

Traffic, Access, and Circulation

Alternative F would generate the same number of off-site vehicle trips as the proposed Project, but these trips would be distributed on SR-138 (in the EOA vicinity), SR-14, Sierra Highway, and local streets within and proximate to the Central EOA. As discussed above under Land Use, Entitlements, and Planning, development of an equivalent land use plan within the Central EOA is inconsistent with the approved 2016–2040 RTP/SCS. As such, it is expected that accommodating the number of off-site vehicle trips would require substantial transportation capacity improvements to the local and regional network beyond that anticipated by regional plans. Construction and use of transportation capacity improvements not anticipated as part of the RTP/SCS would result in greater air quality and

GHG emissions than expected and thereby reduces the ability of the County and the State to achieve its GHG reduction targets under AB 32, as implemented through SB 375.

As with the proposed Project, significant impacts to the existing transportation system and CMP highways would occur under this Alternative. Payment of fair share fees for improvements to Caltrans facilities would be made as mitigation for the impacts of this Alternative, but it is outside the County's control to implement these improvements. Thus, if Caltrans does not construct the necessary improvements, impacts would be significant and unavoidable, similar to the Project.

Impacts on air traffic would be greater than the proposed Project due to the proximity of the General William J. Fox Airfield (Fox Airfield) approximately 1.25 miles to the south at the nearest point. The southwestern portion of the Central EOA is within the Airport Influence Area Boundary of the Fox Airfield, and land use compatibility zones C, D, and E overlap the EOA. These zones represent limitations on land use development, due to flight paths, noise, accidents, risks, and other issues, to maintain compatibility with the airport operations. Although there would be greater constraints related to air traffic than the proposed Project, through compliance with FAA regulations and/or avoidance of the Fox Airfield's Airport Influence Area in the hypothetical placement of the alternative location within the EOA, there would be less than significant impacts, same as the proposed Project. EAFB is also adjacent to the Central EOA. EAFB was contacted to request its Air Installation Compatible Use Zone (AICUZ), if applicable, and/or other information on land use compatibility planning. The EAFB staff reports the Central EOA is not within an area with any land use compatibility restrictions (Perry 2016). It is assumed this is due to the distance between the active EAFB operations and the Central EOA. As such, there would be less than significant impacts related to EAFB.

As with the proposed Project, impacts related to emergency access and traffic hazards can be mitigated. No conflict with alternative transportation policies would occur, similar to the Project.

Air Resources

Implementation of Alternative F would involve the same grading and construction activity, and associated criteria pollutant emissions, as the proposed Project. The entirety of the Central EOA is located within the AVAQMD. Because the AVAQMD thresholds are based on annual construction emissions, with implementation of mitigation (i.e., use of Tier 4 construction equipment) emissions would be less than significant for both the average construction year and peak construction year. Therefore, this alternative would avoid the significant and unavoidable construction-related impacts associated with CO, VOCs, NOx, PM10, and PM2.5 emissions.

This Alternative would have the same land use development and would generate the same amount of vehicular traffic; therefore, vehicular emissions would not change. As with the proposed Project, this Alternative would result in significant unavoidable operational emissions associated with CO, VOCs, NOx, PM10, and PM2.5 pursuant to AVAQMD thresholds. Consistency with the applicable Air Quality Management Plan would represent a

less than significant impact under this Alternative, similar to the proposed Project. Based on the presence of the Lancaster Water Reclamation Plant, which has large open basins as part of its facilities, it is unclear whether exposure to odors would also be a less than significant impact under this Alternative.

Noise

Alternative F would involve the same construction as the proposed Project, with the same noise impacts and exposure to groundborne vibration resulting from construction. Impacts related to noise increases in excess of Los Angeles County standards at sensitive receptors, including existing residences within and immediately adjacent to 12,323-acre alternative location within the Central EOA, would likely be significant, similar to those of the proposed Project. Mitigation would reduce these impacts to less than significant levels.

Off-site traffic noise would be the same when compared to the proposed Project because of the same vehicular traffic generation. Noise impacts on existing residences along roadways that would have much higher capacity would likely also be significant and unavoidable under this Alternative because it is outside the County's control to implement improvements on private properties or Caltrans right-of-way.

Airport noise exposure would be greater than the Project due to the proximity of Fox Airfield; however, as discussed above under "Traffic, Access, and Circulation", through compliance with FAA regulations and/or avoidance of the Fox Airfield's Airport Influence Area in the hypothetical placement of the alternative location within the EOA, there would be less than significant impacts, similar to the proposed Project.

Visual Resources

Visual changes to the Project site associated with the implementation of Alternative F would be greater than those anticipated under the proposed Project because the Central EOA is more visible from public roadways, and from a farther distance because of the flat topography of the EOA and surrounding areas. Like the proposed Project, impacts with respect to alterations to a scenic vista and degradation of the visual quality of the site would be significant and unavoidable. This Alternative would also result in significant and unavoidable impacts related to creation of new sources of light and glare.

The AVAP identifies scenic drives on roadways that are two miles from the Central EOA boundary at the nearest point (i.e., 90th Street West). Under both the proposed Project and this Alternative, less than significant impacts would occur related to a scenic highway corridor since the site is planned for development in the AVAP, though not at the intensity envisioned under the Conceptual Land Use Plan, and based on the distance to the scenic drives.

Parks and Recreation

Implementation of Alternative F would result in the same demand for parks and recreational facilities since the same number of dwelling units is proposed, resulting in the same resident

population. As with the proposed Project, less than significant impacts would occur with the provision of on-site parks and recreational facilities. This Alternative would also provide on-site trails that may connect to existing County or regional trails; however, this alternative site is not proximate to regional open space (e.g., National Forests, realigned Pacific Crest Trail) in the same manner as the Project site. Regardless, this would remain a less than significant impact, similar to the proposed Project.

Education

The demand for school facilities and services associated with Alternative F would be similar to those of the proposed Project because the same residential development is proposed. As such, schools needed to serve on-site residents would also be the same. This Alternative would require school services from the Lancaster Elementary School District, Westside Union Elementary School District and the Antelope Valley Union High School District. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative through school facilities and funding agreements with the affected school districts.

Fire and Law Enforcement Services

The demand for fire and law enforcement services associated with Alternative F would be similar to that for the proposed Project because the same amount of development is proposed. Impacts to fire and law enforcement services would be mitigated through the provision of on-site fire stations and a Sheriff's station, similar to the proposed Project. Impacts to fire and law enforcement services would be mitigated to a less than significant level under this Alternative.

Other Public Services

Library

The demand for library services associated with Alternative F would be similar to those of the proposed Project. With the same number of residents, this Alternative would require the development of the same size community library as the proposed Project. Both the proposed Project and this Alternative would result in less than significant impact after mitigation.

Solid Waste

The solid waste demands associated with Alternative F would be similar to those of the proposed Project because the same development is proposed. Also, the demand for landfill capacity would be considered significant and unavoidable because permitted landfill capacity at existing County landfills cannot be guaranteed at the time of Project buildout and through the life of the Project, which would occur beyond the required 15-year LACDPW planning horizon. Like the proposed Project, this Alternative would result in a significant and unavoidable impact related to solid waste.

Other Public Facilities

Alternative F would create a demand for County services and facilities but would be subject to the payment of fees for any needed services. Alternative F would also provide a maintenance yard on the site for County use for public park and facility maintenance, County-owned roadway maintenance, public right-of-way maintenance, flood-control infrastructure maintenance, and other maintenance activities. Impacts would be less than significant, similar to the Project.

Water Resources

The water demands associated with Alternative F would be similar to those of the proposed Project because the same amount of development is proposed. Unlike the Project site, there is no existing water supply infrastructure (i.e., water bank) and associated water rights to support development of the proposed master-planned community. Therefore, this Alternative would result in greater direct impacts than the proposed Project. It is expected there would not be feasible mitigation to accommodate the water demands of the Conceptual Land Use Plan without the existing water resources associated with the Project site, resulting in a new significant and unavoidable impact. Also, as with the proposed Project, significant unavoidable cumulative impacts to water supplies would result from Alternative F.

Wastewater

Wastewater generation associated with Alternative F would be similar to the Project due to the same development. As such, impacts related to wastewater treatment requirements and wastewater facilities would also be less. Both the proposed Project and this Alternative would result in less than significant impacts with the provision of an on-site sewer system and WRFs.

Dry Utilities

Demands for dry utility services associated with Alternative F would be similar to those of the proposed Project because the same development is proposed. As with the proposed Project, impacts would be mitigated to a less than significant level under this Alternative.

Climate Change

With the same development associated with Alternative F, greenhouse gas emissions from development would be similar to the Project. As discussed above under "Land Use, Entitlements, and Planning", development of an equivalent land use plan within the Central EOA is inconsistent with the approved 2016–2040 RTP/SCS, which is the region's approved land use and transportation plan pursuant to SB 375). Accordingly, development of a master planned community on lands not anticipated as part of the RTP/SCS thereby reduces the ability of the County and the State to achieve its GHG reduction targets under AB 32, as implemented through SB 375. Therefore, Alternative F would result in impacts related to climate change would be greater under Alternative F, and would result in a greater significant and unavoidable impact related to climate change impacts.

Summary Conclusion

Implementation of Alternative F would result in similar impacts as the proposed Project related to land resources, geotechnical, hydrology and flood, water quality, air resources (operation only), noise, cultural resources, parks and recreation, hazards, fire and law enforcement services, other public services, dry utilities, wastewater, and education. Alternative F would result in increased impacts related to land use and planning; population, housing, and employment and growth-inducing impacts; traffic, access, and circulation; visual resources; water resources; and climate change. This Alternative would result in decreased impacts related to air resources (construction only) and wildland fire risk. Regarding biological resources, this Alternative would result in similar impacts related to sensitive plant and wildlife species (impact mitigated) and habitat conservation plans (no impact), and would result in reduced impacts related to sensitive vegetation communities, wetlands, oak trees and oak woodlands, and wildlife movement. This Alternative would avoid significant and unavoidable cumulative impacts to sensitive vegetation communities and wildlife movement, as it is anticipated these impacts would be cumulatively less than significant with mitigation. Like the proposed Project, this Alternative would also result in significant and unavoidable impacts associated with air quality, agriculture resources, noise, traffic, visual resources, climate change, water supply, and solid waste.

8.5 ABILITY OF ALTERNATIVES TO MEET OBJECTIVES

Table 8-3 provides a brief discussion of how each alternative meets the Project objectives. For review of all Project objectives, please refer to Section 4.0, Project Description, of this Draft EIR.

TABLE 8-3
ABILITY OF EACH ALTERNATIVE TO MEET THE PROJECT OBJECTIVES

Implement the Antelope Valley Area Plan (AVAP) by creating an environmentally and economically sustainable master-planned community on the Project site to help accommodate planned regional population and economic growth within the West EOA.	All of the alternatives except for Alternatives A and F would meet this objective. Alternative A would not meet this objective since no development is proposed on the site. Alternative B would meet the objective for an environmentally and economically sustainable master-planned community, but would not be consistent with the land use designations for the site, as contained in the AVAP. Alternatives C, D, and E would also meet the objective for an environmentally and economically sustainable master plan while also being largely consistent with the land use designations for the site. However, Alternatives C and D would provide less development than the Project. Under these alternatives, the County would not be able to achieve housing and employment levels anticipated by the AVAP and associated with the adopted growth projections unless development occurs in excess of projections in other areas of the Antelope Valley,

TABLE 8-3
ABILITY OF EACH ALTERNATIVE TO MEET THE PROJECT OBJECTIVES

	which would result in similar or greater impacts than the proposed Project. Alternative F would not meet this objective because locating the proposed master-planned community in the Central EOA would not be environmentally sustainable, as indicated by the analysis above, nor would it be consistent with the land use designations and associated population, housing, and employment levels anticipated for this area of the Antelope Valley by the AVAP. This Alternative would also exceed SCAG's regional growth projections.
Design the Project to maximize efficient utilization of regional infrastructure while preserving hundreds of thousands of acres of contiguous natural open space and important biological resources.	All of the alternatives except for Alternatives A and F would meet this objective. All of the alternatives except for Alternatives A and F would utilize the northwest segment of SR-138 as primary access to future development, and would preserve in perpetuity the on-site natural open space areas that connect to the approximate 240,000-acre Tejon Ranch Conservancy lands. Alternatives B and D include less open space areas than the proposed Project, while Alternatives A, C, and E would have more open space areas. However, Alternative A would not involve stewardship of the on-site resources to restore and/or create habitats, and the existing grazing activities would continue. Alternatives A and F would not utilize existing (i.e., I-5 and the California Aqueduct) and planned regional infrastructure (i.e., the Northwest 138 Corridor) to the same extent as the Project. Additionally, Alternative F would result in less efficient use of regional transportation infrastructure than Alternative A because accommodating this Alternative would require substantial transportation capacity improvements to the local and regional network beyond that anticipated by regional plans.
Size the Project to include a broad range of employment, residential, institutional, and recreational land uses to encourage walkability and wellness, while reducing off-site employment-related commuter trips.	All of the alternatives except for Alternative A would meet this objective, to varying degrees. Alternative A would not meet this objective since no development is proposed on the site. Alternatives B through F would provide a range of land uses, balanced to encourage alternative transportation (e.g., walking, bicycling) as well as wellness through provision of abundant recreational facilities; walkable and interconnected village centers; and on-site employment. Alternative B includes more land use development than the proposed Project, and Alternative C includes less. Alternative F would include the same types and amounts of land uses, but would not be located adjacent to existing open space and recreation features (e.g., National Forests) and would not be in a location that can connect to the Pacific Crest Trail. Alternative F is, however, situated closer to existing employment-generating land uses in the City of Lancaster and at EAFB, as it relates to commute lengths.

TABLE 8-3
ABILITY OF EACH ALTERNATIVE TO MEET THE PROJECT OBJECTIVES

Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers.	All of the alternatives except for Alternatives A and E would meet this objective. This objective is not applicable to Alternative A since no development is proposed on the site. However, Alternative E would not have ready access to the Tejon Ranch water resource infrastructure or the California Aqueduct.
Integrate a multi-modal transportation network, renewable energy, water conservation, community wellness, and other green development features into the Project's design, build out and ongoing operations.	All of the alternatives except for Alternatives A and F would meet this objective. Alternative A would not meet this objective since no development is proposed on the site. Alternatives B through F would provide essentially the same green development features within the Project site boundaries. However, Alternative F would not meet this objective because development of the equivalent land use plan within the Central EOA would be inconsistent with the adopted RTP/SCS. This, in turn, reduces the ability of the County and the State to achieve its GHG reduction targets under AB 32, as implemented through SB 375. Development that is substantially inconsistent with the primary State and regional land use plans related to sustainability outweighs the benefits of the green development features that would be implemented within this Project location.

8.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an EIR identify the environmentally superior alternative. Section 15126.6 of the State CEQA Guidelines (14 CCR) identifies the following factors that may be used to eliminate alternatives from detailed consideration in an EIR: (1) failure to meet most of the basic Project objectives, (2) infeasibility, or (3) inability to avoid significant environmental impacts. These factors are considered in the selection of the environmentally superior alternative.

The analysis of the potential impacts associated with the proposed Project and the alternatives addressed in this EIR indicate that Alternative A, the No Project Alternative, has the least environmental impact since no development is proposed on site. However, the No Project Alternative would not meet any of the Project objectives. Section 15126.6 of the State CEQA Guidelines states "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (14 CCR 15126.6).

Alternative B would meet most of the Project Objectives but would result in greater impacts on most issues due to the increase in development proposed on a smaller site. It would also not avoid any of the significant impacts of the Project. The currently proposed Project is an amended proposal from a 2003 application submitted to the County of Los Angeles, as described in the NOP dated March 2004. Based on the AVAP community outreach, environmental review, and County approval process, the Project was redesigned to be

consistent with the 2015 AVAP. The current Project has 3,665 fewer dwelling units and 4.12 million sf less of commercial and business park development, on a development footprint that is approximately 640 acres less than the earlier proposed project. The proposed Project is a significantly better and environmentally superior design compared to the earlier proposal.

Alternative C would meet the Project Objectives and would reduce impacts to major drainages on the site as well as other environmental factors due to the reduction in dwelling units (92 fewer units) and commercial and institutional development (198,634 sf less). This Alternative would reduce both its grading-driven impacts (e.g., biological resources, cultural resources, visual resources) and population-driven impacts (e.g., air quality, climate change, noise, traffic, water supply, public services and utility demands). However, it would not avoid any of the significant and unavoidable impacts of the Project.

Alternative D would meet the Project Objectives and would relocate water tanks and the water treatment plant to improve the water system and reduce energy demands for water distribution. It would also reduce its visual impacts, but would increase impacts on biological resources, with 58 acres of the San Andreas SEA disturbed. Since this Alternative would not change the development on the site, it would not avoid any of the significant and unavoidable impacts of the Project.

Alternative E would meet the Project Objectives and would result in decreased impacts to grading-driven impacts (approximately 656 fewer graded acres), increased preservation of open space, as well as reduced impacts to visual resources. This Alternative would result in the same or similar impacts to population-driven impacts and would not avoid any of the significant and unavoidable impacts of the Project.

Alternative F would not meet three of the five Project Objectives, and would result in additional significant and unavoidable impacts to related to land use, population projections, and water supply and greater significant and unavoidable impacts related to growth-inducing impacts and climate change. However, Alternative F would avoid significant and unavoidable impacts to sensitive vegetation communities and wildlife movement, as it is anticipated these impacts would be cumulatively less than significant with mitigation.

Based on the analysis for each Alternative above, although no alternative would entirely avoid any of the significant and unavoidable impacts of the proposed Project, Alternative E, Density Clustering/East of Aqueduct is considered the environmentally superior alternative to the Project in relation to some impact topics. Alternative E would result in a reduced grading footprint of approximately 656 acres; would have a corresponding increase in open space; and would meet all the Project Objectives.

8.7 REFERENCES

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